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#### भारत सरकार

विज्ञान और प्रौद्योगिकी मंत्रालय, विज्ञान और प्रौद्योगिकी विभाग, टेक्नोलॉजी भवन, महरौली मार्ग, नई दिल्ली-110016

#### **GOVERNMENT OF INDIA**

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY, TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD, NEW DELHI-110 016

Dated: 10-09-2012

# No. INT/SWISS/ISJRP/PEP/P-10/2012

ORDER

Sanction of the President is hereby accorded for implementation of the Indo-Swiss PEP joint research project entitled "Radiation damage studies of Silicon sensors" at a total cost of Rs. 4,08,000/- (Rupees Four Lac Eight Thousand Only). The duration of the project shall be 2 years from date of issue of this sanction order.

2. The composition of the project team is as below:

<u>Indian side</u>	Swiss side
i.) Bhardwaj Ashutosh, Dr., Department of Physics & Astrophysics, Room No. 189, 2nd Floor, Mutli Story Building, University of Delhi, Delhi-110007 ii.) Dr. Kirti Ranjan, PhD iii.) Mr. Ranjeet Singh, M.Sc.	i) Dr. Michael Moli, CEPN, DIL Donnel

3. The change/ replacement of project participants is not allowed. The participating scientists should be working on the project and affiliated with the Institute/University holding the indicated position at the time of start of the project as well as at the time of exchange visits under the project. The expenditure related to approve visits of participating scientists, as mentioned above, only can be met from the project grant.

4. The break-up of estimated expenditure is as indicated below and no re-appropriation shall be allowed under this project.

<b>Headings</b>	Estimated expenditure(s)			
	1 <sup>st</sup> year	2 <sup>nd</sup> year	Total	
1. Expenses for Indian scientists to visit Switzerland under the project	(2 visits) (30&90 days)	(2 visits) (30&90 days)	(4 visits)	
(i) International air-fare (by IATA excursion/economy class by shortest route) including surface travel from place of work in India to place of work in Switzerland & back; Visa charges etc @ Rs. 60000/- per visit.	1,20,000/-	1,20,000/-	2,40,000/-	
2. Expenses for Swiss scientists to visit India under the project	(2 visits) (14 days each)	(2 visits) (14 days each)	(4 visits)	
(i) Accommodation charges @ Rs. 2000/- per day.	56,000/-	56,000/-	1,12,000/-	
(ii) Per-diem charges @ Rs. 1000/- per day	28,000/-	28,000/-	56,000/-	
Total	2,04,000/-	2,04,000/-	4,08,000/-	

(Rupees Four Lac Eight Thousand Only)



Contd. p/2

- 5. The local hospitality (which includes per-diem, accommodation, etc) for Indian scientists visiting Switz\_land and the International travel related expenses wrt the Swiss Scientists visiting India under the project shall be borne by EPFL Switzerland through the Swiss Co-PI of the project.
- 6. Sanction of the President is also accorded for the release of Rs. 2,04,000/- (Rupees Two Lac Four Thousand Only) as an initial installment for incurring expenditure during the first year of the project and payment of this amount may be made to The Registrar, University of Delhi, Delhi-110007 and transfer electronically as per the Bank details given below:

1.	Name of the account (as per Bank record)	University of Delhi
2.	Name and Designation of A/C holder (as per Bank A/C)	The Registrar, University of Delhi, Delhi-110007
3.	Bank Account No.	10851298650
4.	Bank Name and Branch Address	State Bank of India, University of Delhi, Utility Centre, Delhi-110007
5.	IFSC Code	SBIN0001067

- 7. The release of this grant is subject to:
  - i) Obtaining prior approval of this Department on all project related visits to be undertaken by the scientists from the either side in connection with the implementation with of this project separately in prescribed format, on a case to case basis, at-least 6 weeks in advance before incurring any expenditure for this purpose.
  - Submission of Utilization Certificate (UC) and a Statement of Expenditure (SE) along with up to date progress report at the end of each financial year for the grants already received under the project and seeking specific approval of this Department for carry forward of unspent funds to the next financial year for utilization under the project
  - The international / domestic air-travel connected to visits under this project is to be performed only as per the prevailing prescribed norms and regulations of Government of India.
  - The grantee Institute/University shall maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The Interest earned should be reported to DST while submitting the SE/UC. The Interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of grant.
- 8. The accounts of the grantee institution shall be open to inspection by the sanctioning authority /audit whenever the institution is called upon to do so, as laid down under Rule 211 of General Financial Rules.
- 9. The expenditure involved is to be debited under the budget head Demand No. 85, Department of Science and Technology Major Head-3425, other scientific research 60.798-International Cooperation 12- S&T Cooperation with Other Countries 12.00.31-Grants—in-aid (Plan) during the current financial year 2012-2013.
- 10. This issues under the delegated powers to the Ministries/Departments and with the approval of Secretary, DST and financial concurrence of IFD vide San no. 100/IFD/3582/2012-2013 dated 04-09-2012.

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### No. SR/MF/PS-03/2009-DU -I

Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi - 110 016.

Dated 30-04-2009

## ORDER

Subject: Financial assistance for the project entitled "Study of New Particles with the CMS Detector at the Large Hadron Collider and Heavy Ion Physics using LHC at CERN-CMS Experiment" under the guidance of Dr. R.K Shivpuri, Department of Physics and Astrophysics, University of Delhi, Delhi-110 007.

In continuation of the Government of India's Sanction Order vide Department of Atomic Energy's OM No. 3/1/2007/GEN/R&D-I/72 dated 21.05.2009, sanction of the President is hereby accorded for a DST contribution of Rs. 3,60,55,000/- (Rupees three crore sixty lakh fifty five thousand only) till 31.03.2012 for the above mentioned project. The items of expenditure for which the total allocation of Rs. 3,60,55,000/- has been approved till 31.03.2012 are given below:-

Head	Amount (Rs. in lakh)		
Machinery & Equipment	26.00		
Materials & Supplies	24.00		
Major Works	20.00		
Consultancy/Manpower	49.75		
Domestic Travel	12.00		
Foreign Travel	187.80		
Contingencies	36.00		
Overheads	5.00		
Total	360.55		

- 2. Sanction of the President is hereby also accorded to the payment of Rs. 1,44,20,000/- (Rupees one crore forty four lakh twenty thousand only) to the Registrar, University of Delhi, Delhi-110 007 being the first installment of the grant for the year 2009-10 for implementation of the said research project.
- 3. The expenditure involved is debitable to

### Demand No.83: Department of Science & Technology

3425 Other Scientific Research (Major Head)

60. Others: (Sub-Major Head)

60.200 Assistance to other Scientific Bodies (Minor Head)

45. Grants-in-aid for Mega Facilities for Basic Research

45.01.31 Grants-in-aid for the year 2009-2010 (Plan Expenditure).

This release is being made under the Mega Facilities for Basic Research scheme.

4. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science & Technology vide San No. 100/IFD/**5357**/2009-10 dated 30.09.2009.

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- The amount of Rs. 1,44,20,000/- (Rupees one crore forty four lakh twenty thousand only) will be drawn by the Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the to the Registrar, University of Delhi, Delhi-110 007.
- The institutions will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each
- The institutions will maintain separate audited accounts for the project. If it is 7. found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the institutions to be adjusted towards further instalment of the
- As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the institutions are called upon to do so.
- The Sanction Order is entered vide Mega Facilities Sl. No. ...... in the register of grants.

(PRAVEER ASTHANA) Scientist-G

Copy forwarded for information and necessary action to:

- 1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi -
- 2. The Drawing and Disbursing Officer, DST, Cash Section (2 copies).
- 3. Dr. R.K Shivpuri, Department of Physics and Astrophysics, University of Delhi,
- 4. The Registrar, University of Delhi, Delhi-110 007. In case the cheque/draft in respect of the amount sanctioned for disbursement under this sanction is not received by the Principal Investigator (PI) within 15 days from the date of issue of the sanction, the PI may intimate the fact, with details of the IFD Diary No. & Date to the Joint Secretary & Financial Adviser at fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.
- 5. The Pay & Accounts Officer, DST, New Delhi. 6. The Controller of Accounts, DST, New Delhi
- 7. Account Section, DST, New Delhi
- 8. Sanction folder SERC
- 9. Head, SERC Division
- 10. The Joint Secretary (R&D), Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.
- 11. Dr. B. Purniah, Department of Atomic Energy, Anushakti Bhavan, CSM Marg,

(PRAVEER ASTHANA) Scientist-G

### No. SR/MF/PS-03/2009-DU

Government of India

Ministry of Science & Technology

Department of Science & Technology

(Mega Facilities for Basic Research)

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 03.09.2012

### ORDER

Sub: Financial assistance for the project entitled "Study of new particles with the CMS Detector at the Large Hadron Collider and Heavy Ion Physics using LHC at CERN-CMS experiment" under the guidance of Dr. R.K. Shivpuri, Department of Physics & Astrophysics, University of Delhi, Delhi -110 007 – extension of the project with revision in project cost.

In partial modification of this Department's sanction order of even number dated 30.09.2009, sanction of the President is accorded for extension of above said project till 31.03.2014 with revision in total project cost from Rs. 3,60,55,000/- to Rs. 5,61,60,000/- as per DAF O M. dated 21.05.2009. The revised allocations are given below

Budget Head	Revised allocations (Rs. in lakh)
Machinery & Equipment	. 26.00
Materials and Supplies	. 24.00
Major Works	20.00
Consultancy/Manpower	93.60
Domestic Travel	20,00
Foreign Travel	313.00
Contingencies	60.00
Overhead charges	5.00
Total	561.60

- 2. All other ferms and conditions remain the same
- This order has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides JSFA diary No. 136 dated 01.05.2012.

(GAURAV AGGARWAL) Scientist-C

Copy forwarded for information and necessary action to:

- The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.
- Dr. R.K. Shivpuri
  Department of Physics & Astrophysics
  University of Delhi, Delhi -110 007
  - The Registrar University of Delhi, Delhi - 110 007
  - The Joint Secretary (R&D)
     Department of Atomic Energy, Anushakti Bhawan, CSM Marg, Mumbai- 400 001
  - 5 The Under Secretary (R&D)
    Department of Atomic Energy, Anushakti Bhawan, CSM Marg, Mumbai- 400 001
  - Dr. B. Purniah Department of Atomic Energy, Anushakti Bhawan, CSM Marg, Mumbai- 400 001
  - ". Sanction folder (Mega Facilities for Basic Research).

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Dauran Regardent

(GAURAV AGGARWAL) Scientist-C

### No. SR/MF/PS-02/2014-DUA (G)

Government of India Ministry of Science & Technology Department of Science & Technology (Mega Facilities for Basic Research)

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 17.09.2014

#### ORDER

Sub: Financial assistance for the project entitled "Compact Muon Solenoid (CMS) Upgrade, Operation and Utilization".

<u>Project Coordinators</u>: Dr. Md. Naimuddin and Dr. Kirti Ranjan, Department of Physics, University of Delhi, Delhi-110 007 (Delhi).

In continuation of Government of India sanction order No. 3/2/2014/Gen/R&D-1/8703 dated 10.07.2014, sanction of the President is hereby accorded for DST contribution of Rs. 9,99,00,000/-(Rupees nine crore ninety nine lakh only) to "University of Delhi, Delhi-110 007 (Delhi)" with break-up of Rs. 5,44,00,000/- under 'Grants-in-aid General' and Rs. 4,55,00,000/- under 'Grants for creation of capital assets' budget heads respectively. The date of start of the project will be 31.07.2014, i.e., the date of sanction of the project by Government of India. The scheduled date of completion of the project is 31.03.2019. The items of expenditure for which total allocation of Rs. 9,99,00,000/- has been approved are given below:

				(Amo	unt in Rup	ees lakh)
Budget head	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4th year	5 <sup>th</sup> year	Total
General (Revenue)						
Manpower	20.64	20.64	20.64	20.64	20.64	103.20
Travel (Domestic)	4.00	4.00	4.00	4.00	4.00	20.00
Travel (Foreign)	76.00	76.00	76.00	76.00	76.00	380.00
Office Expenses/Contingency	6.00	6.00	6.00	6.00	1.00	25.00
Consultancy	3.60	3.60	3.60	-		10.80
Overhead	5.00	-	-	-	-	5.00
Sub-Total (General)	115.24	110.24	110.24	101.64	101.64	544.00
Capital						
Machinery & Equipment	70.00	60.00	57.00	58.00	-	245.00
Materials & Supplies	40.00	60,00	50.00	30.00	-	180.00
Major Works	18.00	7.00	5.00	12	-	30.00
Sub-Total (Capital)	128.00	127.00	112.00	88.00		455.00
TOTAL	243.24	237.24	222.24	194.64	101.64	999.00

- 2. Sanction of the President is also accorded for payment of Rs. 1,15,24,000/- (Rupees one crore fifteen lakh twenty four thousand only) from 'Grants-in-aid General' and Rs. 1,28,00,000/- (Rupees one crore twenty eight lakh only) from 'Grants for creation of capital assets' budget heads respectively to "University of Delhi, Delhi-110 007 (Delhi)" being first installment of the grant for implementation of the above said project. Since it is first installment of grant, no previous UC is applicable.
- The amount of Rs. 1,15,24,000/- (Rupees one crore fifteen lakh twenty four thousand only) will be drawn by Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the "University of Delhi, Delhi-110 007 (Delhi)" through their bank account details given below:

Bank account number	10851298650
Name of the bank and branch	State Bank of India University of Delhi branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110002030

The expenditure involved is debit able to:

Demand No. 86	Department of Science & Technology
3425	Other Scientific Research (Major Head)
60.	Others: (Sub-Major Head)
60.200	Assistance to other Scientific Bodies (Minor Head)
45.	Mega Facilities for Basic Research
45.01	Mega Facilities for Basic Research
45.01.31	Grants-in-aid General for 2014-2015 (Plan Expenditure)
This release is bein	g made under Mega Facilities for Basic Research

- Overheads are meant for the host institute/university towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc.
- 6. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website. All items of equipment should be procured in accordance with the provisions contained in GFR'2005. The benefit of custom duty exemption extended to the research institutes under GoI notification No. 51/96 on imports of equipment for research purposes, may be availed.
- The implementing institute/university will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 8. The implementing institute/university will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the implementing institute/university to be adjusted towards further installment of the grant.
- As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the implementing Institute/University is called upon to do so.
- The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vide concurrence diary number C/ 3326 /IFD/2014-15 dated 17.09.2014.
- 11. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research programme at Sr. No. 22.

GAURAV AGGARWAL)
Scientist-D

To
Drawing and Disbursing Officer, DST
Cash Section (Copy with 2 spare copies).

# Copy forwarded for information and necessary action to:

- The Pay & Accounts Officer, DST.
- Dr. Md. Naimuddin
   Department of Physics
   University of Delhi, Delhi-110 007 (Delhi)
- 3 Dr. Kirti Ranjan Department of Physics University of Delhi, Delhi-110 007 (Delhi)
- The Registrar University of Delhi, Delhi-110 007 (Delhi)
- Dr. Ajit K. Mohanty Bhabha Atomic Research Centre (BARC) Trombay, Mumbai-400 085 (Maharashtra)
- The Under Secretary (R&D)
   Department of Atomic Energy
   O. Y. C. Building, CSM Marg, Mumbai 400 001
- The Principal Director of Audit, Scientific Departments IIIrd Floor, AGCR Building, I.P. Estate, New Delhi-110 002
- Sanction folder (Mega Facilities for Basic Research programme).

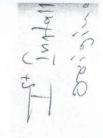
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GAURAV AGGARWAL)
Scientist-D

No. SR/MF/PS-03/2014-DU (G)

Government of India Ministry of Science & Technology Department of Science & Technology (Mega Facilities for Basic Research)

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 26.09.2014



#### ORDER

Sub: Financial assistance for the project entitled "Updating and Operation of Regional WLCG Grid System".

Project Coordinator:

Dr. Kirti Ranjan, Department of Physics, University of Delhi, Delhi-110 007 (Delhi).

In pursuance of O.M. No. 3/1/2014/Gen/R&D-I/11030 dated 28.08.2014 issued by the Department of Atomic Energy, Government of India and in continuation of this Department's sanction order No. SR/MF/PS-03/2014 dated 26.09.2014, sanction of the President is hereby accorded for DST contribution of Rs. 25,30,000/- (Rupees twenty five lakh and thirty thousand only) to the "University of Delhi, Delhi-110 007 (Delhi)" with break-up of Rs. 10,30,000/- under 'Grants-in-aid General' and Rs. 15,00,000/- under 'Grants for creation of capital assets' budget heads respectively. The date of start of the project is 28.08.2014, i.e., the date of sanction of the project by Government of India. The scheduled date of completion of the project is 31.03.2019. The items of expenditure for which total allocation of Rs. 25,30,000/- has been approved are given below:

				·. (Amo	unt in Rup	ees lakh)
Budget head	1 <sup>st</sup> year	2 <sup>nd</sup> year	3 <sup>rd</sup> year	4 <sup>th</sup> year	5 <sup>th</sup> year	Total
General (Revenue)						
Domestic Travel	0.30	0.30	0.30	0.30	0.30	1.50
Foreign Travel	1.00	1.00	1.00	1.00	1.00	5.00
Office Expenses	0.76	0.76	0.76	0.76	0.76	3.80
Sub-Total (General)	2.06	2.06	2.06	2.06	2.06	10.30
Capital						
Machinery & Equipment	15.00			-	-	15.00
Sub-Totai (Capital)	15.00	-	-	-		15.00
Total	17.06	2.06	2.06	2.06	2.06	25.30

- Sanction of the President is also accorded for payment of Rs. 2,06,000/- (Rupees two lakh six thousand only) from 'Grants-in-aid General' and Rs. 15,00,000/- (Rupees fifteen lakh only) from 'Grants for creation of capital assets' budget heads respectively to the "University of Delhi, Delhi-110 037 (Delhi)" being first installment of the grant for implementation of the above said project. Since it is first installment of grant, no previous UC is applicable.
- 3. The amount of Rs. 2,06,000/- (Rupees two lakh six thousand only) will be drawn by Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the "University of Delhi, Delhi-110 007 (Delhi)" through their bank account details given below:

Bank account number	10351298650
Name of the bank and branch	State Bank of India University of Delhi branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110092030

4. The expenditure involved is debit able to:

Demand No. 86	Department of Science & Technology
3425	Other Scientific Research (Major Head)
60.	Others: (Sub-Major Head)
60.200	Assistance to other Scientific Bodies (Minor Head)
45.	Mega Facilities for Basic Research
45.01	Mega Facilities for Basic Research
45.01.31	Grants-in-aid General for 2014-2015 (Plan Expenditure)
This release is bein	g made under Mega Facilities for Basic Research

5. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website. All items of equipment should be procured in accordance with the provisions contained in GFR'2005. The benefit of custom duty exemption extended to the research institutes under GoI notification No. 51/96 on imports of equipment for research purposes, may be availed.

Jamas Rga\_ 26.09.2014

- The implementing institute/university will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 7. The implementing institute/university will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the implementing institute/university to be adjusted towards further installment of the grant.
- 8. As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the implementing Institute/University is called upon to do so.
- The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides concurrence diary number C/3658/IFD/2014-15 dated 26.09.2014.
- 10. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research programme at Sr. No. 37.

Scientist-D

To

Drawing and Disbursing Officer, DST Cash Section (Copy with 2 spare copies).

# Copy forwarded for information and necessary action to:

- 1. The Pay & Accounts Officer, DST.
- 2 Dr. Kirti Ranjan Department of Physics University of Delhi, Delhi-110 007 (Delhi)
- The Registrar University of Delhi, Delhi-110 007 (Delhi)
- Dr. B.S. Jagdeesh
   Head Grid & Networking Section, Computer Division
   Bhabha Atomic Research Centre, Trombay
   Mumbai-400 085 (Maharashtra)
- The Under Secretary (R&D)
   Department of Atomic Energy
   O. Y. C. Building, CSM Marg, Mumbai 400 001
- The Principal Director of Audit, Scientific Departments IIIrd Floor, AGCR Building, I.P. Estate, New Delhi-110 002
- 7. Sanction folder (Mega Facilities for Basic Research programme).
- 8. File copy.

GAURAV AGGARWAL)
Scientist-D

# No. SR/MF/PS-03/2008-DU-1

Government of India
Ministry of Science & Technology
Department of Science and Technology

Technology Bhavan New Mehrauli Road New Delhi – 110016 Dated: **17.03.2010** 

# ORDER

Sub: The project entitled "India LHC Grid Collaboration - Enhancement of Regional World wide Computing Grid (WLCG)" under the guidance of Dr. R.K. Shivpuri, Department of Physics & Astrophysics, University of Delhi, Delhi - 110 007.

Sanction of the President is hereby accorded to the above project at a total cost of Rs. 28,57,500/- (Rupees twenty eight lakh fifty seven thousand and five hundred only) till 31.03.2013. The items of expenditure for which total allocation of Rs. 28,57,500/- has been approved till 31.03.2013 are given below:

Machinery and Equipment	(Amount in Rupees)
Manpower Manpower	15,00,000
Travel	5,85,000
Contingencies	1,12,500
Overheads	2,85,000
	3,75,000
Total	28,57,500

- Sanction of the President is also accorded for payment of Rs. 19,52,500/- (Rupees nineteen lakh fifty two thousand and five hundred only) to the "Registrar, University of Delhi, Delhi".
- The expenditure involved is debitable to

Demand No.83: Department of Science & Technology

Other Scientific Research (Major Head)

60. Others (Sub-Major Head)

60.200 Assistance to other Scientific Bodies (Major Head)

45. Mega Facilities for Basic Research

45.01 Grant in aid for Mega Facilities for Basic Research

45.01.31 Grant in aid for the year 2009-2010 (Plan Expenditure)

This release is being made under Mega Facilities for Basic Research Scheme.

- 4. The amount of Rs. 19,52,500/- (Rupees nineteen lakh fifty two thousand and five hundred only) will be drawn by Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to Account No. 10851298650 of University of Delhi, Delhi with State Bank of India, University of Delhi Branch, Delhi. [Bank RTGS Code SBIN 0001067] and [MICR No. 110002030].
- The Institute/University will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.

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- Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website www.serc-dst.org. All items of equipment should be procured in accordance with the provisions contained in GFR'2005. The benefit of custom duty exemption extended to the research institutes under GoI notification No. 51/96 on imports of equipment for research purposes, may
- The Institute/University will maintain separate audited accounts for this project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the Institute/University to
- As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the institute/university is called upon to do so.
- The sanction order is entered vide Mega Facilities for Basic Research Sr. No. 13 in the
- The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides Sanction No. 100/IFD/ 11525 /2009-10 dated 17.03.2010.

Bauran Ogganwal

(GAURAV AGGARWAL)

Scientist-C

Copy forwarded for information and necessary action to:

The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P.

Copy with two spare copies of the sanction to the Drawing and Disbursing Officer, DST, Dr. R.K. Shivpuri

Department of Physics & Astrophysics University of Delhi, Delhi - 110 007

In case the amount sanctioned for the disbursement under this sanction is not received by the recipient of the grant within 15 days from the date of issue of the sanction, he/she may intimate the fact, with details of the IFD Diary No. and date to the Joint Secretary and Financial Advisor at the e-mail address fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.

The Registrar University of Delhi, Delhi - 110 007

- The Pay & Accounts Officer, DST.
- The Controller of Accounts, DST. 7.
- Accounts Section, DST. 8.
- Head (SERC Division) 9.
- Sanction folder (Mega Facilities for Basic Research). 10. File copy.

Laurale Gegalwell

(GAURAV AGGARWAL) Scientist-C

- Funding agency
- Total grant of the Project Date of the commencement d.
- e. Date of Completion
- f. Project closure

Yes/No

Date: 12/2/16

Date:

दिल्ली-110007/Delhi-110007

प्रोo मालाश्री लाल / Prof. Malashri

अध्यक्ष अनुस्थान वरिषद / Chairperson, Research Council दिल्ली विश्वविद्यालय / University of Delhi

- 16. Details of ongoing projects (In the last 5 years)

  a. Title of the project Undersknoling the dynamin to in

  b. Funding agency DST wenter rotating onillators
  - Total grant of the Project d.
  - Date of Completion

    23/10/13
    22/10/16 e.

We certify that no civil/electrical modifications shall be carried out without the express permission of the University Engineering Department and the PVC/DSC. We will follow the norms for the operation of the projects framed from time to time by the Research Project Advisory Committee:

Signature of the Investigator:

Signature of the Co – Investigator:

Name: Head of the Department/Director of Center/Institute

Signature:

प्रो. अमिताभ मुखर्जी / Prof. A. Mukherjee

विमागाध्यक्ष / Head भौतिकी और खगोलभौतिकी विभाग ent of Physics & Astrophysics वेल्ली विश्वविद्यालय, दिल्ली-110007 University of Delhi, Delhi-110007

Notes:

Date: 13/2/16

1. Faculty member should be allowed to work as a Project-in-charge (PI) only up to the age of Superannuation i.e. 65 years.

2. "when a PI attains the age of 60 years, then all documents/bill/utilization certificates etc. retaining to his/her project should be signed by both i.e. PI as well as the Co-PI (a permanent teacher of the Department). The Co-PI will be responsible for all the assets, pending advances and subsequent transactions under the project".

3. "The PI should stop signing all the financial documents at least six months before the due date of his/her superannuation in order to facilitate issuance of No Dues Certificates to him".

4. "No Project proposal should be forwarded by the University to the funding agency if two or more tenure expired projects are pending for closure by the concerned PI.

# UNIVERSITY OF DELHI

PROJECT SUBMISSION FORM
(Enclose Two Copies of the Project Proposals with this form)

1.	Name of the Investigator Awadhesh Prasad
2.	Designation Assist. Pool.
2	Data of Rirth Merch 10, 1565
4.	Department/Center/Institute Depl- of Phys. 4 Astrophys  Name of the Co-Investigator M. D. Shrimali 4 GA. Leonov  Depl- of Phys. 4 Astrophys  Name of the Co-Investigator M. D. Shrimali 4 GA. Leonov
5.	Name of the Co-Investigator M.D. Shimali & GA. Leonov
6.	Designation
7.	Date of Birth Jan 3, 1373 4 Feb 2, 1847
8.	Department/Center/Institute CURAJ Rays Man and St. Petersburg University
9.	Title of the project (and like
10.	Tentative Duration of the Project From: To: Two years after Sanchion
11.	Funding Agency DST. Gol. of India and RFDR Russia
12.	Details of Funding requested:  a. Salaries  b. Consumables  c. Equipment  d. Contingency  e. Overhead –(20 % of the total cost of the project)  f. Total funds requested
13.	Requirement from the University  a. Space b. Funding
14.	<ul> <li>a. Total no. of ongoing projects with the PI</li> <li>b. Total no. of projects completed by the PI</li> <li>2</li> </ul>
15.	Details of completed projects (In the last 5 years)  a. Title of the project  [ A skeel is a climited]

Tel: 2300 7307 Fax 2379 4562

ARMREB/MAA/2015/163

Defence R&D Organization (HQ)
Armament Research Board
DRDO Bhawan, Rajaji Marg
New Delhi – 110 011

26 Nov 2015

Registrar, University of Delhi, Delhi-110007

# CORRIGENDUM

Ref:- Our letter of even no. dated 02 March 2015.

2. In exercise of SI. No. 3.1 of GOI, MoD letter No. DRDO/DBFA/FA/83226/M/01/2031/D(R&D) dated 30 July 2010, the competent financial authority has accorded approval for the following amendments in Para 2 of the letter under reference for the project entitled "Flux growth of Pb(Mg<sub>1</sub>Nb<sub>2</sub>)O<sub>3</sub>-PbTiO3(PMNT)single crystals for piezoelectric and pyroelectric applications" sanctioned to University of Delhi under ARMREB:-

# FOR:

Heads (₹ In lakhs)	1 <sup>st</sup> Yr (IC)	2 <sup>nd</sup> Yr (IC)	3rd Yr (IC)
(a) Research Staff	2.5	2.5	2.8
(b) Special Equipments: Piezoelectric/Ferroelectric/Piezoel-	52.8	00	00
ectric Characterization System of Radiant Technologies, Inc. Canada			
(c) Consumable	7.0	1.0	0.5
(d) Contingencies	0.5	0.5	0.5
(e) TA/DA	0.5	0.5	0.5
(f) Sub-total(A)	63.3	4.5	4.3
g) Institute Overheads (B)	4.0	0.5	0.5
Grand Total (A+B)	67.3	5.0	4.8
Total cost of the project		77.1	

# READ:

Heads (₹ In lakhs)	1st Yr (IC)	2 <sup>nd</sup> Yr (IC)	3 <sup>rd</sup> Yr (IC)
(a) Research Staff	3.9	3.9	4.3
(b) Special Equipments: Piezoelectric/Ferroelectric/Piezoel-	56.8	00	00
ectric Characterization System of Radiant Technologies, Inc. Canada			
(c) Consumable	7.0	1.0	0.5
(d) Contingencies	0.5	0.5	0.5
(e) TA/DA	0.5	0.5	0.5
(f) Sub-total(A)	68.7	5.9	5.8
g) Institute Overheads (B)	4.0	0.5	0.5
Grand Total (A+B)	72.7	6.4	6.3
Total cost of the project		85.4	

13-7

डॉ. विनय कुमार / DR. BINAY KUMAR cipal Investigator, DRDO Project : "Flux groy

Principal Investigator, DRDO Project: "Flux growth of Pb(Mg<sub>1/3</sub>Nb<sub>2/3</sub>)O<sub>3</sub>-PbTiO<sub>3</sub> (PMNT) single crystals for piezoel. Tric and pyroelectric applications"

Sanction No.: ARMREB / MAA / 2015 / 163

# No.SR/S2/CMP-0068/2010(G) Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi-110 016.

Dated:

29-9-2011

Financial Assistance for the Research project entitled, entitled "Growth of device level lead free alkali-based piezoelectric single crystals" under the guidance of Dr. Binay Kumar, Department of Physics & Astrophysics, University of Delhi - Delhi-110007

Sanction of the President is hereby accorded to the above-mentioned project at a total cost of Rs. 24,81,480/-(Rupees twenty four lakh eighty one thousand four hundred eighty only) with a break -up of Rs. 7,97,900/- under Capital head and Rs.16,83,580/- under General head for a duration of three years. The items of expenditure for which the total allocation of Rs. 24,81,480/- has been

approved for a period of three years, are given below:

SI. No	for a period of three years, are given below:  Head	Total (in Rs.)
A		7,97,900/-
1.00000	Crucible - Two	7,97,900/-
$A^{*}$	Total (Capital)	
1.	Manpower:	7,80,000/-
AVARI	JRF @ Rs.16,000-16,000-13,000/-(HRA-10%)	3,00,000/
2.	Consumables	90,000/
3.	Travels	1,00,000/
4.	Contingencies {Su	b Total 20,67,900/-
		4,13,580/
5.	Overhead Charges	16,83,580/
D.	Total (General)  Total cost of the project (A' + B')	24,81,480/

- 2. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project.
- The sanction of the President is also accorded to the payment of Rs.7,97,900/- (Rupees seven lakh ninety seven thousand nine hundred only) under 'Grants for creation of capital assets' and Rs.5.02,100/- (Rupees five lakh two thousand one hundred only) under 'Grants-in-aid General to the Registrar, University of Delhi - Delhi-110007 being the first installment of the grant for the year 2011-12 for implementation of the said research project.
- 4. Sanction of the grant is subject to the condition given at the website www.serc-dst.org under the heading 'guidelines for implementing research projects'.
- The amount of Rs.5,02,100/- (Rupees five lakh two thousand one hundred only) under 'Grants-in-aid General' will be drawn by the Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the Registrar, University of Delhi-110007.

डा. विनय कुमार/Dr. BINAY KUMAR Principal Investigator DST Project: Growth of Device Lev Free Alkali Based Piezoelectric Single Sanction No. SR/S2/CMP-0068/

FILE NO. EMR/2015/000385

SCIENCE & ENGINEERING RESEARCH BOARD

D.O.S. 150ch2016

5 & 5A, Lower Ground Floor Vasant Square Mall Plot No. A, Community Centre Sector-B, Pocket-5, Vasant Kunj New Delhi-110070

Dated: 03-Oct-2016

# ORDER

Subject: Financial Sanction of the research project titled "Fabrication and characterization of piezoelectric nanocrystals-organic hybrid sheet for energy harvesting and pressure sensor" under the guidance of Dr. Binay Kumar, Department of Physics & Astrophysics, University of Delhi, North Campus, New Delhi, Delhi, 110007 - Release of 1st grant.

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 7168480/- (Rs. Seventy One Lakh Sixty Eight Thousand Four Hundred and Eighty Only) with break-up of Rs. 4500000/- under Capital (Non-recurring) head and Rs. 2668480/- under General (Recurring) head for a duration of Three years. The items of expenditure for which the total allocation of Rs. 7168480/- has been approved are given below:

The following budget may be considered for University Of Delhi, North Campus, New Delhi, Delhi

S. No	Head	Total (in Rs.)
Α	Non-recurring	
1	Equipment	4500000
	-> Autoclave	
	-> Spin coating	
	-> Voltage and Current preamplifier	
	-> Fritsch Planetary Ball Mill	
	-> Particle size analyzer	
	-> Force simulator	
	-> Bending tester	
A'	Total (Non-Recurring)	4500000
В	Recurring Items	
1	Recurring - A : (Manpower, Consumables, Travel, Contingencies)	2016800
2	Recurring - B : (Overhead Charges)	651680
B'	Total (Recurring)	2668480
С	Total cost of the project (A' + B')	7168480

1357

Principal Investigator, DST Project: Fabrication and characterization of piezoelectric nanocrystals-organic hybrid sheet for energy harvesting and pressure sensor

-in- No · FMR/2015/000385 dated 3 Oct 2016



विश्वविद्यालय अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली-110 002

UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI-110 002

F. No. 41-914/2012 (SR)

The Under Secretary (FD-III)
University Grants Commission
New Delhi-110002

Sub:- UGC support for the Major Research Project in Physical Sciences, Bio-Sciences, Maths , Medical, Agricultural Sciences and Engineering & Chemistry to University/College Teachers – Project entitled,

"Growth and characterization of n-and p-type ZnO nanostrucutre for optoelectronic applications"

Sir,

I am to refer to your letter forwarding the application of **Dr. Binay Kumar** of your institution for financial assistance under the above scheme and to convey the Commission's approval & sanction an on account grant of **Rs.** 6,73,000/- (**Rupees: six lakh seventy three thousand only**) to the Registrar, **University of Delhi**, **Delhi-110007**, in detailed below:-

S.No		AMOUNT APPROVED	GRANT RELEASED AS Ist INSTALMENT	Categ
A. 1. 2.	Non - Recurring  Books & Journals  Equipment (As per proposal)	nil 6,00,000/-	6,00,000/-	GEN
B. 1. 2. 3. 4. 5. 6. 7.	Recurring Honorarium to Retd. Teacher @ Rs. 12, 000/- p.m. Project Fellow @14,000/- p.m. for initial 2 years and Rs. 16,000/- p.m. from the third year onwards. Chemical/ Glassware / Consumable Hiring Services Contingency Travel/Field Work Special Need	nil 45,000/- nil 60,000/- 20.000/- nil	73,000/-	
8.	Overhead Charges @ Rs. 10% approved recurring Grant (Except Travel & Field Work)	10,500/-	in the state of about and a state of the sta	
	Total (A + B)	7,35,500/-	6,73,000/-	

The acceptance Certificate in prescribed format (Annexure-1 available on the UGC web-site) may be sent to the undersigned within one month from the issue of the award letter failing which the project may be treated as cancelled.

If the terms & conditions are acceptable, as per guideline which are available on UGC web-site www.ugc.ac.in the Demand Draft/ Cheque being sent may be retained. Otherwise the same may be returned in original Secretary, UGC, New Delhi.

Principal Investigators should ensure that the statement of expenditure & utilization Certificate to the effect that the grant has been utilized for the purpose for which it has been sanctioned shall be furnished to the University Grants Commission in time.

The first instalment of the grant shall comprise of 100% of the Non –Recurring including Over Head Charges, and 50% of the total Recurring grant.



# COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

# EXTRAMURAL RESEARCH DIVISION

CSIR COMPLEX, PUSA, NEW DELHI - 110 012

No. 03	(1249)	/12/EMR-II	
From	Head,	Human Resources	Development Group

Dated: 06-11-12-

To/

PROF(MS) S ANNAPOORNI DEPT OF PHYSICS & ASTROPHY DELHI UNIV DELHI 110007 DELHI

Subject:

Grants-in-aid for your scheme entitled : INVESTIGATION OF PHASE TRANSITION IN Pt BASED HARD

MAGNETIC ALLOY FILMS

Sir,

I am directed to refer to your proposal for sanction of CSIR Scheme titled above and to convey the approval of DG CSIR as per the details given below.

ſſ-	Duration of the Scheme (from the date of Commencement)		36 Months		
11	Staff		Nil		1
Ш	Contingency (per annum in ₹)	1st Year: 1,00,000	2 <sup>nd</sup> Year: 1,00,000	3rd Year :1,00,000	L C in l
IV	Equipment (lumpsum in ₹)	*	9,00,000 (1	s) (For ele	trochemical
				COLIDA	L5/W

- 2. The above sanction is subject to review of periodical progress of the project by expert committee.
- 3. DG CSIR has also approved the release of the following grants for the period 01/11/2012 to 31/03/2013

No	Grants	Amount (in ₹)
I	Staff	.0
II	Contingency	41,667
III	Equipment	9,00,000
	Total:	9,41,667

4. Sanction of grants is subject to strict compliance of the terms and conditions enclosed or as may be modified from time to time. Please go through the instructions carefully with regard to subsequent release of grants and your obligations under this sanction. The grant for the Ist installment will be sent through RBI – EFT (Electronic Funds Transfer), to the concerned authority of your institution on receipt of your joining report, undertaking (form-A), non-funding certificate and EFT Transaction Request Form.

The expenditure is debitable to budget head P81102.

Yours faithfully,

SECTION OFFICER (EMR-II)

Enci : A	s above			
Copy to	Registrar/Principal/Director, Delki alongwith a cheque No.	University,	Delhi - 110007	, Delki for
	Rs representing first	year's grant for th	e above scheme. The utilisa	
	subject to compliance of para-1 of the	terms and condition	ons stated overlear.	
2.	Sr F&AO(EMR) alongwith FVC for fi	rst year's grant.		

## SUMMARY TERMS AND CONDITIONS

- 1. The first installment of the grants sent by cheque herewith will be utilized subject to submission of the following documents/information.
  - a) Acceptance of the grants sanctioned above.
  - b) An Undertaking in the prescribed form-A of the enclosed booklet executed on non judicial stamp paper of RS. 10/- each pate duly signed.
  - c) A certificate by you duty countersigned by the Head of the Department/Head of the Institution that no other aid giving agency is funding your above scheme.
  - d) Date of commencement of the scheme. This should be started within 3 months from the date mentioned in the sanction letter overleaf at Para 3, with or without the appointment of "Staff"
  - 2. "Contingency" amount will be utilized on pro-rata from the date of the commencement of the scheme. "Staff Stipend" will be utilized from the date the Research Fellow/Associate Joins duty in accordance with the rules stipulated in the terms and conditions and he/she will be paid stipend after receipt of approval of appointment from CSIR. JRF with NET/GATE qualification can be appointed directly, and CSIR concurrence/ratification is to be obtained subsequently.
  - 3. While claiming grants for the subsequent year/period the position regarding unspent balances of the previous year's grants must be mentioned head-wise in the bill failing which the same may be returned unpassed for compliance. Statement of accounts duly audited by the Account Officer and countersigned by the next higher authority in respect of the grants received and expenditure incurred with balance, if any, during the previous year should also be invariably enclosed with the bill.
  - 4. Utilization of funds and maintenance of account under the head "Staff", "Contingency" & Equipment" and appointment of Research Fellows/Associates should be in accordance with the procedure laid down in the terms and conditions.
  - 5. Your obligations under this sanction include, inter alias, the following:
    - i. Submission of Annual Progress Report (15 Copies) to CSIR by I st October, each year including the progress of work as on 31<sup>st</sup> aug. (as per Form-E1 in the booklet). Non-receipt of this report in time will lead to the scheme being withdrawn.
    - ii. Submission of Final Technical Reports (10 copies) in Form-F of the booklet within 3 months after completion of the work describing the original objectives of the scheme, how far these objectives have been achieved and how the results would benefit technological development or enrich the existing knowledge on the subject.
      - iii. Sending of copies of Research Papers published in Journals and Proceedings of Prestigious national/international conferences under this grant with due acknowledgement of CSIR support for information as and when published. The project numbers should always be mentioned in the acknowledgements.
      - iv. Submission of the Audit Utilization Certificate and audited statement of accounts for the grants paid by the CSIR immediately on termination of the scheme.
  - 6. ALL INSTRUMENTS/EQUIPMENT PURCHASED OUT OF/PROVIDED BY CSIR EXTRAMURAL RESRARCH FUND SHOULD CARRY THE LABEL "CSIR FUNDED".

SR/NM/NS-45/2007

Government of Índia Ministry of Science & Technology Department of Science & Technology Arts. Annaporis

Technology Bhavan New Mehrauli Road New Delhi -110 016

Dated:

26.02.2009

# ORDER

Sub: Financial assistance for the research project entitled "Investigations of Magnetic, Optical and Electrical properties of Nanomaterials: Synthesis, Characterization and applications" under the guidance of Dr. S. Annapoorni, Department of Physics & Astrophysics, University of Delhi, Delhi – 110 007.

Sanction of the President is hereby accorded to the above mentioned research project at a total cost of Rs. 5,23,84,800/- (Rupees five crore twenty three lakks eighty four thousand and eight hundred only) for a duration of three years. The items of expenditure for which total allocation of Rs.5,23,84,800/- has been approved for a period of three years are given below:

(Amount in Rupees)

Manpower: Research Associate-III (Two) @ 18000 + 30 % HRA

16,84,800/-

Equipment :

4,70,00,000/-

Material Preparation - Microwave digestion vessel for chemical synthesis, Ball Mill, Sonicator and high speed centrifuge.

Characterization- MPMS, Fluorescence Spectrophotometer with low temperature attachment, Powder XRD with thin film attachment.

Consumables:
Travel:
Contingencies:
Overhead charges:

24,00,000/-

4,00,000/-

5,00,000/-

Total

5,23,84,800/-

- Overhead expenses are meant for the host institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc.
- 3. Sanction of the President is also accorded to the payment of Rs.4,92,00,000/- (Rupees four crore and ninety two lakhs only) to the "Registrar, University of Delhi, Delhi 110 007" being the first instalment of the grant for the year 2008-09 for implementation of the said research project.
- The expenditure involved is debitable to:

Demand No.83: Department of Science & Technology

3425 Other Scientific Research (Major Head)

60. Others: (Sub-Major Head)

60.200 Assistance to other Scientific Bodies (Minor Head)

36. National Mission on Nano Science & Nano Technology

36.00.31 Grants-in-aid for the year 2008-2009 (Plan Expenditure).

This release is being made under Nano Mission.

5. The amount of Rs. 4,92,00,000/- (Rupees four crore and ninety two lakhs only) will be drawn by the Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the "Registrar, University of Delhi, Delhi – 110 007".

.....2/-

- 6. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Projects" given on our website <a href="www.nanomission.gov.in">www.nanomission.gov.in</a>. All items of equipment should be procured in accordance with the provisions contained in GFR 2005.
- 7. The institute/university will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 8. The institute/university will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to DST. The interest thus earned will be treated as a credit to the institute/university to be adjusted towards further installment of the grant.
- 9. As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the institute/university is called upon to do so.
- 10. The sanction order is entered vide Nano Mission St. No. 108 in the Register of Grants.
- 11. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides Sanction No. 100/IFD/ 8058 /2008-09 dated 26.02.2009.

(S.SUDERSHAN RAO) Scientist-D

# Copy forwarded for information and necessary action to:-

- 1. The Principal Director of Audit, Scientific Department, IIIrd floor, AGCR Building, I.P. Estate, New Delhi.
- 2. Copy with two spare copies of the sanction to the Drawing and Disbursing Officer, DST, Cash Section.
- 3. Dr. S. Annapoorni, Department of Physics & Astrophysics University of Delhi, Delhi 110 007.

In case the cheuqe/draft in respect of the amount sanctioned for the disbursement under this sanction is not received by the recipient of the grant within 15 days from the date of issue of the sanction, he/she may intimate the fact, with details of the IFD Diary No. and date to the Joint Secretary and Financial Advisor at the e-mail address fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.

4. The Registrar
University of Delhi, Delhi – 110 007

- 5. The Pay & Accounts Officer, DST, New Delhi.
- 6. The Controller of Accounts, DST, New Delhi.
- 7. Accounts Section, DST, New Delhi.
- 8. MD (Nano Mission).
- 9. Sanction folder (Nano Mission).
- 10. File copy.

s. All the act

(S.SUDERSHAN RAO)
Scientist-D



# अन्तर-विश्वविद्यालय त्वरक केन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

#### Convenor AUC

Ref: IUAC/XIII.7/UFR-51314/ 2679

January 20, 2012

Dr. Samit Kumar Mandal Department of physics & Astrophysics University of Delhi Delhi-110007

Dear Dr. Samit,

We are pleased to inform you that your project entitled "Investigation of few-nucleons transfer reaction in medium mass nuclei at and near the Coulomb barrier" under the UFUP scheme of this Centre has been sanctioned with the following financial approval for a period of three years.

Year	Fellowship	Contingency/Consumbles	Equipment
First	JRF	25,000/-	Nil
Second	JRF	25,000/-	Nil
Third	JRF	25,000/-	Nil

Your project code no. UFR-51314 and the same should be quoted in all future correspondences.

The contingency will be inclusive of all consumables. The grant for the first year contingency will be transferred online to the university's bank account as per the details given below. Fellowship grant will be released only after a Project Fellow/JRF is appointed by the University/Institution and the related documents along with the joining report is sent to this office.

Normal UGC guidelines will apply in all circumstances. Travel money would not be released for you but as per AUC decision, you may come to IUAC for experiments, data analysis and research discussions as required and approved by Centre. IUAC will pay your TA (by train) and the local hospitality as per rule.

Annual progress report and provisional utilisation certificate duly signed by a competent authority of the university in the standard UGC format must be submitted at the completion of each financial year for enabling us to release the funds for the next financial year. As soon as annual accounts of the university are audited, the final audited utilisation certificate should be sent to IUAC and the draft for the unspent grant should be sent in favour of IUAC, Delhi.

Thanking you,

Yours sincerely,

(S.CHOPRA)

:/Telephone: 011-26893955

फैक्स

:/Fax

वेबसाईट:/Website

NURCEN

011-26893666

: www.iuac.res.in

CC: The Registrar University of Delhi Delhi-110007

## No. SR/MF/PS-01/2009-DU

Government of India
Ministry of Science & Technology
Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi – 110 016.

Dated 28.03.2009.

### ORDER

Subject:- Financial assistance for the "Pre-Operative Programme for Indian Participation in the FAIR Project at GSI, Darmstadt, Germany – Accelerator and Detector-Related R&D and Prototyping" under the guidance of Dr. S. Mandal, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.

In continuation of this Department's Sanction Order No. SR/MF/PS-01/2009-Main dated 25.03.2009 sanctioning an amount of Rs. 40,35,000/- (Rupees forty lakh thirty five thousand only) as DST's contribution to the Delhi University, Delhi, sanction of the President is hereby accorded to the payment of Rs. 31,10,000/- (Rupees thirty one lakh ten thousand only) to the Registrar, University of Delhi, Delhi 110 007 being the first installment of the grant for the year 2008-09 for implementation of the said research project.

2. The expenditure involved is debitable to

# Demand No.83: Department of Science & Technology

3425 Other Scientific Research (Major Head)

60. Others: (Sub-Major Head)

60.200 Assistance to other Scientific Bodies (Minor Head)

45. Grants-in-aid for Mega Facilities for Basic Research

45.01.31 Grants-in-aid for the year 2008-2009 (Plan Expenditure).

This release is being made under Mega Facilities for Basic Research scheme.

- 3. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science & Technology vide San No. 100/IFD/8913/2008-09 dated 24.03.2009 and 28.03.2009.
- 1. The amount of Rs. 31,10,000/- (Rupees thirty one lakh ten thousand only) will be drawn by the Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the Registrar, University of Delhi, Delhi 110 007.
- 5. The institutions will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 6. The institutions will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the institutions to be adjusted towards further instalment of the grant.

contd....2/-

- 7. As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the institutions are called upon to do so.
- 8. The Sanction Order is entered vide Mega Facilities Sl. No. ..... in the register of grants.

(PRAVEER ASTHANA)
Scientist-G

Copy forwarded for information and necessary action to:

- 1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi 110 002.
- 2. The Drawing and Disbursing Officer, DST, Cash Section (2 copies).
- 3. Dr. S. Mandal, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.
- 4. The Registrar, University of Delhi, Delhi 110 007.

In case the cheque/draft in respect of the amount sanctioned for disbursement under this sanction is not received by the Principal Investigator (PI) within 15 days from the date of issue of the sanction, the PI may intimate the fact, with details of the IFD Diary No. & Date to the Joint Secretary & Financial Adviser at fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.

- 5. The Pay & Accounts Officer, DST, New Delhi.
- 6. The Controller of Accounts, DST, New Delhi
- 7. Account Section, DST, New Delhi
- 8. Sanction folder SERC
- 9. Head, SERC Division
- 10. Head, International Cooperation Division
- 11. The Joint Secretary (R&D), Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.
- 12. Dr. B. Purniah, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.

(PRAVEER ASTHANA)
Scientist-G

# NO. SR/MF/PS-01/2009-Main Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi – 110 016.

Dated 25.03.2009.

# **ORDER**

Subject:- Financial assistance for the "Pre-Operative Programme for Indian Participation in the FAIR Project at GSI, Darmstadt, Germany — Accelerator and Detector-Related R&D and Prototyping" to various Indian research and educational institutions (listed in Annexure-I).

Sanction of the President is hereby accorded for grant of the above-mentioned project at a total cost of Rs. 9,54,26,600/- (Rupees nine crore fifty four lakh twenty six thousand six hundred only) for a duration of one year to various research and educational institutions in the country as given in Annexure-I. The items of expenditure for which the total allocation of Rs. 9,54,26,600/- has been approved for various research and educational institutions for a period of 1 year are given in Annexure-II.

- 2. Out of the total sanctioned amount of Rs. 9,54,26,600/-, Rs. 4,99,82,000/-(Rupees four crore ninety nine lakh eighty two thousand only) shall be contributed by the Department of Atomic Energy (DAE) and Rs. 4,54,44,600/- (Rupees four crore fifty four lakh forty four thousand six hundred only) shall be contributed by the Department of Science and Technology (DST). The agency-wise, item-wise and institution-wise break-up of the budget are given in Annexure-III and Annexure-IV.
- 3. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc.
- 4. Sanction of the grant is subject to the conditions as detailed at the website www.serc-dst.org under "Guidelines for Implementing Research Projects".
- 5. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science & Technology vide Dy. No. IFD/1811/2008-09 dated 24.3.2009.
- 6. The institutions will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.

- The institutions will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the institutions to be adjusted towards further instalment of the grant.
- As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the institutions are called upon to do so.

(PRAVEER ASTHANA) Scientist-G

Copy forwarded for information and necessary action to:

- 1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi -110 002.
- 2. The Pay & Accounts Officer, DST, New Delhi.
- 3. The Controller of Accounts, DST, New Delhi
- 4. Account Section, DST, New Delhi
- 5. Sanction folder SERC
- 6. Head, SERC Division
- 7. Head, International Cooperation Division
- 8. The Joint Secretary (R&D), Department of Atomic Energy, Anushakti Bhavan, CSM
- 9. Dr. B. Purniah, Department of Atomic Energy, Anushakti Bhavan, CSM Marg,
- 10. Prof. VS Ramamurthy, Chairman, India-FAIR Task Force, Inter University Accelerator Centre, Aruna Asaf Ali Marg, Post Box 10502, New Delhi 110 067.

(PRAVEER ASTHANA) Scientist-G



# Samit Mandal <s.mandal.du@gmail.com>

# India-FAIR Seed Funding Project No. SR/MF/PS-01/2009-DU

1 message

Tue, Feb 21, 2017 at 10:42 AM GAURAV AGGARWAL <gaurav.dst@nic.in> To: DU Samit Mandal Mandal <s.mandal.du@gmail.com>, DU Samit Mandal <smandal@physics.du.ac.in>

Sir,

We have received SE/UC etc. in respect of above project.

We would process for release of Rs. 28,799/-.

As per our PFMS requirement, UCs for all grants need to be uploaded on PFMS website.

In this project, two grants were released.

 1. Rs. 31.10 lakh vide sanction order dated 28.03.2009. For this, we need a UC uploaded on PFMS website.

2. Rs. 4,29,800/- vide sanction order dated 21.03.2012. For this also, we need a UC uploaded on PFMS website. You may upload it on PFMS website. The link is

https://pfms.nic.in/Users/LoginDetails/Login.aspx

I am attaching a PPT for guidance in the matter.

With Regards,

Gaurav Aggarwal

\*\*\*\*\*\*\*\*\*

Gaurav Aggarwal Scientist-D Room No. 4, Hall-H, S&T Block-II Department of Science & Technology New Mehrauli Road, New Delhi-110 016 011-26590 554 (Direct) e-mail: gaurav.dst@nic.in

PPT on UC Monitoring System.pptx 3673K



# अन्तर-विश्वविद्यालय त्वरक केन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

Ref: IUAC/XIII.7/UFR-58309/2597

September 8, 2015

Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007

Sub: Financial sanction for the financial year 2015-2016

Ref: Project Code No. UFR-58309 sanctioned in favour of Dr. Samit Kr Mandal, University of Delhi, Delhi.

Dear Sir,

We are pleased to inform you that your project entitled "Investigation of Few-Nucleons Transfer and Fusion Reactions Mechanism in Medium Mass Nuclei at and Near the Coulomb Barrier" under the UFUP scheme of this Centre has been sanctioned with the following financial approval for a period of three years.

Year	Fellowship	Contingency/Consumbles	Equipment
First	JRF	25,000/-	Nil
Second	JRF	25,000/-	Nil
Third	JRF	25,000/-	Nil

Your project code no. UFR- 58309 and the same should be quoted in all future correspondences.

The contingency will be inclusive of all consumables. The grant for the first year contingency will be released now. Fellowship grant will be released only after a Project Fellow/JRF is appointed by the University/Institution and the related documents along with the joining report is sent to this office.

Normal UGC guidelines will apply in all circumstances. Travel money would not be released for you but as per AUC decision, you may come to IUAC for experiments, data analysis and research discussions as required and approved by Centre. IUAC will pay your TA (by train) and the local hospitality as per rule.

Annual progress report and provisional utilization certificate duly signed by a competent authority of the university in the standard UGC format must be submitted at the completion of each financial year for enabling us to release the funds for the next financial year. As soon as annual accounts of the university are audited, the final audited utilization certificate should be sent to IUAC and the draft for the unspent grant should be sent in favour of "Inter University Accelerator Centre" payable at New Delhi.

Thanking you,

Yours sincerely,

(Dr. S.CHOPRA) Convenor – AUC

CC:

The Registrar University of Delhi, Delhi-110007

पोस्ट बाक्स: 10502 अरूणा आसफ अली मार्ग, Post Box No. 10502, Aruna Asaf Ali Marg, नई दिल्ली - 110 067 (भारत) New Delhi- 110 067 (India)

रभाष :/Telephone: 011-26893955

011-26892601 तार :/Telegram : NURCEN क्रेक्स :/Fax :011-26893666

वेबसाईट:/Website : www.iuac.res.in



# अन्तर-विश्वविद्यालय त्वरक कन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

# Dr. Sundeep Chopra Convenor - AUC

Ref:IUAC/XIII.3A/

August 19, 2015

Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007

# Subject: Your Application for Beam Time Allotment

Dear Dr. Mandal,

This is in response to your proposal for beam time/funds request and subsequent presentation made before the Accelerator Users Committee(AUC) of Inter University Accelerator Centre on July 05-08, 2015. I am pleased to inform you that your request has been considered and following beam time/funds has been allotted to you as specified below:

BTR No. PI & Name Activity Affiliation		Title	No. of Shifts Sanctioned	Comments From AUC
58309 <b>NP</b>	Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007	Investigation of Few-Nucleons Transfer and Fusion Reactions Mechanism in Medium Mass Nuclei at and Near the Coulomb Barrier.	15	JRF sanctioned with normal funding

The contingency amount will be sent to you soon. Regarding the appointment of JRF/Project Fellow, you are requested to contact the undersigned since as per the directives of AUC, a nominee will be deputed by IUAC as part of your selection committee. The information regarding the selection committee meeting should be sent to the undersigned at least two weeks in advance for the nomination of IUAC representative.

You are requested to kindly submit progress report of the project twice a year (April & October). Kindly acknowledge the receipt of this letter and inform us suitable period regarding scheduling of your experiment. In case you need further information, you are requested to contact the undersigned.

Thanking you,

Yours Sincerely,

(Sundeep Chopra)

E-mail: choprasundeep@gmail.com

तार :/Telegram : NURCEN फ़ैक्स :/Fax : 011-26893666

फेक्स :/Fax : 011-2689366 वेबसाईट:/Website : www.iuac.res.i

NNEX

No. IR/S2/PF-02/2007

Government of India

Department of Science & Technology Ministry of Science & Technology

Dated: 04.01.2010 New Delhi -110 016 New Mehrauli Road Technology Bhavan

# OKDEK

Centre, Post Box 10502, Aruna Asaf Ali Marg, New Delhi -110 067. New Delhi - 110 067" under the guidance of Dr. R. K. Bhowmik, Inter-University Accelerator (NAND) for Nuclear Reaction Dynamics Studies" at the Inter-University Accelerator Centre, Sub: Financial assistance for the research project entitled "National Array of Neutron Detectors

has been approved for a period of five years are given below:duration of 5 years. The items of expenditure for which total allocation of Rs. 10,34,96,000/cost of Rs. 10,34,96,000/- (Rupees ten crore thirty four lakh and ninety six thousand only) for a Sanction of the President is hereby accorded to the above mentioned project at a total

96'77	766.4	766.4	760.4	766.p	Z60.p	Manpower-
						RA-I (Two) as per DST norms @ 16000/-p.m. + HRA @ 30%
00.026		-	#00°0SE	-	*00.009	Equipment- as per details below
30.00	4	- 20 10	00.21	7	15.00	Consumables
10.00	2.00	2.00	2.00	2.00	2.00	Travel
10.00	2.00	2.00	2.00	2.00	2:00	Contingencies
10.00	2.00	2.00	2.00	2.00	2.00	Overhead charges
1034.96	10.992	766.01	266.27£	10.992	266.229	Total

# \*Equipment to be Procured in the 1st year

Regulation set up-4, Housing and assembly for Pission detector. 10,20,50 micron gold plated tungsten wires, Delay line chip, 2ns/tap, 50 Ohm), Gas Control archive for data acquisition and analysis-4, UPS 30 kVA-1, Thin (1 µ m) foil for gas detector PC based thermometers) + CCD cameras+ Monitors and related accessories, PCs and data cooling fan & related accessories-3, Oscilloscope -1, Measuring Instruments (multimeter's, module for neutron detector -60, Pre-amp Power Supply-20, Target ladder set up-1, 19 Racks, Dual channel High voltage Power supply for PMT-60, Dual channel Integrated electronic Edge Discriminator- I, Rate Divider-2, Nano second Delay unit-2, Time Calibrator Unit-1, Unit-1, 16 channel Discriminator/ Latch-5, Quad Linear gate Fan IN/OUT-1, Quad Leading Quad Bias Supply for Fission detector-2, Quad CFD-7, Octal gate & delay generator-7, Logic timing pre-amplifier-25, Fast amplifier for delay line read out -3, 16 Channel Amplifier-1, Crate and related accessories-2, VME based ADC, TDC and related accessories-2 each, Fast Crate Controllers & Trigger generators-5, 16 channel ADC -8, 16 channel TDC-6, VME NE213 coupled to Fast PMT and voltage divider-50, NIM BIN-8, CAMAC Crate-3, CAMAC Mechanical Assembly for neutron detector array-1, Liquid scintillator cells of BC501A /

Contd on page -2-

ANNEX-PG)-5

### PROGRESS REPORT FROM 10-02-2010 TILL 30-09-2014

Project Title:     National Array of Neutron Detectors(NAND) for Nuclear Reaction Dynamics Studies.	DST No: IR/S2/PF-02/2007
2. PI (Name & Address):	Date of Birth
Dr. P. Sugathan Scientist 'SG' Inter University Accelerator Centre Aruna Asaf Ali Marg, New Delhi	30. 05. 1964
3. Co-PI (Name & Address):	Date of Birth
Mr. A. Jhingan, Scientist, Inter University Accelerator	05. 10. 1972
Mrs. K. S. Golda, Scientist, Inter University Accelerator	06. 03. 1975
Centre Mr. R. P. Singh, Scientist, Inter University Accelerator Centre	06. 10. 1965
Dr. B. R. Behera, Lecturer, Dept of Physics, Panjab	01. 06. 1972
University Dr. S.K. Mandal, Reader, Dept of Physics, Delhi	20. 02. 1967
University Dr. N.M. Badiger, Reader, Dept. of Physics, Karnatak University, Dharwad,	01. 08. 1960
4. Broad area of Research	, .

- Broad area of Research Physical Science
  - 4.1 Sub Area: Nuclear Physics
- 5. Approved Objectives of the Proposal:

Major objectives of the present project are the following

Department of Science and Technology(DST) has given financial support for this project to setup a 100 liquid scintillator detector array along with a high efficiency fission detector array for neutron-charged particle coincidence measurements using heavy ion beams at inter university accelerator facility. Such a facility does not exist in our country at this moment. Using this advanced detector array of 100 detectors with high efficiency and good time resolution would be very helpful for number of researchers from universities and institutions to explore the various aspects of nuclear reaction mechanism and would also motivate young experimentalists to carry out front ranking experiments in heavy ion reaction dynamics. The facility would meet the following objectives in physics research.

1. Explore the study of heavy ion induced fusion -fission reaction dynamics by neutron

June 1 (43)

#### No. SR/MF/PS-02/2013-DUB (G)

Government of India Ministry of Science & Technology Department of Science & Technology (Mega Facilities for Basic Research)

> Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 26.09.2013

#### ORDER

Sub: Financial assistance for the project entitled "R&D Efforts by University Groups for INO project" under the guidance of Prof. Brajesh Chandra Choudhary, Prof. Samit Mandal, Prof. Debjyoti Choudhury, Dr. Suresk Kumar, Dr. Shashi Verma and Dr. Smarjit Triambak, all Department of Physics and Astrophysics, University of Delhi, Delhi - 110 007.

Sanction of the President is hereby accorded to the above mentioned project at a total cost of **Rs.** 1,77,80,000/- (Rupees one crore seventy seven lakh and eighty thousand only) for a duration of 5 years. The items of expenditure for which total allocation of **Rs.** 1,77,80,000/- has been approved for a period of **five** years are given below:

Budget Head	Amount (Rs. in lakh)
Manpower	56.30
Consumables	7.00
National Travel	5.00
Works	10.00
Contingencies	10.00
Equipment	87.00
Overhead charges	2.50
Total	177.80

- 2. Sanction of the President is also accorded for payment of a sum of Rs. 26,00,000/- (Rupees twenty six lakh only) from 'Grants-in-aid General' and Rs. 50,00,000/- (Rupees fifty lakh only) from 'Grants for creation of capital assets' budget heads respectively to the "University of Delhi, Delhi 110 007" as 1<sup>st</sup> instalment of the grant for implementation of the above said project. Since this is first installment of the grant, no previous UC is required.
- 3. The amount of Rs. 26,00,000/- (Rupees twenty six lakh only) will be drawn by Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the "University of Delhi, Delhi 110 007" through their bank account details given below:

Bank account number	10851298650
Name of the bank and branch	State Bank of India
	Delhi University branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110002030

4. The expenditure involved is debitable to:

Demand No. 85	Department of Science & Technology
3425	Other Scientific Research (Major Head)
60.	Others: (Sub-Major Head)
60.200	Assistance to other Scientific Bodies (Minor Head)
45.	Mega Facilities for Basic Research (Sub Head)
45.01	Mega Facilities for Basic Research (Detailed Head)
45.01.31	Grants-in-aid General for 2013-2014 (Plan Expenditure)
This release is being	ng made under Mega Facilities for Basic Research programme.

5. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website <a href="https://www.serc-dst.org">www.serc-dst.org</a>.

Jaurau 2992 26.9.13

- 6. The Institute/University will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 7. The Institute/University will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the Institute/University to be adjusted towards further installment of the grant.
- 8. As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the Institute/University is called upon to do so.
- 9. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides diary No. 100/IFD/ 4724 /2013-14 dated 26.09.2013.
- 10. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research at Sr. No. 25.

Daurau agon

(GAURAV AGGARWAL) Scientist-D

# Copy forwarded for information and necessary action to:

- The Principal Director of Audit, Scientific Departments IIIrd floor, AGCR Building, I.P. Estate, New Delhi-110 002
- 2. Dr. Brajesh Chandra Choudhary
  Department of Physics & Astrophysics
  University of Delhi, Delhi 110 007 (Delhi)
- 3. The Registrar
  University of Delhi, Delhi 110 007 (Delhi)
- 4. Prof. N.K. Mondal
  Project Director, INO
  Tata Institute of Fundamental Research
  Homi Bhabha Road, Colaba
  Mumbai 400 005 (Maharashtra)
- The Joint Secretary (R&D)
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001
- Dr. B. Purniah
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001
- 8. Sanction folder (Mega Facilities for Basic Research).
- 9. File copy.

Jaurau Rgol 26.9.13 (GAURAV AGGARWAL)
Scientist-D

# No. SR/MF/PS-02/2013-DUB (C)

Government of India
Ministry of Science & Technology
Department of Science & Technology
(Mega Facilities for Basic Research)

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 26.09.2013

### **ORDER**

Sub: Financial assistance for the project entitled "R&D Efforts by University Groups for INO project" under the guidance of Prof. Brajesh Chandra Choudhary, Prof. Samit Mandal, Prof. Debjyoti Choudhury, Dr. Suresk Kumar, Dr. Shashi Verma and Dr. Smarjit Triambak, all Department of Physics and Astrophysics, University of Delhi, Delhi - 110 007.

In continuation to this department's sanction order No. SR/MF/PS-02/2013-DUB (G) dated 26.09.2013, sanction of the President is also accorded for payment of a sum of Rs. 50,00,000/- (Rupees fifty lakh only) from 'Grants for creation of capital assets' budget head to the "University of Delhi, Delhi - 110 007" as 1st instalment of the grant for implementation of the above said project. Since this is first installment of the grant, no previous UC is required.

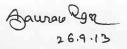
 The amount of Rs. 50,00,000/- (Rupees fifty lakh only) will be drawn by Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the "University of Delhi, Delhi - 110 007" through their bank account details given below:

Bank account number	10851298650
Name of the bank and branch	State Bank of India
(March	Delhi University branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110002030

3. The expenditure involved is debitable to:

Demand No. 85	Department of Science & Technology		
3425	Other Scientific Research (Major Head)		
60.	Others: (Sub-Major Head)		
60.200	Assistance to other Scientific Bodies (Minor Head)		
45.	Mega Facilities for Basic Research (Sub Head)		
45.01	Mega Facilities for Basic Research (Detailed Head)		
45.01.35	Grants for creation of capital assets for 2013-2014 (Plan Expenditure)		
This release is programme.	being made under Mega Facilities for Basic Research		

- 4. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website <a href="www.serc-dst.org">www.serc-dst.org</a>. All items of equipment should be procured in accordance with the provisions contained in GFR'2005. The benefit of custom duty exemption extended to the research institutes under GoI notification No. 51/96 on imports of equipment for research purposes, may be availed.
- The Institute/University will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.



- The Institute/University will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the Institute/University to be adjusted towards further installment of the grant.
- As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the Institute/University is called upon to do so.
- 8. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides diary No. 100/IFD/ 4725 /2013-14 dated 26.09.2013.
- 9. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research at Sr. No.

Daurau 2992

(GAURAV AGGARWAL) Scientist - D

# Copy forwarded for information and necessary action to:

- The Principal Director of Audit, Scientific Departments Illrd floor, AGCR Building, I.P. Estate, New Delhi-110 002
- 2. Dr. Brajesh Chandra Choudhary
  Department of Physics & Astrophysics
  University of Delhi, Delhi 110 007 (Delhi)
- The Registrar University of Delhi, Delhi – 110 007 (Delhi)
- 4. Prof. N.K. Mondal
  Project Director, INO
  Tata Institute of Fundamental Research
  Homi Bhabha Road, Colaba
  Mumbai 400 005 (Maharashtra)
- The Joint Secretary (R&D)
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001 (Maharashtra)
- Dr. B. Purniah
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001 (Maharashtra)
- Sanction folder (Mega Facilities for Basic Research).

8. File copy.

Aawab Rge 269.13
GAURAV AGGARWAI

(GAURAV AGGARWAL) Scientist - D



GAURAV AGGARWAL Scientist-C Phone: (011) 2659 0554 (Direct)

E-mail: gaurav.dst@nic.in

भारत सरकार

विज्ञान और प्रौद्योगिकी मंत्रालय, विज्ञान और प्रौद्योगिकी विभाग, टेक्नोलॉजी भवन, महरौली मार्ग, नई दिल्ली-110016

**GOVERNMENT OF INDIA** 

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY, TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD, NEW DELHI-110016

02.04.2012

D.O. No.

SR/MF/PS-03/2010

Sub: The proposal by Indian Physicists to Collaborate on Neutrino Projects at Fermilab (USA).

Dear Dr. Choudhary,

This is with reference to the above mentioned proposal.

I have to inform you that the above proposal has been sanctioned to 8 participating institutions at a total cost of Rs. 1106.96 lakh for a period of 3 years and sanction orders to all the participating institutions have been issued.

Kindly initiate necessary action for smooth implementation of the project.

With best regards,

Yours sincerely

Samao agg

(GAURAV AGGARWAL)

Dr. Brajesh Chandra Choudhary (Project Spokesperson) Department of Physics & Astrophysics University of Delhi Delhi - 110 007



# अन्तर-विश्वविद्यालय त्वरक केन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

### Convenor AUC

Ref: IUAC/XIII.7/UFR-51314/ 2679

January 20, 2012

Dr. Samit Kumar Mandal
Department of physics & Astrophysics
University of Delhi
Delhi-110007

Dear Dr. Samit,

We are pleased to inform you that your project entitled "Investigation of few-nucleons transfer reaction in medium mass nuclei at and near the Coulomb barrier" under the UFUP scheme of this Centre has been sanctioned with the following financial approval for a period of three years.

Year	Fellowship	Contingency/Consumbles	Equipment
First	JRF	25,000/-	Nil
Second	JRF	25,000/-	Nil
Third	JRF	25,000/-	Nil

Your project code no. UFR-51314 and the same should be quoted in all future correspondences.

The contingency will be inclusive of all consumables. The grant for the first year contingency will be transferred online to the university's bank account as per the details given below. Fellowship grant will be released only after a Project Fellow/JRF is appointed by the University/Institution and the related documents along with the joining report is sent to this office.

Normal UGC guidelines will apply in all circumstances. Travel money would not be released for you but as per AUC decision, you may come to IUAC for experiments, data analysis and research discussions as required and approved by Centre. IUAC will pay your TA (by train) and the local hospitality as per rule.

Annual progress report and provisional utilisation certificate duly signed by a competent authority of the university in the standard UGC format must be submitted at the completion of each financial year for enabling us to release the funds for the next financial year. As soon as annual accounts of the university are audited, the final audited utilisation certificate should be sent to IUAC and the draft for the unspent grant should be sent in favour of IUAC, Delhi.

Thanking you,

Yours sincerely,

(S.CHOPRA)

:/Telephone: 011-26893955

फैक्स

:/Fax

वेबसाईट:/Website

NURCEN

011-26893666

: www.iuac.res.in

CC: The Registrar University of Delhi Delhi-110007

#### No. SR/MF/PS-01/2009-DU

Government of India
Ministry of Science & Technology
Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi – 110 016.

Dated 28.03.2009.

### **ORDER**

Subject:- Financial assistance for the "Pre-Operative Programme for Indian Participation in the FAIR Project at GSI, Darmstadt, Germany – Accelerator and Detector-Related R&D and Prototyping" under the guidance of Dr. S. Mandal, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.

In continuation of this Department's Sanction Order No. SR/MF/PS-01/2009-Main dated 25.03.2009 sanctioning an amount of Rs. 40,35,000/- (Rupees forty lakh thirty five thousand only) as DST's contribution to the Delhi University, Delhi, sanction of the President is hereby accorded to the payment of Rs. 31,10,000/- (Rupees thirty one lakh ten thousand only) to the Registrar, University of Delhi, Delhi 110 007 being the first installment of the grant for the year 2008-09 for implementation of the said research project.

2. The expenditure involved is debitable to

# Demand No.83: Department of Science & Technology

3425 Other Scientific Research (Major Head)

60. Others: (Sub-Major Head)

60.200 Assistance to other Scientific Bodies (Minor Head)

45. Grants-in-aid for Mega Facilities for Basic Research

45.01.31 Grants-in-aid for the year 2008-2009 (Plan Expenditure).

This release is being made under Mega Facilities for Basic Research scheme.

- 3. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science & Technology vide San No. 100/IFD/8913/2008-09 dated 24.03.2009 and 28.03.2009.
- 1. The amount of Rs. 31,10,000/- (Rupees thirty one lakh ten thousand only) will be drawn by the Drawing and Disbursing Officer of the Department of Science & Technology and will be disbursed to the Registrar, University of Delhi, Delhi 110 007.
- 5. The institutions will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 6. The institutions will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the institutions to be adjusted towards further instalment of the grant.

contd....2/-

- 7. As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the institutions are called upon to do so.
- 8. The Sanction Order is entered vide Mega Facilities Sl. No. ..... in the register of grants.

(PRAVEER ASTHANA)
Scientist-G

Copy forwarded for information and necessary action to:

- 1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi 110 002.
- 2. The Drawing and Disbursing Officer, DST, Cash Section (2 copies).
- 3. Dr. S. Mandal, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.
- 4. The Registrar, University of Delhi, Delhi 110 007.

In case the cheque/draft in respect of the amount sanctioned for disbursement under this sanction is not received by the Principal Investigator (PI) within 15 days from the date of issue of the sanction, the PI may intimate the fact, with details of the IFD Diary No. & Date to the Joint Secretary & Financial Adviser at fin.adv.dst.dbt@gmail.com for looking into the matter and resolving it.

- 5. The Pay & Accounts Officer, DST, New Delhi.
- 6. The Controller of Accounts, DST, New Delhi
- 7. Account Section, DST, New Delhi
- 8. Sanction folder SERC
- 9. Head, SERC Division
- 10. Head, International Cooperation Division
- 11. The Joint Secretary (R&D), Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.
- 12. Dr. B. Purniah, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.

(PRAVEER ASTHANA)
Scientist-G

# NO. SR/MF/PS-01/2009-Main Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhavan New Mehrauli Road New Delhi – 110 016.

Dated 25.03.2009.

## **ORDER**

Subject:- Financial assistance for the "Pre-Operative Programme for Indian Participation in the FAIR Project at GSI, Darmstadt, Germany — Accelerator and Detector-Related R&D and Prototyping" to various Indian research and educational institutions (listed in Annexure-I).

Sanction of the President is hereby accorded for grant of the above-mentioned project at a total cost of Rs. 9,54,26,600/- (Rupees nine crore fifty four lakh twenty six thousand six hundred only) for a duration of one year to various research and educational institutions in the country as given in Annexure-I. The items of expenditure for which the total allocation of Rs. 9,54,26,600/- has been approved for various research and educational institutions for a period of 1 year are given in Annexure-II.

- 2. Out of the total sanctioned amount of Rs. 9,54,26,600/-, Rs. 4,99,82,000/-(Rupees four crore ninety nine lakh eighty two thousand only) shall be contributed by the Department of Atomic Energy (DAE) and Rs. 4,54,44,600/- (Rupees four crore fifty four lakh forty four thousand six hundred only) shall be contributed by the Department of Science and Technology (DST). The agency-wise, item-wise and institution-wise break-up of the budget are given in Annexure-III and Annexure-IV.
- 3. Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project etc.
- 4. Sanction of the grant is subject to the conditions as detailed at the website www.serc-dst.org under "Guidelines for Implementing Research Projects".
- 5. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science & Technology vide Dy. No. IFD/1811/2008-09 dated 24.3.2009.
- 6. The institutions will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.

- The institutions will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the institutions to be adjusted towards further instalment of the grant.
- As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the institutions are called upon to do so.

(PRAVEER ASTHANA) Scientist-G

Copy forwarded for information and necessary action to:

- 1. The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi -110 002.
- 2. The Pay & Accounts Officer, DST, New Delhi.
- 3. The Controller of Accounts, DST, New Delhi
- 4. Account Section, DST, New Delhi
- 5. Sanction folder SERC
- 6. Head, SERC Division
- 7. Head, International Cooperation Division
- 8. The Joint Secretary (R&D), Department of Atomic Energy, Anushakti Bhavan, CSM
- 9. Dr. B. Purniah, Department of Atomic Energy, Anushakti Bhavan, CSM Marg,
- 10. Prof. VS Ramamurthy, Chairman, India-FAIR Task Force, Inter University Accelerator Centre, Aruna Asaf Ali Marg, Post Box 10502, New Delhi 110 067.

(PRAVEER ASTHANA) Scientist-G



# Samit Mandal <s.mandal.du@gmail.com>

# India-FAIR Seed Funding Project No. SR/MF/PS-01/2009-DU

1 message

GAURAV AGGARWAL <gaurav.dst@nic.in> Tue, Feb 21, 2017 at 10:42 AM To: DU Samit Mandal Mandal <s.mandal.du@gmail.com>, DU Samit Mandal <smandal@physics.du.ac.in>

Sir,

We have received SE/UC etc. in respect of above project.

We would process for release of Rs. 28,799/-.

As per our PFMS requirement, UCs for all grants need to be uploaded on PFMS website.

In this project, two grants were released.

- 1. Rs. 31.10 lakh vide sanction order dated 28.03.2009.
   For this, we need a UC uploaded on PFMS website.
  - 2. Rs. 4,29,800/- vide sanction order dated 21.03.2012. For this also, we need a UC uploaded on PFMS website. You may upload it on PFMS website. The link is

https://pfms.nic.in/Users/LoginDetails/Login.aspx

I am attaching a PPT for guidance in the matter.

With Regards,

Gaurav Aggarwal

\*\*\*\*\*\*\*\*\*

Gaurav Aggarwal
Scientist-D
Room No. 4, Hall-H, S&T Block-II
Department of Science & Technology
New Mehrauli Road, New Delhi-110 016
011-26590 554 (Direct)
e-mail: gaurav.dst@nic.in

PPT on UC Monitoring System.pptx 3673K



# अन्तर-विश्वविद्यालय त्वरक केन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

Ref: IUAC/XIII.7/UFR-58309/2597

September 8, 2015

Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007

Sub: Financial sanction for the financial year 2015-2016

Ref: Project Code No. UFR- 58309 sanctioned in favour of Dr. Samit Kr Mandal, University of Delhi, Delhi.

Dear Sir,

We are pleased to inform you that your project entitled "Investigation of Few-Nucleons Transfer and Fusion Reactions Mechanism in Medium Mass Nuclei at and Near the Coulomb Barrier" under the UFUP scheme of this Centre has been sanctioned with the following financial approval for a period of three years.

Year	Fellowship	Contingency/Consumbles	Equipment
First	JRF	25,000/-	Nil
Second	JRF	25,000/-	Nil
Third	JRF	25,000/-	Nil

Your project code no. UFR- 58309 and the same should be quoted in all future correspondences.

The contingency will be inclusive of all consumables. The grant for the first year contingency will be released now. Fellowship grant will be released only after a Project Fellow/JRF is appointed by the University/Institution and the related documents along with the joining report is sent to this office.

Normal UGC guidelines will apply in all circumstances. Travel money would not be released for you but as per AUC decision, you may come to IUAC for experiments, data analysis and research discussions as required and approved by Centre. IUAC will pay your TA (by train) and the local hospitality as per rule.

Annual progress report and provisional utilization certificate duly signed by a competent authority of the university in the standard UGC format must be submitted at the completion of each financial year for enabling us to release the funds for the next financial year. As soon as annual accounts of the university are audited, the final audited utilization certificate should be sent to IUAC and the draft for the unspent grant should be sent in favour of "Inter University Accelerator Centre" payable at New Delhi.

Thanking you,

Yours sincerely,

(Dr. S.CHOPRA) Convenor – AUC

:/Telephone: 011-26893955

:/Telegram

:/Fax

वेबसाईट:/Website

011-26892601

: 011-26893666

: www.iuac.res.in

NURCEN

CC:

The Registrar University of Delhi, Delhi-110007



# अन्तर-विश्वविद्यालय त्वरक कन INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

# Dr. Sundeep Chopra Convenor - AUC

Ref:IUAC/XIII.3A/

August 19, 2015

Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007

### Subject: Your Application for Beam Time Allotment

Dear Dr. Mandal,

This is in response to your proposal for beam time/funds request and subsequent presentation made before the Accelerator Users Committee(AUC) of Inter University Accelerator Centre on July 05-08, 2015. I am pleased to inform you that your request has been considered and following beam time/funds has been allotted to you as specified below:

BTR No & Activity	PI Name Affiliation	Title	No. of Shifts Sanctioned	Comments From AUC
58309 N	Dr. Samit Kr Mandal Associate Professor Department of Physics & Astrophysics, University of Delhi, Delhi-110007	Investigation of Few-Nucleons Transfer and Fusion Reactions Mechanism in Medium Mass Nuclei at and Near the Coulomb Barrier.	15	JRF sanctioned with normal funding

The contingency amount will be sent to you soon. Regarding the appointment of JRF/Project Fellow, you are requested to contact the undersigned since as per the directives of AUC, a nominee will be deputed by IUAC as part of your selection committee. The information regarding the selection committee meeting should be sent to the undersigned at least two weeks in advance for the nomination of IUAC representative.

You are requested to kindly submit progress report of the project twice a year (April & October). Kindly acknowledge the receipt of this letter and inform us suitable period regarding scheduling of your experiment. In case you need further information, you are requested to contact the undersigned.

Thanking you,

Yours Sincerely,

(Sundeep Chopra)

E-mail: choprasundeep@gmail.com

Telegram Telegram NURCEN फैक्स :/Fax 011-26893666 वेबसाईट:/Website

NNEX

No. IR/S2/PF-02/2007

Government of India

Department of Science & Technology Ministry of Science & Technology

Dated: 04.01.2010 New Delhi -110 016 New Mehrauli Road Technology Bhavan

## OKDEK

Centre, Post Box 10502, Aruna Asaf Ali Marg, New Delhi -110 067. New Delhi - 110 067" under the guidance of Dr. R. K. Bhowmik, Inter-University Accelerator (NAND) for Nuclear Reaction Dynamics Studies" at the Inter-University Accelerator Centre, Sub: Financial assistance for the research project entitled "National Array of Neutron Detectors

has been approved for a period of five years are given below:duration of 5 years. The items of expenditure for which total allocation of Rs. 10,34,96,000/cost of Rs. 10,34,96,000/- (Rupees ten crore thirty four lakh and ninety six thousand only) for a Sanction of the President is hereby accorded to the above mentioned project at a total

						A CONTROL OF THE BOARD SERVICE AND ADDRESS OF THE SERVICE AND ADDRESS OF TH
1034.96	10.992	766:01	266.27£	766'01	766.229	Total
00.01	2.00	2.00	2.00	2.00	2.00	Overhead charges
THE STATE OF THE S	2.00	2.00	2.00	2.00	2.00	Contingencies
10.00	2.00	2.00	00.2	2.00	2.00	Travel
10.00	00 0	000	00.21	-	15.00	Consumables
30.00			#00.025	-	*00.008	Equipment- as per details below
96.42	266.4	266.4	Z66.4	766. p	Z66.4	Manpower- RA-I (Two) as per DST norms @ 16000/-p.m. + HRA @ 30%
Total	Xear Sth	Xear 414	Zear Zear	урах	Ist Year	ppəy 1ə8png

# \*Equipment to be Procured in the Ist year

Regulation set up-4, Housing and assembly for Pission detector. 10,20,50 micron gold plated tungsten wires, Delay line chip, 2ns/tap, 50 Ohm), Gas Control archive for data acquisition and analysis-4, UPS 30 kVA-1, Thin (1 µ m) foil for gas detector PC based thermometers) + CCD cameras+ Monitors and related accessories, PCs and data cooling fan & related accessories-3, Oscilloscope -1, Measuring Instruments (multimeter's, module for neutron detector -60, Pre-amp Power Supply-20, Target ladder set up-1, 19 Racks, Dual channel High voltage Power supply for PMT-60, Dual channel Integrated electronic Edge Discriminator- 1, Rate Divider-2, Nano second Delay unit-2, Time Calibrator Unit-1, Unit-1, 16 channel Discriminator/ Latch-5, Quad Linear gate Fan IN/OUT-1, Quad Leading Quad Bias Supply for Fission detector-2, Quad CFD-7, Octal gate & delay generator-7, Logic timing pre-amplifier-25, Fast amplifier for delay line read out -3, 16 Channel Amplifier-1, Crate and related accessories-2, VME based ADC, TDC and related accessories-2 each, Fast Crate Controllers & Trigger generators-5, 16 channel ADC -8, 16 channel TDC-6, VME NE213 coupled to Fast PMT and voltage divider-50, NIM BIN-8, CAMAC Crate-3, CAMAC Mechanical Assembly for neutron detector array-1, Liquid scintillator cells of BC501A /

Contd on page -2-

ANNEX-PG-5

#### PROGRESS REPORT FROM 10-02-2010 TILL 30-09-2014

Project Title:     National Array of Neutron Detectors(NAND) for Nuclear Reaction Dynamics Studies.	DST No: IR/S2/PF-02/2007
2. PI (Name & Address):	Date of Birth
Dr. P. Sugathan Scientist 'SG' Inter University Accelerator Centre Aruna Asaf Ali Marg, New Delhi	30. 05. 1964
3. Co-PI (Name & Address):	Date of Birth
Mr. A. Jhingan, Scientist, Inter University Accelerator	05. 10. 1972
Mrs. K. S. Golda, Scientist, Inter University Accelerator	06. 03. 1975
Centre Mr. R. P. Singh, Scientist, Inter University Accelerator	06. 10. 1965
Centre Dr. B. R. Behera, Lecturer, Dept of Physics, Panjab	01. 06. 1972
University Dr. S.K. Mandal, Reader, Dept of Physics, Delhi	20. 02. 1967
University Dr. N.M. Badiger, Reader, Dept. of Physics, Karnatak University, Dharwad,	01. 08. 1960
4 Broad area of Research	

- Broad area of Research Physical Science
  - 4.1 Sub Area: Nuclear Physics
- 5. Approved Objectives of the Proposal:

Major objectives of the present project are the following

Department of Science and Technology(DST) has given financial support for this project to setup a 100 liquid scintillator detector array along with a high efficiency fission detector array for neutron-charged particle coincidence measurements using heavy ion beams at inter university accelerator facility. Such a facility does not exist in our country at this moment. Using this advanced detector array of 100 detectors with high efficiency and good time resolution would be very helpful for number of researchers from universities and institutions to explore the various aspects of nuclear reaction mechanism and would also motivate young experimentalists to carry out front ranking experiments in heavy ion reaction dynamics. The facility would meet the following objectives in physics research.

1. Explore the study of heavy ion induced fusion -fission reaction dynamics by neutron

June 1 (43)

#### No. SR/MF/PS-02/2013-DUB (G)

Government of India Ministry of Science & Technology Department of Science & Technology (Mega Facilities for Basic Research)

> Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 26.09.2013

#### ORDER

Sub: Financial assistance for the project entitled "R&D Efforts by University Groups for INO project" under the guidance of Prof. Brajesh Chandra Choudhary, Prof. Samit Mandal, Prof. Debjyoti Choudhury, Dr. Suresk Kumar, Dr. Shashi Verma and Dr. Smarjit Triambak, all Department of Physics and Astrophysics, University of Delhi, Delhi - 110 007.

Sanction of the President is hereby accorded to the above mentioned project at a total cost of **Rs.** 1,77,80,000/- (Rupees one crore seventy seven lakh and eighty thousand only) for a duration of 5 years. The items of expenditure for which total allocation of **Rs.** 1,77,80,000/- has been approved for a period of **five** years are given below:

Budget Head	Amount (Rs. in lakh)
Manpower	56.30
Consumables	7.00
National Travel	5.00
Works	10.00
Contingencies	10.00
Equipment	87.00
Overhead charges	2.50
Total	177.80

- 2. Sanction of the President is also accorded for payment of a sum of Rs. 26,00,000/- (Rupees twenty six lakh only) from 'Grants-in-aid General' and Rs. 50,00,000/- (Rupees fifty lakh only) from 'Grants for creation of capital assets' budget heads respectively to the "University of Delhi, Delhi 110 007" as 1<sup>st</sup> instalment of the grant for implementation of the above said project. Since this is first installment of the grant, no previous UC is required.
- 3. The amount of Rs. 26,00,000/- (Rupees twenty six lakh only) will be drawn by Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the "University of Delhi, Delhi 110 007" through their bank account details given below:

Bank account number	10851298650
Name of the bank and branch	State Bank of India
	Delhi University branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110002030

4. The expenditure involved is debitable to:

Demand No. 85	Department of Science & Technology		
3425	Other Scientific Research (Major Head)		
60.	Others: (Sub-Major Head)		
60.200	Assistance to other Scientific Bodies (Minor Head)		
45.	Mega Facilities for Basic Research (Sub Head)		
45.01	01 Mega Facilities for Basic Research (Detailed Head)		
15.01.31 Grants-in-aid General for 2013-2014 (Plan Expenditure)			
This release is being	ng made under Mega Facilities for Basic Research programme.		

5. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website <a href="https://www.serc-dst.org">www.serc-dst.org</a>.

Jaurau 2992 26.9.13

- 6. The Institute/University will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- 7. The Institute/University will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the Institute/University to be adjusted towards further installment of the grant.
- 8. As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the Institute/University is called upon to do so.
- The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides diary No. 100/IFD/ 4724 /2013-14 dated 26.09.2013.
- 10. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research at Sr. No. 25.

Daurau agon

(GAURAV AGGARWAL) Scientist-D

# Copy forwarded for information and necessary action to:

- The Principal Director of Audit, Scientific Departments IIIrd floor, AGCR Building, I.P. Estate, New Delhi-110 002
- 2. Dr. Brajesh Chandra Choudhary
  Department of Physics & Astrophysics
  University of Delhi, Delhi 110 007 (Delhi)
- 3. The Registrar
  University of Delhi, Delhi 110 007 (Delhi)
- 4. Prof. N.K. Mondal
  Project Director, INO
  Tata Institute of Fundamental Research
  Homi Bhabha Road, Colaba
  Mumbai 400 005 (Maharashtra)
- The Joint Secretary (R&D)
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001
- Dr. B. Purniah
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001
- 8. Sanction folder (Mega Facilities for Basic Research).
- 9. File copy.

Jaurau Rgol 26.9.13 (GAURAV AGGARWAL)
Scientist-D

## No. SR/MF/PS-02/2013-DUB (C)

Government of India
Ministry of Science & Technology
Department of Science & Technology
(Mega Facilities for Basic Research)

Technology Bhavan New Mehrauli Road New Delhi -110 016 Dated: 26.09.2013

### **ORDER**

Sub: Financial assistance for the project entitled "R&D Efforts by University Groups for INO project" under the guidance of Prof. Brajesh Chandra Choudhary, Prof. Samit Mandal, Prof. Debjyoti Choudhury, Dr. Suresk Kumar, Dr. Shashi Verma and Dr. Smarjit Triambak, all Department of Physics and Astrophysics, University of Delhi, Delhi - 110 007.

In continuation to this department's sanction order No. SR/MF/PS-02/2013-DUB (G) dated **26.09.2013**, sanction of the President is also accorded for payment of a sum of **Rs. 50,00,000/-** (Rupees fifty lakh only) from 'Grants for creation of capital assets' budget head to the "University of Delhi, Delhi - 110 007" as 1<sup>st</sup> instalment of the grant for implementation of the above said project. Since this is first installment of the grant, no previous UC is required.

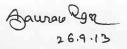
 The amount of Rs. 50,00,000/- (Rupees fifty lakh only) will be drawn by Drawing and Disbursing Officer of the Department of Science and Technology and will be disbursed to the "University of Delhi, Delhi - 110 007" through their bank account details given below:

Bank account number	10851298650
Name of the bank and branch	State Bank of India
(March	Delhi University branch, Delhi
RTGS/IFSC Code	SBIN0001067
MICR Code	110002030

3. The expenditure involved is debitable to:

Demand No. 85	Department of Science & Technology		
3425	Other Scientific Research (Major Head)		
60.	Others: (Sub-Major Head)		
60.200	Assistance to other Scientific Bodies (Minor Head)		
45.	Mega Facilities for Basic Research (Sub Head)		
45.01	Mega Facilities for Basic Research (Detailed Head)		
45.01.35	Grants for creation of capital assets for 2013-2014 (Plan Expenditure)		
This release is programme.	being made under Mega Facilities for Basic Research		

- 4. Sanction of the grant is subject to the conditions as detailed in "Guidelines for Implementing Research Project" given on our website <a href="www.serc-dst.org">www.serc-dst.org</a>. All items of equipment should be procured in accordance with the provisions contained in GFR'2005. The benefit of custom duty exemption extended to the research institutes under GoI notification No. 51/96 on imports of equipment for research purposes, may be availed.
- The Institute/University will furnish to the DST, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.



- The Institute/University will maintain separate audited accounts for this project and would keep the whole of the grant in a bank account earning interest. The interest earned should be reported to DST while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the Institute/University to be adjusted towards further installment of the grant.
- As per rule 211 of GFRs, the accounts of this grant shall be open to inspection by sanctioning authority/audit whenever the Institute/University is called upon to do so.
- 8. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vides diary No. 100/IFD/ 4725 /2013-14 dated 26.09.2013.
- 9. The sanction order is entered in the Register of Grants for Mega Facilities for Basic Research at Sr. No.

Daurau 2992

(GAURAV AGGARWAL) Scientist - D

# Copy forwarded for information and necessary action to:

- The Principal Director of Audit, Scientific Departments IIIrd floor, AGCR Building, I.P. Estate, New Delhi-110 002
- 2. Dr. Brajesh Chandra Choudhary
  Department of Physics & Astrophysics
  University of Delhi, Delhi 110 007 (Delhi)
- The Registrar University of Delhi, Delhi – 110 007 (Delhi)
- 4. Prof. N.K. Mondal
  Project Director, INO
  Tata Institute of Fundamental Research
  Homi Bhabha Road, Colaba
  Mumbai 400 005 (Maharashtra)
- The Joint Secretary (R&D)
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001 (Maharashtra)
- Dr. B. Purniah
   Department of Atomic Energy, Anushakti Bhawan, CSM Marg Mumbai- 400 001 (Maharashtra)
- Sanction folder (Mega Facilities for Basic Research).

8. File copy.

Aawab Rge 269.13
GAURAV AGGARWAI

(GAURAV AGGARWAL) Scientist - D



GAURAV AGGARWAL Scientist-C Phone: (011) 2659 0554 (Direct)

E-mail: gaurav.dst@nic.in

भारत सरकार

विज्ञान और प्रौद्योगिकी मंत्रालय, विज्ञान और प्रौद्योगिकी विभाग, टेक्नोलॉजी भवन, महरौली मार्ग, नई दिल्ली-110016

**GOVERNMENT OF INDIA** 

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY, TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD, NEW DELHI-110016

02.04.2012

D.O. No.

SR/MF/PS-03/2010

Sub: The proposal by Indian Physicists to Collaborate on Neutrino Projects at Fermilab (USA).

Dear Dr. Choudhary,

This is with reference to the above mentioned proposal.

I have to inform you that the above proposal has been sanctioned to 8 participating institutions at a total cost of Rs. 1106.96 lakh for a period of 3 years and sanction orders to all the participating institutions have been issued.

Kindly initiate necessary action for smooth implementation of the project.

With best regards,

Yours sincerely

Lauras aggr

(GAURAV AGGARWAL)

Dr. Brajesh Chandra Choudhary (Project Spokesperson) Department of Physics & Astrophysics University of Delhi Delhi - 110 007



# अन्तर-विश्वविद्यालय त्वरक केन्द्र INTER-UNIVERSITY ACCELERATOR CENTRE

(Formerly Nuclear Science Centre)

(विश्वविद्यालय अनुदान आयोग का स्वायत्त केन्द्र) (An Autonomous Centre of UGC)

#### Convenor AUC

Ref: IUAC/XIII.7/UFR-52312

August 21, 2012

Dr.Sanjay Kumar Chamoli Department of Physics & Astrophysics University of Delhi Delhi – 110 007

Dear Dr. Chamoli,

We are pleased to inform you that your project entitled "Nuclear structure studies at high spins in nuclei of mass region  $A\sim175$ " under the UFUP scheme of this Centre has been sanctioned with the following financial approval for a period of three years.

Year	Fellowship	Contingency/Consumbles	Equipment
First	JRF	25,000/-	Nil
Second	JRF .	25,000/-	Nil
Third	JRF	25,000/-	Nil

Your project code no. UFR-52312 and the same should be quoted in all future correspondences.

The contingency will be inclusive of all consumables. The grant for the first year contingency will be released now. Fellowship grant will be released only after a Project Fellow/JRF is appointed by the University/Institution and the related documents along with the joining report is sent to this office.

Normal UGC guidelines will apply in all circumstances. Travel money would not be released for you but as per AUC decision, you may come to IUAC for experiments, data analysis and research discussions as required and approved by Centre. IUAC will pay your TA (by train) and the local hospitality as per rule.

Annual progress report and provisional utilisation certificate duly signed by a competent authority of the university in the standard UGC format must be submitted at the completion of each financial year for enabling us to release the funds for the next financial year. As soon as annual accounts of the university are audited, the final audited utilisation certificate should be sent to IUAC and the draft for the unspent grant should be sent in favour of IUAC, Delhi.

Thanking you,

Yours sincerely,

JCham CS CHORDA

CC:

The Registrar University of Delhi Delhi – 110 007

नई दिल्ली - 110 067 (भारत) New Delhi- 110 067 (India) दूरभाष :/Telephone: 011-26893955

011-26892601 Telegram : NURCEN

वेबसाईट:/Website

: www.iuac.res.in



Telegram

Scienctech

दूरभाष/Tel

26962819, 26567373,

फैक्स/Fax

26562134, 26562122 (EPBAX) 26569908, 26864570

26863847, 26862418

वेबसाइट/website : www.dst.gov.in No. INT/FRG/DAAD/P-253/2015 भारत सरकार

चिज्ञान और प्रौद्योगिकी मंत्रालय. विज्ञान और प्रौद्योगिकी विभाग, टेक्नोलॉजी भवन, तया महरौली मार्ग, नई दिल्ली 110 016

GOVERNMENT OF INDIA

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY, TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD, NEW DELHI-110-016

Dated: 10-4-2015

ORDER

Sanction of the President is hereby accorded for implementation of the Indo-German (DST-DAAD) joint research project entitled "Electron and Ion Accelerations from Laser-Plasma Interactions" at a total cost of Rs. 9,64,000/- (Rupees Nine Lac Six Four Thousand Only). The duration of the project shall be 2 years from date of issue of this sanction order. The requests for extension of the project beyond this validity shall NOT be considered in any case.

The composition of the project team is as below:

<u>Indian side</u>	German side
i.) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007 ii.) Mr. Krishnagopal, Doctoral student	i.) Dr. Michael Bussmann, Laser Particle Acceleration Group, Helmholtz-Zentrum Dresden -Rossendorf e. V., HZDR, Bautzner Landstrasse 400, Dresden, Saxony, Germany, 01314 ii.) Mr. Thomas Kluge, Doctoral student

3. The change/ replacement of project participants is not allowed. The participating scientists should be working on the project and affiliated with the Institute/University holding the indicated position at the time of start of the project as well as at the time of exchange visits under the project. The expenditure related to approve visits of participating scientists, as mentioned above, only can be met from the project grant.

4. The break-up of estimated expenditure is as indicated below and no re-appropriation shall be allowed under this project:-

Estimated expenditure(s)		
1 <sup>st</sup> year	2 <sup>nd</sup> vear	Total
(2 visits) (28&60 days) 1,30,000/-	(2 visits) (28&60 days) 1,30,000/-	(4 visits) 2,60,000/-
(2 visits) (28&60 days) 1,32,000/-	(2 visits) (28&60 days) 1,32,000/-	(4 visits) 2,64,000/
2,20,000/- 4,82,000/-	2,20,000/-	4,40,000/
	1 <sup>st</sup> year (2 visits) (28&60 days) 1,30,000/- (2 visits) (28&60 days) 1,32,000/- 2,20,000/-	1st year 2nd year (2 visits) (28&60 days) 1,30,000/-  (2 visits) (28&60 days) 1,30,000/-  (2 visits) (28&60 days) 1,32,000/- 2,20,000/- 2,20,000/- 2,20,000/-

Contd. p/2

- 5. The local hospitality (which includes per-diem, accommodation, etc) for Indian scientists visiting Germany and the International travel related expenses wrt the German Scientists visiting India under the project shall be borne by DAAD (Germany) through the German Co-Pl of the project.
- 6. Sanction of the President is also accorded for the release of Rs. 4,82,000/- (Rupees Four Lac Eighty Two Thousand Only) as an initial installment for incurring expenditure during the first year of the project and payment of this amount may be made electronically to The Registrar, University of Delhi, Delhi-110007 as per the Bank details given below:

1.	Name of the account (as per Bank record)	University of Delhi
2.	Name and Designation of A/C holder	Registrar, Delhi University
	(as per Bank A/C)	registral, Delin University
	Bank Account No.	10851298593
4.	Bank Name and Branch Address	State Bank of India, University of Delhi, North
-	TECC O. I	Campus, Delhi-110007
[3.]	IFSC Code	SBIN0001067

The release of this grant is subject to:-

i) Obtaining prior approval of this Department on all project related visits to be undertaken by the scientists from the either side in connection with the implementation with of this project separately in prescribed format, on a case to case basis, at-least 4 weeks in advance before incurring any expenditure for this purpose.

submission of Utilization Certificate (UC) and a Statement of Expenditure (SE) along with up to date progress report at the end of each financial year for the grants already received under the project and seeking specific approval of this Department for carry forward of unspent funds to the

next financial year for utilization under the project

The international / domestic air-travel connected to visits under this project is to be performed only as per the prevailing norms and regulations of Government of India.

- iv) The grantee Institute/University shall maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The Interest earned should be reported to DST while submitting the SE/UC. The Interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of grant.
- v) It must be ensured that all the Utilization Certificate (UC) and Statement of Expenditure (SE) in respect of the project and the final completion report is submitted within one year from the scheduled date of completion of the project.
- 8. The accounts of the grantee institution shall be open to inspection by the sanctioning authority /audit whenever the institution is called upon to do so, as laid down under Rule 211(1) of General Financial Rules.
- 9. The expenditure involved is to be debited under the budget head Demand No. 86, Department of Science and Technology Major Head-3425, other scientific research 60.798-International Cooperation 12- S&T Cooperation with Other Countries 12.00.31-Grants—in-aid (Plan) during the current financial year 2015-2016.
- 10. This issues under the delegated powers to the Ministries/Departments and with the approval of Secretary, DST and financial concurrence of IFD vide Dy no. C/169/2015-2016 dated 9-4-2015.

Cont next page/-

11. The expenditure on account of this Sanction Order has been entered in grant register at Page

R K Sharma Scientist E

To,

The Pay & Accounts Officer, Dept. of Science and Technology, New Delhi

# Copy to -

- 1) Office of the Principal Director & Audit, Illrd Floor, AGCR Bldg., IP Estate, New Delhi 110002.
- 2) Cash Section (3 copies), DST, New Delhi
- 3) I.F. Division/Accounts Section, DST, New Delhi
- 4) The Registrar, University of Delhi, Delhi-110007
- 5) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007
- 6) Sanction folder
- 7) FICCI Cell, DST- for website requirements

R K Sharma Scientist E



Telegram दूरभाषाम्ब Scienctech

26962819, 26567373,

desce.

26562134, 26562122 (EPBAX)

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26569908, 26864570, 26863847, 26862418

वेबसाइट/website : www.dst.gov.in

भणन सरकार

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No.INT/RUS/RFBR/P-186

Dated: 06 .01.2016

#### ORDER

Subject: Implementation of the Indo-Russian project entitled "Tunable radiation source from laser plasma based nonlinearities" coordinated by Dr. D.N. Gupta, Department of Physics & Astrophysics, University of Delhi, Delhi with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow under DST-RFBR programme.

Sanction of the President is hereby accorded for an DST and Russian Federation project entitled: "Tunable radiation source from laser plasma based nonlinearities" under the MoU with RFBR at a total cost of Rs.15,98,520/- (Fifteen lakh ninety eight thousand five hundred twenty only) for a period of two years as under:

Ite	em of Expenditure	Amounts in (Rs.)	
-		First year	Second year
Ī.	Consumables:	50,000/-	50, 000/-
2.	Mobility of Scientists: (One visit each year)	2, 36, 600/-	2, 36, 600/-
	<ul> <li>For visit of Indian Scientists to Russia</li> <li>For visit of Russian Scientists to India</li> </ul>		
3.	Contingency:	50, 000/-	50, 000/-
4.	Manpower: JRF-1 @ Rs.25,000+30% HRA	3,90,000/-	3, 90, 000/-
5.	Year-wise Cost	7,26,600/-	7,26,600/-
<u>6.</u>	Overhead @ 10%	72,660/-	72,660/-
<del>0.</del> 7.	Total year-wise Cost	7,99,260/-	7,99,260/-

Total Cost = Rs.15,98,520/-

2. Sanction of the President is hereby accorded for release of 1st installment as initial grant of Rs. 7,99,260/- (Rupees Seven lakh ninety nine thousand two hundred sixty only) and the payment of this amount may be made to DDO, DST by means of electronic transfer to the following a/c:

Contd.2/-



1.	Name & Designation of A/c holder	Registrar, University of Delhi
2.	Bank A/c Number	108 51 298 593
3.	Bank name & Branch address	State Bank of India, Delhi University, Delhi-
4.	IFSC Code	SBIN 000 1067
	MICR Code	11000 20 30
6.	E-mail (Agency/PI)	dngupta2001@gmail.com

- 3. The expenditure involved will be dubitable to the budget Head, Demand No. 86, Department of Science & Technology, Major Head-3425 B- Other Scientific Research 60 others- Minor Head 60.798 -International Co-operation S&T Co-operation with Other Countries, 12.00.31 Grants-in-aid (general) during the current financial year 2015-16 (PLAN).
- 4. The Project will be coordinated by **Dr. D.N. Gupta**, Department of Physics & Astrophysics, University of Delhi, Delhi 110007, India with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow, Russia, from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 5. **Dr. D.N. Gupta**, Department of Physics & Astrophysics, University of Delhi, Delhi, India is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 6. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant for exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

a) Break up of expenditure on each visit of Indian Scientists visiting collaborative Institute is calculated broadly as below: (All conversion US \$ 1 = Rs 60)

1.	International Fare Delhi-Moscow-Dehli by excursion economy class	(In Rs.)
L		60, 000/-
2.	Medical Insurance (Silver class)	5, 000/-
3.	Domestic Travel related to visit	2,000/-
4.	Visa Fee (as per actual)	10, 000/-
5.	Accommodation @ US \$ 125 for 14 days	1, 05, 000/-
6.	Cash Allowance @ US \$ 40 for 14 days	33, 600/-
7.	Local transport @ US \$ 25 for 14 days	21, 000/-
	Total (Col. 1 to 7)	2, 36, 600/-

Contd.3/-



- 7. The institute/university will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure//Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- 8. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India.
- 9. It must be ensured that the final statement of expenditure, utilization certificate and project completion report is submitted within one year after the scheduled dated of completion of the project.
- 10. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub/head of expenditure and copies of claims may be called by DST if required. This sanction order has been issued in current financial year 2015-16 and is valid up to 31.03.2016 only. For incurring any expenditure in next financial year (2016-17), PI should apply to DST for carry forward of unspent balance to 2016-17 during April 2016. For seeking carry forward approval/sanction order, Indian Project coordinator should furnish the requisite utilization certificate immediately at the end of the each financial year (ending 31st March) along with the audited statement of expenditure and project progress report.
- 11. As per rule 211 (1) of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institution is called upon to do so.
- 12. This issues under the delegated powers to the Minister/Departments and with the financial approval and concurrence of Director (IFD) vide Diary No <u>C/4595/IFD 2015-16</u> dated 23.12.2015.
- 13. This Sanction Order has been entered at S. No in Grant-in-aid Register (2015-16).
- 14. "There is provision for manpower in the project. For recruitment of manpower there should be nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications & post should be sent to DST. Positions of manpower are co-terminus with duration of the project and DST would have no liability to meet these manpower cost beyond the duration of the project. Project staff should be selected as per the DST norms, as indicated in DST Office Memorandum no. SR/S9/Z-09/2012 dated: October, 21 2014 which is available at www.dst.gov.in"

Contd.4/-

- 15. As per instructions issued by the Ministry of Finance, Department of Expenditure, the Institute/Organization shall enter, upload and confirm feeding of the details of Utilization Certificate (Receipt and Expenditure of the Grand-In-Aid) in the Public Finance Management System Portal (PFMS) besides sending it in Physical form to DST, failing which, carry forward, further release and closure of the Project shall be put on the HOLD.
- 16. This sanction order being 1<sup>st</sup> installment for implementation of this project, no SE/UC is due from GI/PI, against this project.

(S. K. Varshney) Scientist 'G' / IBCD, DST

To

The Pay & Accounts Officer,

Dept. of Science and Technology, New Delhi

Copy to:

- 1. Office of the Principal Director & Audit III<sup>rd</sup> Floor, AGCR Bldg., IP Estate, New Delhi-2
- 2. Cash Section (3 copies), DST
- 3. I.F. Division/Accounts Section, DST
- 4. Dr. D.N. Gupta, Assistant Professor, Department of Physics & Astrophysics,

University of Delhi, Delhi – 110 007.

- 5. Director, University of Delhi, Delhi 110 007.
- 6. Registrar, University of Delhi, Delhi 110 007.
- 7. Sanction folder.

(S. K. Varshney) Scientist 'G' / IBCD, DST

#### INT/RFBR/P-120 Government of India Ministry of Science & Technology (International Division)

INT/RFBR/P-120

Date: 20.11.2012

#### **ORDER**

Sub: - Implementation of Indo-Russian project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. Under DST-RFBR MoU.

Sanction of the President is hereby accorded for an Indo-Russian joint project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992, Russia, under the MoU with Russian Foundation for Basic Research (RFBR) at a total cost of Rs. 7,88,340/-(Rupees seven lakh eighty eight thousand three hundred and forty only) for a period of two years as under:

I from of h spenditure	l (st Year (Rs.)	2nd Year (B) )	Loral (Rs.)
Equipmental Each Speed computer workstation systems	5,00,000 -		i (00) (10) -
Consumables (for data storing)	25 000	25,000 -	\$0,000 -
Contingency	25 (00)0	25,(0)0 -	0000
Indian Scientist to Russia 1 visits (2) visits per year of two Week.			
respectively)	1 41.670 -	191,670 -	3.83.340
Overhead: 2-10% con Consumable -		T 500	5.000%
Total	5,44,170%	2 44,170	7.88, 40

- 2. Sanction of the President is hereby accorded for release of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) to the Registrar, University of Delhi
- 3. DDO DST will draw the amount of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) from PAO DST Ministry of Science & Technology and disburse by means of electronic transfer (E-transfer) in favour of Registrar, University of Delhi. as details given below:

Account Holder Name	Regular University of Helb.
Designation	
Name of Bank & Branch	State Bank of India, University of Delhi, Delhi-110007
Bank Account Number	50871, 586/0
IFSC Code	NH(NHH-1107
MICR Code	110.97.10.10
Scheme Name	International Cooperation
Sanction No.	DST-INT-RT9R P-120
C-mail (Agency/PI)	dagapta a physics datae in
Mobile No. (Agency Pl)	9958266708

- 4 The expenditure involved is debitable to:-
  - (i) Demand No. 85-Department of Science and Technology
  - (ii) Major Head-3425 B-Other Scientific Research
  - (iii) 60 others Minor Head 60.798 International Co-operation S&T Co-operation with other Countries
  - (iv) 12.00.31 Grants-in-aid during the current financial year 2012-13 (PLAN).



- 5. The Project will be coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992 from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 6. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India, is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 7. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant tor exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

# For Indian Scientist visiting Russia (for an average duration of two weeks)

a. International Fare (Delhi- Moscow-Delhi) by cheapest economy class	Rs.45,000/-
b. Per diem @ US\$ 40 per day (on average of 2 weeks 14 x 40 x 57)	Rs.31,920/-
c. Medical Insurance (silverclass) & Visa fee	Rs. 5,000/-
d. Domestic travel	Rs.10,000/-
e. Accomodation Rate @ US\$ 100 per day (14 x 100 x 57)	Rs.79.800/-
f. Local transport in Russia @ US\$ 25 per day (14 x 25 x57)	Rs. 19,950/-
Total (for one)	Rs.1,91,670/-

- 8. Local hospitality including cost for the stay of Indian scientists in Russia for the total duration is to be met by the receiving side as per the provision of MoU between Department of Science & Technology and Russian Foundation for Basic Research.
- 9. "The institute will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further instalment of the grant".
- 10. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination, beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India
- 11. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub head of expenditure and copies of claims may be called for by DST if required. This sanction order has been issued in current financial year 2012-13 and is valid upto 31.03.13 only. For incurring any expenditure in next financial year, PI should apply to DST for carry forward of unspent balance to 2013-14 during April 2013 for seeking carry forward approval/sanction order. Indian Project Coordinator should furnish the requisite Utilization Certificate immediately at the end of the each financial year (ending 31st March) alongwith the audited Statement of Expenditure and progress report.
- 12. The account of the grantee institution shall be open to inspection by the sanctioning authority/audit whenever the institution is called upon to do so, as laid down under Rule 211(i) of General Financial Rules.

lang

- This issues under the delegated powers to the Minister/Departments and with approval of Integrated Finance Division vide San No.100/IFD/ 5554/2012-13 dated: 16/11/12
- This sanction has been entered in grants-in-aid register at Sl.No. 3119 dated: 20/11/12

(S.K.Varshney)

To,

The Pay & Accounts Officer, Department of Science & Technology, New Delhi-110016 Copy to:

- 1. Principal Director of Audit, AGCR Bldg., IP Estate, New Delhi-110002.
- Cash Section (3 copies), DST.
- I.F. Division/Accounts Section, DST.
- Sanction Folder
- 5. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminous with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 6. Registrar, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 7. Accounts Officer, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.

8. Project file.

For US (IC)

#### SR/FTP/PS-076/2011

# Science and Engineering Research Board

(A Statutory Body under Department of Science and Technology)

Technology Bhavan New Mehrauli Road New Delhi - 110 016.

Dated 27.06.2012

#### ORDER

Subject:- Financial assistance for the research project entitled "Ultrafast laser interactions with plasmas by particle-in-cell simulations" by Dr Devki Nandan Gupta, Department of Physics and Astrophysics, University of Delhi, Delhi – 110 007, Delhi.

Sanction of the Science and Engineering Research Board (SERB) is hereby accorded to the above-mentioned project at a total cost of Rs. 23,76,000/- (Rupees twenty three lakh seventy six thousand only) with break-up of Rs. 10,50,000/- under Capital head and Rs. 13,26,000/- under General head for a duration of three years. The items of expenditure for which the total allocation of Rs. 23,76,000/- has been approved for a period of three years, are given below:

SI. No	Head	Total (in Rs.)
Α	Non-recurring (Capital Items)	
1.	Minor Equipment	10,50,000/-
1	Computing system, 3D PIC with 10 node simulation code	
A'	Total Capital	10,50,000/-
В	Recurring Items (General)	
B.1	General A	9,30,000/-
	[Manpower (1), Consumables, Travel, Contingencies]	
B.2	General B	3,96,000/-
	(Overhead Charges)	
B'	Total General (B.1 + B.2)	13,26,000/-
C	Total cost of the project (A' + B')	23,76,000/-

- Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
- The sanction of the Board is also accorded to the payment of Rs. 10,50,000/- (Rupees ten lakh fifty thousand only) under 'Grants for creation of capital assets' and Rs. 4,40,000/- (Rupees four lakh forty thousand only) under 'Grants-in-aid General' to the Registrar, University of Delhi, Delhi 110 007 being the first installment of the grant for the year 2012-13 for implementation of the said research project.
- Sanction of the grant is subject to the conditions as detailed in Annexure I.
- The expenditure involved is debitable to Grant-in-aid for the year 2012-13 (Plan Expenditure- Capital) Rs. 10,50,000/-

Grant-in-aid for the year 2012-13 (Plan Expenditure- General) - Rs. 4,40,000/-This release is being made under OYS Scheme.

The sanction has been issued with the approval of the competent authority in SERB vide Dy. No. SERB/F/1801/2012-13 dated 27.06.2012.

- The amount of Rs. 14,90,000/- (Rupees fourteen lakh ninety thousand only) meant for both 'Grants-in-aid General' and 'Grants for creation of capital assets' will be drawn by the Drawing and Disbursing Officer of the SERB and it will be disbursed by means of cheque/DD favouring to the Registrar, University of Delhi, Delhi 110 007.
- 8 The Institute will furnish to the Board, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- While providing operational flexibility among various subheads under head General-A, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.
- 10 The manpower sanctioned in the project, if any, is co-terminus with the project and SERB will have no liability to meet the fellowship etc. beyond the duration of the project
- 11 All purchases of equipments etc. would be as per GFR and the disposal of the same would be done with prior approval of SERB.
- The institute will maintain separate audited accounts for the project. It is found expedient to keep a part or whole of grant in a bank account earning interest. The interest earned should be reported to the SERB, New Delhi. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the Institute is called upon to do so.
- As this is the first grant being released for the project, no previous U/C is required.

(Praveen Kumar S) Scientist `D`

Copy forwarded for information and necessary action to:

- The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi 110 002.
- The Drawing and Disbursing Officer, SERB (2 copies).
- Dr Devki Nandan Gupta
   Department of Physics and Astrophysics
   University of Delhi
   Delhi 110007, Delhi
- The Registrar
   University of Delhi
   Delhi 110007, Delhi
- 5. Sanction folder SERB
- 6. OSD, SERB\*
- 7. SERB Secretariat

(Praveen Kumar S) Scientist 'D'



Telegram

Scienctech

दूरभाष/Tel

26962819, 26567373,

फैक्स/Fax

26562134, 26562122 (EPBAX) 26569908, 26864570

26863847, 26862418

वेबसाइट/website : www.dst.gov.in No. INT/FRG/DAAD/P-253/2015 भारत सरकार

चिज्ञान और प्रौद्योगिकी मंत्रालय. विज्ञान और प्रौद्योगिकी विभाग, टेक्नोलॉजी भवन, तया महरौली मार्ग, नई दिल्ली 110 016

GOVERNMENT OF INDIA

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY, TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD, NEW DELHI-110-016

Dated: 10-4-2015

ORDER

Sanction of the President is hereby accorded for implementation of the Indo-German (DST-DAAD) joint research project entitled "Electron and Ion Accelerations from Laser-Plasma Interactions" at a total cost of Rs. 9,64,000/- (Rupees Nine Lac Six Four Thousand Only). The duration of the project shall be 2 years from date of issue of this sanction order. The requests for extension of the project beyond this validity shall NOT be considered in any case.

The composition of the project team is as below:

<u>Indian side</u>	German side
i.) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007 ii.) Mr. Krishnagopal, Doctoral student	i.) Dr. Michael Bussmann, Laser Particle Acceleration Group, Helmholtz-Zentrum Dresden -Rossendorf e. V., HZDR, Bautzner Landstrasse 400, Dresden, Saxony, Germany, 01314 ii.) Mr. Thomas Kluge, Doctoral student

3. The change/ replacement of project participants is not allowed. The participating scientists should be working on the project and affiliated with the Institute/University holding the indicated position at the time of start of the project as well as at the time of exchange visits under the project. The expenditure related to approve visits of participating scientists, as mentioned above, only can be met from the project grant.

4. The break-up of estimated expenditure is as indicated below and no re-appropriation shall be allowed under this project:-

Estimated expenditure(s)		
1 <sup>st</sup> year	2 <sup>nd</sup> vear	Total
(2 visits) (28&60 days) 1,30,000/-	(2 visits) (28&60 days) 1,30,000/-	(4 visits) 2,60,000/-
(2 visits) (28&60 days) 1,32,000/-	(2 visits) (28&60 days) 1,32,000/-	(4 visits) 2,64,000/
2,20,000/- 4,82,000/-	2,20,000/-	4,40,000/
	1 <sup>st</sup> year (2 visits) (28&60 days) 1,30,000/- (2 visits) (28&60 days) 1,32,000/- 2,20,000/-	1st year 2nd year (2 visits) (28&60 days) 1,30,000/-  (2 visits) (28&60 days) 1,30,000/-  (2 visits) (28&60 days) 1,32,000/- 2,20,000/- 2,20,000/- 2,20,000/-

Contd. p/2

- 5. The local hospitality (which includes per-diem, accommodation, etc) for Indian scientists visiting Germany and the International travel related expenses wrt the German Scientists visiting India under the project shall be borne by DAAD (Germany) through the German Co-Pl of the project.
- 6. Sanction of the President is also accorded for the release of Rs. 4,82,000/- (Rupees Four Lac Eighty Two Thousand Only) as an initial installment for incurring expenditure during the first year of the project and payment of this amount may be made electronically to The Registrar, University of Delhi, Delhi-110007 as per the Bank details given below:

1.	Name of the account (as per Bank record)	University of Delhi
2.	Name and Designation of A/C holder	Registrar, Delhi University
	(as per Bank A/C)	registral, Delin University
	Bank Account No.	10851298593
4.	Bank Name and Branch Address	State Bank of India, University of Delhi, North
-	TECC O. I	Campus, Delhi-110007
[3.]	IFSC Code	SBIN0001067

The release of this grant is subject to:-

i) Obtaining prior approval of this Department on all project related visits to be undertaken by the scientists from the either side in connection with the implementation with of this project separately in prescribed format, on a case to case basis, at-least 4 weeks in advance before incurring any expenditure for this purpose.

submission of Utilization Certificate (UC) and a Statement of Expenditure (SE) along with up to date progress report at the end of each financial year for the grants already received under the project and seeking specific approval of this Department for carry forward of unspent funds to the

next financial year for utilization under the project

The international / domestic air-travel connected to visits under this project is to be performed only as per the prevailing norms and regulations of Government of India.

- iv) The grantee Institute/University shall maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The Interest earned should be reported to DST while submitting the SE/UC. The Interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of grant.
- v) It must be ensured that all the Utilization Certificate (UC) and Statement of Expenditure (SE) in respect of the project and the final completion report is submitted within one year from the scheduled date of completion of the project.
- 8. The accounts of the grantee institution shall be open to inspection by the sanctioning authority /audit whenever the institution is called upon to do so, as laid down under Rule 211(1) of General Financial Rules.
- 9. The expenditure involved is to be debited under the budget head Demand No. 86, Department of Science and Technology Major Head-3425, other scientific research 60.798-International Cooperation 12- S&T Cooperation with Other Countries 12.00.31-Grants—in-aid (Plan) during the current financial year 2015-2016.
- 10. This issues under the delegated powers to the Ministries/Departments and with the approval of Secretary, DST and financial concurrence of IFD vide Dy no. C/169/2015-2016 dated 9-4-2015.

Cont next page/-

11. The expenditure on account of this Sanction Order has been entered in grant register at Page

R K Sharma Scientist E

To,

The Pay & Accounts Officer, Dept. of Science and Technology, New Delhi

# Copy to -

- 1) Office of the Principal Director & Audit, Illrd Floor, AGCR Bldg., IP Estate, New Delhi 110002.
- 2) Cash Section (3 copies), DST, New Delhi
- 3) I.F. Division/Accounts Section, DST, New Delhi
- 4) The Registrar, University of Delhi, Delhi-110007
- 5) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007
- 6) Sanction folder
- 7) FICCI Cell, DST- for website requirements

R K Sharma Scientist E



Telegram दूरभाषाम्ब Scienctech

26962819, 26567373,

desce.

26562134, 26562122 (EPBAX)

HARRES

26569908, 26864570, 26863847, 26862418

वेबसाइट/website : www.dst.gov.in

भणन सरकार

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No.INT/RUS/RFBR/P-186

Dated: 06 .01.2016

#### ORDER

Subject: Implementation of the Indo-Russian project entitled "Tunable radiation source from laser plasma based nonlinearities" coordinated by Dr. D.N. Gupta, Department of Physics & Astrophysics, University of Delhi, Delhi with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow under DST-RFBR programme.

Sanction of the President is hereby accorded for an DST and Russian Federation project entitled: "Tunable radiation source from laser plasma based nonlinearities" under the MoU with RFBR at a total cost of Rs.15,98,520/- (Fifteen lakh ninety eight thousand five hundred twenty only) for a period of two years as under:

Ite	em of Expenditure	Amounts in (Rs.)	
		First year	Second year
1.	Consumables:	50,000/-	50, 000/-
2.	Mobility of Scientists: (One visit each year)	2, 36, 600/-	2, 36, 600/-
	<ul> <li>For visit of Indian Scientists to Russia</li> <li>For visit of Russian Scientists to India</li> </ul>		
3.	Contingency:	50, 000/-	50, 000/-
4.	Manpower: JRF-1 @ Rs.25,000+30% HRA	3,90,000/-	3, 90, 000/-
5.	Year-wise Cost	7,26,600/-	7,26,600/-
6.	Overhead @ 10%	72,660/-	72,660/-
7.	Total year-wise Cost	7,99,260/-	7,99,260/-

Total Cost = Rs.15,98,520/-

2. Sanction of the President is hereby accorded for release of 1st installment as initial grant of Rs. 7,99,260/- (Rupees Seven lakh ninety nine thousand two hundred sixty only) and the payment of this amount may be made to DDO, DST by means of electronic transfer to the following a/c:

Contd.2/-



1.	Name & Designation of A/c holder	Registrar, University of Delhi
2.	Bank A/c Number	108 51 298 593
3.	Bank name & Branch address	State Bank of India, Delhi University, Delhi-
4.	IFSC Code	SBIN 000 1067
	MICR Code	11000 20 30
6.	E-mail (Agency/PI)	dngupta2001@gmail.com

- 3. The expenditure involved will be dubitable to the budget Head, Demand No. 86, Department of Science & Technology, Major Head-3425 B- Other Scientific Research 60 others- Minor Head 60.798 -International Co-operation S&T Co-operation with Other Countries, 12.00.31 Grants-in-aid (general) during the current financial year 2015-16 (PLAN).
- 4. The Project will be coordinated by **Dr. D.N. Gupta**, Department of Physics & Astrophysics, University of Delhi, Delhi 110007, India with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow, Russia, from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 5. **Dr. D.N. Gupta**, Department of Physics & Astrophysics, University of Delhi, Delhi, India is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 6. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant for exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

a) Break up of expenditure on each visit of Indian Scientists visiting collaborative Institute is calculated broadly as below: (All conversion US \$ 1 = Rs 60)

1.	International Fare Delhi-Moscow-Dehli by excursion economy class	(In Rs.)
L		60, 000/-
2.	Medical Insurance (Silver class)	5, 000/-
3.	Domestic Travel related to visit	2,000/-
4.	Visa Fee (as per actual)	10, 000/-
5.	Accommodation @ US \$ 125 for 14 days	1, 05, 000/-
6.	Cash Allowance @ US \$ 40 for 14 days	33, 600/-
7.	Local transport @ US \$ 25 for 14 days	21, 000/-
	Total (Col. 1 to 7)	2, 36, 600/-

Contd.3/-



- 7. The institute/university will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure//Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- 8. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India.
- 9. It must be ensured that the final statement of expenditure, utilization certificate and project completion report is submitted within one year after the scheduled dated of completion of the project.
- 10. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub/head of expenditure and copies of claims may be called by DST if required. This sanction order has been issued in current financial year 2015-16 and is valid up to 31.03.2016 only. For incurring any expenditure in next financial year (2016-17), PI should apply to DST for carry forward of unspent balance to 2016-17 during April 2016. For seeking carry forward approval/sanction order, Indian Project coordinator should furnish the requisite utilization certificate immediately at the end of the each financial year (ending 31st March) along with the audited statement of expenditure and project progress report.
- 11. As per rule 211 (1) of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institution is called upon to do so.
- 12. This issues under the delegated powers to the Minister/Departments and with the financial approval and concurrence of Director (IFD) vide Diary No <u>C/4595/IFD 2015-16</u> dated 23.12.2015.
- 13. This Sanction Order has been entered at S. No in Grant-in-aid Register (2015-16).
- 14. "There is provision for manpower in the project. For recruitment of manpower there should be nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications & post should be sent to DST. Positions of manpower are co-terminus with duration of the project and DST would have no liability to meet these manpower cost beyond the duration of the project. Project staff should be selected as per the DST norms, as indicated in DST Office Memorandum no. SR/S9/Z-09/2012 dated: October, 21 2014 which is available at www.dst.gov.in"

Contd.4/-

- 15. As per instructions issued by the Ministry of Finance, Department of Expenditure, the Institute/Organization shall enter, upload and confirm feeding of the details of Utilization Certificate (Receipt and Expenditure of the Grand-In-Aid) in the Public Finance Management System Portal (PFMS) besides sending it in Physical form to DST, failing which, carry forward, further release and closure of the Project shall be put on the HOLD.
- 16. This sanction order being 1<sup>st</sup> installment for implementation of this project, no SE/UC is due from GI/PI, against this project.

(S. K. Varshney) Scientist 'G' / IBCD, DST

To

The Pay & Accounts Officer,

Dept. of Science and Technology, New Delhi

Copy to:

- 1. Office of the Principal Director & Audit III<sup>rd</sup> Floor, AGCR Bldg., IP Estate, New Delhi-2
- 2. Cash Section (3 copies), DST
- 3. I.F. Division/Accounts Section, DST
- 4. Dr. D.N. Gupta, Assistant Professor, Department of Physics & Astrophysics,

University of Delhi, Delhi – 110 007.

- 5. Director, University of Delhi, Delhi 110 007.
- 6. Registrar, University of Delhi, Delhi 110 007.
- 7. Sanction folder.

(S. K. Varshney) Scientist 'G' / IBCD, DST

#### INT/RFBR/P-120 Government of India Ministry of Science & Technology (International Division)

INT/RFBR/P-120

Date: 20.11.2012

#### **ORDER**

Sub: - Implementation of Indo-Russian project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. Under DST-RFBR MoU.

Sanction of the President is hereby accorded for an Indo-Russian joint project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992, Russia, under the MoU with Russian Foundation for Basic Research (RFBR) at a total cost of Rs. 7,88,340/-(Rupees seven lakh eighty eight thousand three hundred and forty only) for a period of two years as under:

tem of Expenditure	l (Ry)	2nd Year (Rs)	fotal (Rs.)
Equipmental ligh Speed computer workstation by stems	1 3,00,000 -		£00;000 -
Consumables (for data storage)	25 000	25,000 -	50,000 -
Contingency	25 (10)0	25,000 -	o or o.
Indian Scienter to Russia Tyrsis. (2) visits per year of two Week. respectively)	1 41.670 -	191,670 -	3.83.340
Overhead, y 10% on Consumable.	410	1 5(00)	5.000%
Total	5,44,170%	2 44,170%	7.88,340

- 2. Sanction of the President is hereby accorded for release of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) to the Registrar, University of Delhi
- 3. DDO DST will draw the amount of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) from PAO DST Ministry of Science & Technology and disburse by means of electronic transfer (E-transfer) in favour of Registrar, University of Delhi. as details given below:

Account Holder Name Designation	Registrar University of Helli.	
Name of Bank & Branch	State Bank of India, University of Delhi, Delin, 110007	
Bank Account Number	5:051,28650	
IFSC Code	NHINEROLO 7	
MICR Code	[10.90.10.10]	
Scheme Name	International Cooperation	
Sanction No.	DST-INT-REBR P-120	
E-mail (Agency P1)	dagapta a physics du ac in	
Mobile No. (Agency Pl)	9958266708	

- 4 The expenditure involved is debitable to:-
  - (i) Demand No. 85-Department of Science and Technology
  - (ii) Major Head-3425 B-Other Scientific Research
  - (iii) 60 others Minor Head 60.798 International Co-operation S&T Co-operation with other Countries
  - (iv) 12.00.31 Grants-in-aid during the current financial year 2012-13 (PLAN).



- 5. The Project will be coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992 from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 6. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India, is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 7. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant tor exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

#### For Indian Scientist visiting Russia (for an average duration of two weeks)

a. International Fare (Delhi- Moscow-Delhi) by cheapest economy class	Rs.45,000/-
b. Per diem @ US\$ 40 per day (on average of 2 weeks 14 x 40 x 57)	Rs.31,920/-
c. Medical Insurance (silverclass) & Visa fee	Rs. 5,000/-
d. Domestic travel	Rs.10,000/-
e. Accomodation Rate @ US\$ 100 per day (14 x 100 x 57)	Rs.79.800/-
f. Local transport in Russia @ US\$ 25 per day (14 x 25 x57)	Rs. 19,950/-
Total (for one)	Rs.1,91,670/-

- 8. Local hospitality including cost for the stay of Indian scientists in Russia for the total duration is to be met by the receiving side as per the provision of MoU between Department of Science & Technology and Russian Foundation for Basic Research.
- 9. "The institute will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further instalment of the grant".
- 10. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination, beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India
- 11. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub head of expenditure and copies of claims may be called for by DST if required. This sanction order has been issued in current financial year 2012-13 and is valid upto 31.03.13 only. For incurring any expenditure in next financial year, PI should apply to DST for carry forward of unspent balance to 2013-14 during April 2013 for seeking carry forward approval/sanction order. Indian Project Coordinator should furnish the requisite Utilization Certificate immediately at the end of the each financial year (ending 31st March) alongwith the audited Statement of Expenditure and progress report.
- 12. The account of the grantee institution shall be open to inspection by the sanctioning authority/audit whenever the institution is called upon to do so, as laid down under Rule 211(i) of General Financial Rules.

lang

- This issues under the delegated powers to the Minister/Departments and with approval of Integrated Finance Division vide San No.100/IFD/ 5554/2012-13 dated: 16/11/12
- This sanction has been entered in grants-in-aid register at Sl.No. 3119 dated: 20/11/12

(S.K.Varshney)

To,

The Pay & Accounts Officer, Department of Science & Technology, New Delhi-110016 Copy to:

- 1. Principal Director of Audit, AGCR Bldg., IP Estate, New Delhi-110002.
- Cash Section (3 copies), DST.
- I.F. Division/Accounts Section, DST.
- Sanction Folder
- 5. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminous with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 6. Registrar, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 7. Accounts Officer, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.

8. Project file.

For US (IC)

#### SR/FTP/PS-076/2011

#### Science and Engineering Research Board

(A Statutory Body under Department of Science and Technology)

Technology Bhavan New Mehrauli Road New Delhi - 110 016.

Dated 27.06.2012

#### ORDER

Subject:- Financial assistance for the research project entitled "Ultrafast laser interactions with plasmas by particle-in-cell simulations" by Dr Devki Nandan Gupta, Department of Physics and Astrophysics, University of Delhi, Delhi – 110 007, Delhi.

Sanction of the Science and Engineering Research Board (SERB) is hereby accorded to the above-mentioned project at a total cost of Rs. 23,76,000/- (Rupees twenty three lakh seventy six thousand only) with break-up of Rs. 10,50,000/- under Capital head and Rs. 13,26,000/- under General head for a duration of three years. The items of expenditure for which the total allocation of Rs. 23,76,000/- has been approved for a period of three years, are given below:

SI. No	Head	Total (in Rs.)
Α	Non-recurring (Capital Items)	
1.	Minor Equipment	10,50,000/-
1	Computing system, 3D PIC with 10 node simulation code	
A'	Total Capital	10,50,000/-
В	Recurring Items (General)	
B.1	General A	9,30,000/-
	[Manpower (1), Consumables, Travel, Contingencies]	
B.2	General B	3,96,000/-
	(Overhead Charges)	
B'	Total General (B.1 + B.2)	13,26,000/-
C	Total cost of the project (A' + B')	23,76,000/-

- Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
- The sanction of the Board is also accorded to the payment of Rs. 10,50,000/- (Rupees ten lakh fifty thousand only) under 'Grants for creation of capital assets' and Rs. 4,40,000/- (Rupees four lakh forty thousand only) under 'Grants-in-aid General' to the Registrar, University of Delhi, Delhi 110 007 being the first installment of the grant for the year 2012-13 for implementation of the said research project.
- Sanction of the grant is subject to the conditions as detailed in Annexure -1.
- The expenditure involved is debitable to Grant-in-aid for the year 2012-13 (Plan Expenditure- Capital) Rs. 10,50,000/-

Grant-in-aid for the year 2012-13 (Plan Expenditure- General) - Rs. 4,40,000/-This release is being made under OYS Scheme.

The sanction has been issued with the approval of the competent authority in SERB vide Dy. No. SERB/F/1801/2012-13 dated 27.06.2012.

- The amount of Rs. 14,90,000/- (Rupees fourteen lakh ninety thousand only) meant for both 'Grants-in-aid General' and 'Grants for creation of capital assets' will be drawn by the Drawing and Disbursing Officer of the SERB and it will be disbursed by means of cheque/DD favouring to the Registrar, University of Delhi, Delhi 110 007.
- 8 The Institute will furnish to the Board, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year.
- While providing operational flexibility among various subheads under head General-A, it should be ensured that not more than Rs. 1.5 lakh each should be spent for travel and contingency.
- 10 The manpower sanctioned in the project, if any, is co-terminus with the project and SERB will have no liability to meet the fellowship etc. beyond the duration of the project
- 11 All purchases of equipments etc. would be as per GFR and the disposal of the same would be done with prior approval of SERB.
- The institute will maintain separate audited accounts for the project. It is found expedient to keep a part or whole of grant in a bank account earning interest. The interest earned should be reported to the SERB, New Delhi. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the Institute is called upon to do so.
- As this is the first grant being released for the project, no previous U/C is required.

(Praveen Kumar S) Scientist `D`

Copy forwarded for information and necessary action to:

- The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi 110 002.
- The Drawing and Disbursing Officer, SERB (2 copies).
- Dr Devki Nandan Gupta
   Department of Physics and Astrophysics
   University of Delhi
   Delhi 110007, Delhi
- The Registrar
   University of Delhi
   Delhi 110007, Delhi
- 5. Sanction folder SERB
- 6. OSD, SERB\*
- 7. SERB Secretariat

(Praveen Kumar S) Scientist 'D'





#### Government of India Department of Atomic Energy (DAE) Board of Research in Nuclear Sciences (BRNS)

D K Dalai Programme Officer (PFRC) BRNS Secretariat,1st Floor, CC. BARC, Trombay, Mumbai-400085Phone: +91-2225594683 Email: dkdalal@barc.gov.in

No: 39/14/24/2016-BRNS/34177

#### Date: 18/07/2016 OFFICE MEMORANDUM

Sub: R/P entitled "Laser-plasma interaction in strong coupling regime" under Dr. Devki Nandan Gupta, Assistant Professor, University of Delhi, Main Campus, Delhi- 110007 bearing sanction 39/14/24/2016-BRNS with PFRC, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS), I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 3 years beginning from financial year 2016-2017 with a total grant of Rs. 19,16,400/- (Rupees nineteen lakh sixteen thousand four hundred only) for the project as under :

Item of expenditure	Year 1	Year 2	Year 3
	(2016-2017)	(2017-2018)	(2018-2019)
Equipments	300000	Ô	0
Staff Salary - JRF	300000	300000	0
Staff Salary - SRF (1)	o	Ó	336000
Travel - Pl	100000	100000	100000
Contingencies	50000	50000	50000
Overheads	52500	30000	32700
Total(INR)	802500	480000	518700

Note: \* Computer Workstation System, Softwares

JRF salary calculated @25,000/- p.m. for first two years and on redesignation by committee on in third year as SRF @ 28,000/- p.m. RA salary calculated @ 36,000/- p.m.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 1,15,200/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 8,02,500/towards grant for the year 2016-2017.
- 3. The expenditure involved is debitable to: 04 3401 00 004 27 0231.

This issues with the concurrence of Scientific Secretary, BRNS and IFA.

for DK Dalal
(DK Chintamani Das)

Pay & Accounts Officer, DAE, Mumbai - 400 001.

Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.

Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001. 2.

Registrar, University of Delhi, Main Campus, Delhi- 110007 3.

- Principal Investigator(PI): Dr. Devki Nandan Gupta, Assistant Professor, University of Delhi, Main Campus, Delhi- 110007.
- First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 10851298650, A/C Name: Registrar, University of Delhi, IFSC: SBIN0001067, State Bank of India, Delhi University, Delhi-110007
- Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).
- THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED). WHICH MAY BE GONE THROUGH CAREFULLY.
- B. Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year, however, the grant will be released (unspent balance of previous year and Interest earned will be adjusted) after the PI submits the following documents to the Programme Officer PFRC:
- a) Claim in Form-II quoting the reference of the sanction issued for the first year.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.
- e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.
- f) A One Page report on the progress of work during first year.
- Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the following requirements:
- Renewal/ Extension Application: Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at www.daebrns.gov.in. All applications received shall be examined by experts from the field and PIs may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.
- ii) Sanction Letter: If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.
- Claim: On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer PFRC, BRNS Secretarial, First FLoor, Central Complex, BARC, Trombay, Mumbai-400 085:
  - a) Claim in Form-II quoting reference of the renewal sanction.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant, should be reflected in the Statement of Accounts.
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.
- e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh.
- At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:
  - a) Claim Form-II if any,
- b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of

pack merest earned on the grant released into the SA.

Final Consolidated Progress Report and a brief report as per format given in Form-VII.

AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg. Mumbai - 400 001 - With a request that the amount granted for the first year of the project may be released.

Member Secretary (PFRC) : Dr. Ravi A. V. Kumar, ravi@ipr.res.in; Ph:+91-9825366039

- Co-Investigator (CI): Avinash Khare, Professor Department of Physics and Astrophysics, University of Delhi, 7. North Campus, Delhi-110007, Email: ak0005@uah.edu
- Project Collaborator (PC): Amita Das, Professor, Institute for Plasma Research (IPR), Bhat, Gandhinagar-382424, India, Ernail : amita@ipr.res.in

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

for DK Dalal

Note:

Please quote the Sanction Number 39/14/24/2016-BRNS in all your correspondence with BRNS





## उन्नत अर्धचालक तकनीकी केंद्र (असीमित Centre for Advanced Semiconductor Technology

Phone: +91-11-23903879

Fax: +91-11-23903480

# Projects

Ref: ASemiT\CARS\02\DU\2017-18

June 21, 2017

To

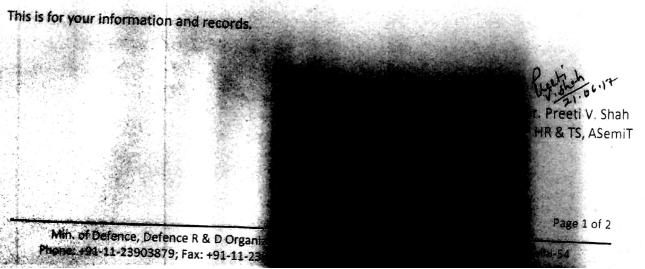
The Registrar University of Delhi Delhi-110007

Fax: 011-27666350

Subject: Awarding of CARS to University of Delhi

Sir,

- 1. This is to inform you that Centre for Advanced Semiconductor Technology (ASemiT) has awarded CARS to University of Delhi titled "Feasibility study for fabrication of Airbridges by gold electroplating" at a cost of ₹ 9.42 Lakhs (Nine lakh and forty two thousand only) with a duration of 15 months as per the terms and conditions of the CARS attached with this letter.
- 2. Kindly revert back within 30 days if you have any issue/query with the specific terms and conditions of this CARS otherwise it will be deemed that the mentioned specific conditions are
- 3. The advance amount of Rs 8.00 lakh will be transferred to the account of The Registrar, University of Delhi. Once the amount is transferred we will send a copy of cheque-slip of the same. RSP is requested to confirm in writing the receipt of initial advance.
- 4. For seeking release of subsequent instalments, the RSP is required to submit utilization certificate and statement of expenditure of the previous instalments, and expected schedule of expenditure from the instalment that is required to be released. The day on which advance amount will be transferred to RSP's account will be deemed as the start date of the CARS.
- 5. The progress of the CARS will be monitored and reviewed by ASemiT on quarterly basis.
- 6. Statements on expenditures incurred on items listed in Annexure I: Summary Offer for Provision of Research Services [at Entry 9.1] as certified by the internal auditors of the RSP shall be submitted within 30 days of crossing of each Performance Milestone identified in the schedule of payments in Annexure I: Summary Offer for Provision of Research Services [at Entry 9.2].
- 7. First review of the CARS will be held in the month of October 2017.
- 8. Two Hard copies (ink-signed) of this letter alongwith Contract for Acquitions of Research Services are being sent to you. You are requested to please send back a copy of CARS after signature and







#### उन्नत अर्धचालक तकनीकी केंद्र (असीमित) Centre for Advanced Semiconductor Technology (ASemiT)

Phone: +91-11-23903879

Fax: +91-11-23903480

#### Enclosures:

(a) Duly signed Contract for Acquition of Research Services alongwith specific & general conditions of this contract,

#### Copy to (by fax):

- 1. DCDA Metcalf House, Delhi-110054 Fax: 011-23814817
- 4. The Director
  Dte. of P&C
  DRDO Bhawan, Delhi-110011
  Fax: 011-23011133
- 2. The Director PM (MED)
  O/o DG (MED & Cos)
  DRDO Bhawan, Delhi-110011
  Fax: 011-23007785
- 5. Prof. Vinay Gupta (PI)
  Deptt. of Physics and
  Astrophysics, Delhi-110007
  Fax: 011-27667061
- 3. The Director
  Dte. of ER & IPR
  DRDO Bhawan,
  Delhi-110011
  Fax: 011-23017582
- 6. Dr. Pami Dua Chairperson, Research Concil University Of Delhi, Delhi-110007 Fax: 011-27667159

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#### ORDER

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The President is accorded for the payment of ₹. 3,28,24,203/- (Rupers The President Fig. 1) The President Four Thousand Two Hundred and Three only under the creation of Capital Assets and ₹. 30,44,000/- (Rupees Thirty make and Four treation of only under Craats in Aid General to the Registrar, University of Delivers 4 \$ 6007 being the first mistalliment of the grant for the year 2014 in the special research project.

with tion of the grant is subjected to the conditions mentioned in annexure I.

change in \$ 30.44.000/ (Rupees Thirty Lakh and Forty Four Thousand 2 TARREST TO BE TO BE BOOK OF FEDERAL IPSC Code SBIN0001067 MER Code 1 (9002030 House SBI, University of Delhi Branch The first sanction of the property makes on a property of the waits of a covernor Occuficate to PACCIS part copiesas i (a) In the second of the powers delegated to the Ministrey and ward the interpolation of France Division of Department of Science is Technology of the second of the Second Science 26 Ph. 2014 and with the approval of Head Cliff ermente selle et a com este 1987 et dessinan cernili**cate und audited st**edsmisses or members. Le com et engle et en el met commut of e pla fin**aziois**i vero. The Institute/Algericy will maintain separate audited accounts for the project and a said keep the whole of the grant in a Bank Account earning interest, the interest earned valuable reported to the DST. The interest thus earned will be treated as a credit to the n intuite Agency to be adjusted towards further installment of the grant". on a Machania and the composition from project shall be open to appead on the re-and the resolution of the instruction is railed apon to days. or old a second subject and been entered in the grants register maintained by the two exposest delta maker (1975) Diamster and the serial number assigned in the register (c. 101) n er en fan 'n de en fan en forstien. De militekte die ergane en en elemen proponie en 'n eerste en en nomme nig to lier herste base oomsprongen oo a the gent of the tage people to bill and remitting the amount is the atis wet to of audit (GW&M-II) AGCR Building, IP Estate, New Delhi, 5 194 a. University of Delhi, Delhi 170 007 Venay Gupta, Professor, Department of Physics & Astrophysics, University e u Dolli Etitiga Neers: Statons Advisor & Head (TDT Division), Department of Sciences Trans New Michronia Bond, New Dolla: 110016. assume folder [Mr] C. Madhusadhanan, JTA. DSTI. THE FREE CAR DEED

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011-23813236

011-23907155

Fax: 011-23819547



No. CFEES/TCP/CARS/NOMHA-FCPCG/CC/09/2013 Government of India Ministry of Defence Defence Research & Development Organization CENTRE FOR FIRE, EXPLOSIVE & ENVIRONMENT SAFETY (CFEES)

Brig. S K Mazumdar Road, Timarpur

Delhi – 110054, India

Dated: 14 November 2014

To

The Assistant Registrar (Fin. II) University of Delhi Delhi - 110007

(Kind Atten:

i)

Prof. Vinay Gupta, Research Service Provider (RSP), Department of Physics,

University of Delhi (DU)

Sanction of CARS entitled "Molecular Modelling of Halon Alternatives" to Deptt. of Physics, University of Delhi

Ref:

Your letter no. Fin III(i)/155/DRDO-new dt. 4th September 2013

Prof. Vinay Gupta, DU, letter No. Nil dt 16th September 2014

Sir.

Under the provisions of Government of India letter No. DARM/CFEES/CARS/1287/3/2369/ D(R&D) dt. 24th September 2014, Unique Sanction Code (USC): SECY/ACE/CFEES/PROC(PRR)/14-15/0011 and DG (ACE) letter No. CFEES/TCP/CARS/NOMHA-FC&PCG/CC/09/2013 dated 27th October 2014, sanction with USC for Rs. Rs. 2,64.774 Lakhs is hereby accorded to University of Delhi for undertaking the subject CARS project by Prof. Vinay Gupta, Deptt of Physics, University of Delhi. The sanction is issued under the delegated Financial Power vide DRDO/DBFA/83226/M/01/2031/D(R&D) dated 30<sup>th</sup> July 2010, in accordance with GFR-29, DRDO vide letter No. DBFA/FA/83301/M/01 dt. 31/08/14

Kindly refer your letters under reference; please find enclosed herewith the agreement of contract duly signed by OS & Director CFEES for subject CARS project No. CFEES/FCPCE/P/CAR/022/14-15 dated 03<sup>rd</sup> November 2014 for an amount of Rs. 2,64,77,400/- (Rupees Two Crore Sixty Four Lakhs Seventy Seven Thousand Four Hundred Only) for a period of 24 months from the date of release of first installment to Delhi University. The schedule of activities, milestones, release of amounts and expenditure profile is given below:

Inst. Amt. (Rs. in Lakhs)	Duration of CARS	Scope of Work/Activities as stipulated under CARS Project by RSP
214.31	To	Initial Advance
30.69	T <sub>0</sub> – T <sub>12</sub> (12 Months)	Milestone – I  Molecular Modelling of Halon 1301 and 1211 to create base data for design of effective fire extinguishing chemicals as per RSQR
18.52	T <sub>12</sub> - T <sub>20</sub> (20 Month)	Milestone – II  Molecular Modelling of designed molecules under NOMHA as per RSQR
1.254	T <sub>20</sub> – T <sub>22</sub> (22 Month)	Milestone – III Training on Molecular Modelling of Halon Alternatives for at least 2-3 scientist of CFEES as per RSQR
-	T <sub>22</sub> – T <sub>24</sub> (24 Month)	Submission of final report, audited accounts & documents
264.774	24 Months	

Contd ....2/-

## Terms & Conditions of Grant

- The CARS Project will last for duration as per approved Contract agreement from the day that the grantee 1. 2.
- The grantee institution may publicise this grant only with the prior approval of DRDO. 3.
- 4.
- By accepting this grant the grantee institution agrees to abide by the Conditions of Grant. 5.
- The monies of the grant will be spent exclusively for the purposes for which they are given. Assets of a capital nature acquired under CARS project wholly or substantially out of this grant are the property of DRDO. Without the prior approval of DRDO these shall not be disposed off or encumbered. 6.
- The equipment procured by grantee institution under the CARS project should be made available for Scientists from DRDO labs without any usage charges as and when required. 7.
- The grantee institution will maintain a record in the format of GFR 19 of the assets of a capital nature acquired by grantee institution, it wholly or substantially out of these grants. A copy of the record, certified by authority of the institution, shall be sent to concern DRDO Lab accordingly. 8.
- The grantee institution will demand monies as per the contract through duly completed Contingent Bill(s). Disbursal of monies shall be through ECS. Monies remaining with the grantee institution at the closure the CARS project (including by short closure) shall be returned to DRDO through DD in favour of CDA
- 9. When demanding monies, subsequent to the first installment, the grantee institutions shall send the statement of expenditure (Financial Year wise) and fresh Contingent Bill, certifying that the unspent balance of previous installments has either been carried forward into the subsequent demand, or has been surrendered to DRDO. Payment of installments will follow receipts by DRDO of the audited statement of accounts and utilization certificate, for the monies already given for the relevant duration.
- The accounts maintained by the grantee institution shall be available for inspection by the Comptroller & 10. Auditor General of India as and when required.
- The ownership of intellectual property, whether or not legally protected, generated by contract research 11. performed under this contract shall vest in DRDO. However, the RSP shall receive, upon demand by it, a royalty - free license from DRDO to use these intellectual properties for its own purposes, which specifically exclude sale or licensing to third parties.

(Dr. Chitra Rajagopal) OS & Director

Tele: 011-23813236

011-23907155

Fax: 011-23819547



Government of India Ministry of Defence Defence Research & Development Organization CENTRE FOR FIRE, EXPLOSIVE & ENVIRONMENT SAFETY (CFEES) Brig. S K Mazumdar Road, Timarpur Delhi – 110054, India

No. CFEES/TCP/CARS/NOMHA

To

Dated: 10th Feburary 2016

Professor Vinay Gupta, Department of Physics University of Delhi Delhi - 110007

Sub: Revision of salary of staff and Submission of Annex-3 Amendment of CARS titled "Molecular Modelling of Halon Alternatives"

Ref:

Your letter No. nil dated 27th November 2014 & 28 January 2016

Sir,

Kindly refer your letter under reference regarding revision of emoluments of staff under DRD CARS, you are requested to submit Annexure-3 Amendment of CARS as per format attached to facilitate the issue of amendment in cars sanction letter to Delhi University

(enclosure as above page)

(Dr. Rajendra Singh) Associate Director TSO & Head - TCP&HRG

for Director

# Amendment of CARS

ature of authority identified at (12) below, DRDO hereby amends extant CARS on the Research es Provider identified at (3)

g) Personnel (Salary + Honorarium)  h) Equipment  i) Others  Total	
2. Amended RSQR Ref. No:    VY   MM   DD   Lab/Estt/Project : CFEES DRDO   Delhi   CFEES/TCP/CARS/NO   MHA.   FCPCG/C/09/2015 / July   2015	
2. Amended RSQR Ref. No:    VY   MM   DD   Lab/Estt/Project : CFEES DRDO   Delhi   CFEES/TCP/CARS/NO   MHA.   FCPCG/C/09/2015 / July   2015	Α-
RSQR Ref. No:    Date of Issue   Issuing DRDO   Lab/Estt/Project:   CFEES/TCP/CARS/NO   MHA.   FCPCG/CC/09/2015/ July   2015	14
2014 11 27 CFEES DRDO Delhi CFEES DRDO MHA- FCPCG/CC/09/2015/ July 2015 CARS: Prof. Vinay Gupta (RSP) Deptt of Physics, University of Delhi Email: vgupta@physics.du.ac.in, drguptavinay@gmail.com 5. RSP is authorized to substitute / change / add key professionals / research consultants as 5. Principal technical features of Research Services to be provided by RSP are amended to 7. List of DRDO owned equipment made available to RSP in changed to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Descentification of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report is amended to read: NO 3. Date of submission of Final Report (Rs. In Lakhs)  a) Initial Advance To O Months  b) At performance Milestone II  c) At performance Milestone III  d) At performance Milestone III  d) At performance Milestone III  e) Submission of Final Report (Refer also entry 8 above)  Payment will be made within 20 days of receipt by L/E/P  of Contingent Bill from RSP  0. General conditions of CARS remain unchanged. Other specific conditions in CARS are at NIL  1. RSP's signatory to original contract:  Sign over seal)	
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3. Name and Address of Research Service Provider (RSP) in  Prof. Vinay Gupta (RSP) Deptt of Physics, University of Delhi  Email: ygupta@physics.du.ac.in, drguptavinay@gmail.com  5. RSP is authorized to substitute / change / add key professionals / research consultants as 5. Principal technical features of Research Services to be provided by RSP are amended to 7. List of DRDO owned equipment made available to RSP in changed to read: NO  3. Date of submission of Final Report is amended to read: NO  3. Date of submission of Final Report is amended to read: NO  3. Descentile (Salary + Honorarium)  h) Equipment  i) Others  Total  1.2 Amended schedule of payment (Rs. In Lakhs)  a) Initial Advance To - 0 Months  b) At performance Milestone II  c) At performance Milestone III  d) At performance Milestone III  d) At performance Milestone III  e) Submission of Final Report (Refer also entry 8 above)  Payment will be made within 20 days of receipt by L/E/P of Contingent Bill from RSP  0. General conditions of CARS remain unchanged. Other specific conditions in CARS are an NIL  1. RSP's signatory to original contract:  Sign over seal)	Amendment
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a) Initial Advance T <sub>0</sub> - 0 Months  b) At performance Milestone I  c) At performance Milestone II  d) At performance Milestone III  e) Submission of Final Report (Refer also entry 8 above)  Payment will be made within 20 days of receipt by L/E/P  of Contingent Bill from RSP  O. General conditions of CARS remain unchanged. Other specific conditions in CARS are an NIL  RSP's signatory to original contract:  11. Signature of L/E/P contract and Sign over seal)	59.804
a) Initial Advance T <sub>0</sub> - 0 Months  b) At performance Milestone I  c) At performance Milestone II  d) At performance Milestone III  T <sub>0</sub> + 20 Months  d) At performance Milestone III  T <sub>0</sub> + 22 Months  e) Submission of Final Report (Refer also entry 8 above)  Payment will be made within 20 days of receipt by L/E/P  of Contingent Bill from RSP  O. General conditions of CARS remain unchanged. Other specific conditions in CARS are an NIL  1. RSP's signatory to original contract:  Sign over seal)	274.134
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ame: PROF. VIWAY GUPTA Name:	
esignation: PROFESSON Designation:	



#### भारत सरकार

#### GOVERNMENT OF INDIA संचार और सूचना प्रौद्योगिकी मंत्रालय

#### MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी विभाग

# DEPARTMENT OF ELECTRONICS AND INFORMATION TECHNOLOGY Website: www.deity.gov.in

संख्या	
No	
No.5(3)/2010-NANO	າາ

To,

Prof. Vinay Gupta, Chief Investigator, Department of Physics and Astrophysics, University of Delhi, New Delhi- 110007.

Subject:

Project entitled, "Demonstration of LED by Pulsed Laser Deposition (PLD) technique" being implemented by University of Delhi-Change of Chief Investigator -regarding.

The undersigned is directed to refer to your communication dated 5.11.2015 on the above subject and to convey that the Component Authority has approve the name of Prof. Vinay Gupta as Chief Investigator for the remaining period of the above project in place of Prof. P.R Tondon.

(LAXMAN) Section Officer

दिनांक

December, 2015

Date.....

COPY TO,

- 1. All Member of the PRSG.
- 2. PAO, DeitY
- 3. D&D Section, DeitY.
- 4. Assistant Registrar (Fin.II), University of Delhi.

इलेक्ट्रॉनिक्स निकेतन 6,सी.जी.ओ. कॉम्प्रलेक्स नई दिल्ली-110003





# No. 5(3)/2010-NANO Government of India Ministry of Communications & Information Technology Department of Electronics & Information Technology R&D in IT Group (Nanotechnology Initiatives Division)

Dated: 11th June, 2014

The Pay & Accounts Office, Department of Electronics & Information Technology, Electronics Niketan, New Delhi - 110 003.

Subject: Release of Grants-in-aid to University of Delhi for the year 2014-15 (Plan and Non-recurring) for the implementation of the project entitled "Demonstration of LED by Pulsed Laser Deposition (PLD) technique".

Implementing Agency: University of Delhi

Reference: Admn. Approval No. 5(3)/2010-NANO dated 31.04.2014.

Sir,

I am directed to refer to this Department's letter of even number dated 31.03.2014 conveying the Administrative Approval for the implementation of the above project with an estimated cost of Rs. 470.80 Lakh over a period of 30 months.

- 2. Sanction of the President of India is hereby conveyed to the release of Rs. 423.46 Lakh (Rupees Four Crore Twenty Three Lakh and Forty Six Thousand only) towards Grants-in-aid to University of Delhi for the implementation of the project entitled "Demonstration of LED by Pulsed Laser Deposition (PLD) technique" for the financial year 2014-2015 (Plan and Non-Recurring) as balance amount of first installment.
- 3. With this release, the total releases to University of Delhi as on date under the subject project would be Rs. 429.46 Lakh [Part payment of first installment: Rs.6.00 Lakh+ remaining Rs. 423.46 Lakh = Rs.429.46Lakh].
- 4. The grants-in-aid will be regulated in accordance with the provisions contained in the terms & conditions of Department of Electronics & Information Technology and Administrative Approval of even number dated 31.03.2014. The Grants-in-Aid is also subject to the Chapter 9 of the General Financial Rules, 2005, as amended from time to time, read with the Government of India's decisions incorporated there-under, and any other guidelines which may be issued in this regard, and in particular to the following conditions:

All relevant information and documents/certificates as required under GFR 209(1) have been received.

Binnote

- The pattern of assistance of rules governing such grants-in-aid under Govt. of India Decision No. (1) under DFPR- Rule 20.
- Terms and conditions of the service of the employees employed in applicable to similar categories of employees of Central Government Ministry of Finance have been obtained for such discrepancies as iv)

  Assets acquired.

Assets acquired wholly or substantially out of Government Grants shall not be disposed off without obtaining the prior approval of the Sanctioning Authority of Grants-in-aid.

V) University of Delhi shall make reservations for Scheduled Castes and Scheduled Tribes or OBC in the posts or services under its control on the line indicated by Govt. of India.

- The accounts of University of Delhi shall be audited by C&AG or by any person authorized by him or his behalf in accordance with the provisions laid down in Section 14 of the C&AG (DPC) 1971 as amended from time to time.
- vii) The accounts of University of Delhi shall be open for inspection by the sanctioning authority and audit, both by the Comptroller & Auditor General of India under the provision of C& AG (DPC) Act, 1971 and internal audit party by the Principal Accounts Office of the Ministry or Department whenever it is called upon to do so.
- viii) University of Delhi shall furnish certificate along with its request for release of Grants-in-Aid certifying that the funds released to them have been utilized for the purpose for which it was sanctioned.
- ix) University of Delhi shall furnish their performance-cum-achievement report within the stipulated period to the sanctioning authority.
- x) Noted at Serial No. 05 in the Register of Grants.
- vi) University of Delhi will spend Grants-in-Aid exclusively in pursuance of the objectives envisaged in Rules/Memorandum of University of Delhi and for the purpose for which it is being sanctioned.
- xii) Grants-in-aid to University of Delhī is subject to Economy Instructions issued from time to time by the Ministry of Finance or by the Competent Authority.
- xiii) Grants-in-aid shall be utilized within the stipulated period and unspent balance, if any will be refunded by University of Delhi to the Government of India.
- xiv) University of Delhi will maintain and will present their annual accounts in the standard format as required under GFR 209(6) (xiii).
- xv) In case of Non-recurring Grant for specified object:
  - (a) University of Delhi will have to spend the amount sanctioned to them within the stipulated period.
  - (b) Utilization Certificate will have to submit the Utilization Certificate in respect of the Grants sanctioned under GFR 212(1) read with Form GFR 19-A.

- University of Delhi is exempted from the execution of Surety Bond in 5. terms of Ministry of Finance O.M. No. 14(1)/E/II(A)/64 dated 23.06.1965 and have accepted the terms and conditions for the Grants-in-aid.
- The expenditure involved will be met from within the sanctioned Budget Grant of Department of Electronics & Information Technology under Demand No.15 Ministry of Communications & Information Technology, Major Head "2852" (Sub-Major Head) Industries, 07- Telecommunication and Electronics Industries, 07.202 Electronics (Minor Head) 03 Micro-Electronics & Nano-Technology Development Programme, 03.02.31 Grants in aid for the year 2014-2015 (Plan and Non-recurring).
- The amount of Rs.423.46 Lakh (Rupees Four Crore Twenty Three Lakh and Forty Six Thousand only) will be paid to University of Delhi by the Pay & Accounts Office, Department of Electronics & Information Technology, New Delhi through RTG System vide State Bank of India, University of Delhi Branch, Saving Account No. 10851298650, MICR Code No. 110002030 and IFSC Code is SBIN0001067.
- In view of the instructions issued by Ministry of Finance vide O.M. NO. 7(1)/E.Coord/202 dated 14.11.2012, it is certified that the grantee institution has no utilization certificate as due for rendition under the Rules in respect of all the Schemes/Programmes/Projects of the Department of Electronics & Information Technology.
- This sanction issues with the approval of Secretary, DeitY vide OPA No.3048298 dated 07.06.2014 and in exercise of the powers conferred on this Department in consultation with the Integrated Finance Division (JS&FA) vide OPA No. 3048298 dated 30.05.2014.

Yours faithfully, PHUE-19 (R. K. Juneja) Deputy Director

#### Copy to:

- Office of the Director General of Audit, Post & 1. Director, Telecommunication, Shamnath Marg, Civil Lines, Delhi – 110054.
- 2. D&D Section, DeitY.
- 3. Finance Division, DeitY.
- Prof. R.P. Tandon, Department of Physics and Astrophysics, University of Delhi, Pin code – 110007.
- 5. GC(GVR)/HOD(NA)/DD(RKJ)/SSO(RKC).
- 6. Master Sanction File.

(R. K. Juneja) Deputy Director

# -- -(3)/2010-NANO Ministry of Electronics and Information Technology R&D in Electronics Group (Nanotechnology Initiatives Division)

Dated: 20th September, 2016

The Pay & Accounts Office, Department of Electronics & Information Technology, New Delhi - 110 003,

Subject: Release of Grants-in-aid to University of Delhi for the year 2016-17 (Plan and Non-planning) for the implementation of the project entitled "Demonstration of LED by Pulsed Laser Deposition (PLD) technique".

Implementing Agency: University of Delhi

Reference: Administrative Approval No. 5(3)/2010-NANO dated 31.03.2014.

Sir,

I am directed to refer to this Department's letter of even number dated 31.03.2014 conveying the Administrative Approval for the implementation of the above project with an estimated cost of Rs. 470.80 Lakh over a period of 30 months and this Department's letter of even number dated 19th September, 2016 regarding the extension of the duration of the project for a period of one year i.e. up-to 30.09.2017 with the enhancement of the project outlay form Rs. 470.80 Lakh to Rs 479.54 Lakh Rupee Four Crore Seventy Nine Lakh and Five Four Thousand only).

- Sanction of the President of India is hereby conveyed to the release of Rs.31,65,000/-(Rupees Thirty One Lakh Sixty Five Thousand only) as final installment after adjusting the interest accrued amounting to Rs. 2,178/- and unspent amount of Rs 19,500/- towards Grants-in-aid to University of Delhi for the implementation of the project entitled "Demonstration of LED by Pulsed Laser Deposition (PLD) technique" for the financial year 2016-17 (Plan and Non-planning).
- With this release, the total releases to University of Delhi as on date under the subject project would be Rs.479.34 Lakh (Rupees Four Crore Seventy Nine Lakh and Thirty Four Thousand only)[Part payment of first installment: Rs.6.00 Lakh + remaining Rs. 423.46 Lakh + Interest accrued: Rs.2,33,849/- + Second Installment: Rs.15,87,122/- + Interest accrued Rs.2,178/- + Current amount: 31,65,000/-].



#### UNIVERSITY GRANTS COMMISSION BAHADUR SHAH ZAFAR MARG NEW DELIH-110 002

No.1 1-9/2013 (e-Content)

October, 2014

The Registrat University of Delhi New Delhi 110007

M1 OCT 2014

Name of the Project: Production of Courseware e-Content Development for Post- Graduate Subjects (c-PG-Pathshaia)

Name of Principal Investigator (PI): Prof. Vinay Gupta

Subject. Material Science

Name of the Anchor Institute: University of Delhi, New Delhi 110007

With reference to MoA submitted by Prof. Vinay Gupta on the above project, I am directed to inform you that the Sub Committee of Standing Committee, e-PG Pathshala approved the following budget head categories and gave autonomy to Pl for distribution of budget in the budget heads mentioned below. The University/Institute/College is requested to incur expenses under the following heads:

S.No.	Budget Head
1	Coment Writers, Language Editing and Content Reviews
2	Honorarium to contributors / Co-ordinators/ Pi
3	Audio / Video and Multi-media Secretarial Assistance (may be done in
	house by hiring of man power or outsourced)
*	Workshops / Meetings / PRSG
5	Contingency / Travelling / Office expenses / Hardware

I am to further inferth you that the total allocation of funds for creation of content for 16 papers in the given subject is as follows:

Sr. Total No. of Paper	Amount per	Total approved	Amount being
3 No.	paper	amount	released
		(Rs. in Lakhs)	
16 Papers	7.00	112.00	7.00

ok

Onkoha Kajbi (Dr. Diksha Rajbut)

Yours faithfully.

Publication Officer

डो. अर्चना ठाकुर उप-सचिव

Dr. Archana Thakun Deputy Secretary विश्वविद्यालय अनुदान आयोग

बहादुर शाह ज़फर मार्ग,

नई दिल्ली-110 002, मारत

UNIVERSITY GRANTS COMMISSION

BAHADUR SHAH ZAFAR MARG, NEW DELHI-110 002 (INDIA) दूरमाष PHONE : (011) 23236977 टेलीफैक्स TELEFAX : (011) 23236977

E-mail: archana@ugc.ac.in

2<sup>nd</sup> January, 2013

No.F.1-9/2013 (e-Content)

The Registrar University of Delhi

Delhi-110007

Name of the Project: Production on Courseware e-Content Development for Post- Graduate Subjects (e-PG-Pathshala)

Name of Principal Investigator (PI): Prof. R.P. Tondon

Subject: Physics

Name of the Anchor Institute: University of Delhi, Delhi-110007

With reference to MoA submitted by Prof. R.P. Tondon on the above project, I am directed to inform you that the Standing Committee, e-PG Pathshala approved the following budget head categories and gave autonomy to PI for distribution of budget in the budget heads below mentioned. The University/Institute/College/ is requested to incur expenses under the heads mentioned below:

S.No.	P. d. Att
1	Content Writers, English Language Editing and Content Reviews
2	Honorarium to contributors / Co-ordinators/ Pl
3	Audio/Video and Multi-media
44	Workshops/ Meetings/ PRSG
.5	Contingency / Travelling / Office expenses / Hardware

I am further to inform you that the total allocation of funds for creation of content for 16 papers in the given subject is as follows:

Sr. No.	Total No. of Paper	Amount per paper	Total approved amount	Amount being released
1	16 Papers	7.00	(Rs. in Lakhs)	7.00

Yours faithfully,

11

(Archana Thakur) Coordinator, e-PG Pathshala Dr. R. P. Tandon
Former Head & Professor of Physics
Formerly: Scientific Adviser, Govt. of Haryana,
Senior Scientist, National Physical Laboratory, Delhi

Tel: 011-27667725- 1367(office)
Mob: 9818229608, Fax:+911127667061
E-mail: rptandon@physics:du.ae.in
ram\_tandon@hotmail.com



Department of Physics and Astrophysics University of Delhi, Delhi-110007, India

Date: 20.05.2015

Dr. Pankaj Mittal
Joint Secretary
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi - 110002

Dear Madam,

I am the PI of the e-PG Pathshala project (Physics) under which considerable progress has been made. We are hoping to complete 10 papers by September 2015 and 16 papers by November 2015. However, I am retiring in November 2015 and the University does not allow PI to sign financial papers, 6 months prior to the superannuation. Under these circumstances, I request you to kindly allow Prof. Vinay Gupta "Co-PI" to act as "PI", and allow me to continue as Co-PI, This arrangement will ensure the normal conclusion of the project in time.

A line in confirmation is requested at the earliest.

el Tand

Thanking You

Yours Sincerely

Prof. R.P. Tandon

Prof. R. P. Tandon
Pi, e-PG-Pathshala-Physics

Co-PI

Prof. Vinay Gupta

#### ORDER

Subject: Financial support for the "Validation and improvement of Indigenously Developed table-top Surface Plasmon Resonance (SPR) set up" by Prof. Vinay Gupta, Professor, Department of Physics and Astrophysics, University of Delhi, Delhi-110007- initial release regarding

Sanction of the President is hereby conveyed for the sanction of the above project at a total cost of Rs. 84,91,160/- (Rupees Eighty Four Lakh Ninety One Thousand One hundred and Sixty Only) with initial release of Rs. 52,00,000/- which includes Rs.12,00,000/- (Rupees Twelve Lakh Only) towards recurring cost and Rs.40,00,000/- (Rupees Forty Lakh Only) towards non-recurring grand to the Vice Chancellor, University of Delhi, Delhi-110007, for implementation of the above referred DST project during F.Y 2014-15. The duration of the project is 12 Months.

#### **Budget outlay**

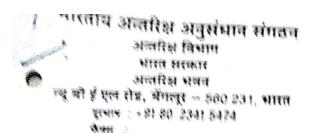
Sl.No.	Items	Cost	
Recurr	ring Costs	restance della microstra della collica della della comita in indice della collica dell	
1	Salaries	249600	
2	Consumables	1600000	
3	Travel ·	30000	
4	Fabrication charges	80000	
	Sub Total (1)	1959600	
:5	Contigencies	120960	
6 :	Over Head Charges	75000	
	Sub Total (2)	195960	
	Sub Total (3)	2155560	
Non- Re	curring Costs	•	
5	Equipment	6335600	
	Grand Total	8491160	

Salary:

One JRF @ Rs. 16,000/- PM fixed + 20% HRA for One year (Candidate should be NET/GATE with leading to PhD) otherwise salary will be fixed on @ Rs. 12,000/- PM fixed + 20% HRA for One year.

- 2. The sanction of the grant is subject to the conditions detailed in Annexure I. Further the project would be monitored by a monitoring Committee comprising of experts and field visits by officers from Department of Science and Technology, Govt. of India.
- 3. It is also certified that this is the first grant towards the project and as such of GFR 212 (1) relating to UCs is not applicable.
- 4. As per Rule 211 (1) of GFRs, the account of grantee Institution shall by open to inspection by the sanctioning authority/ audit whenever the institute is called upon to do so.
- The expenditure involved is debitable to:-Demand No. 86
   Department of Science & Technology

Contd..2





Indian Space Research Organisation
Department of Space
Government of India
Antariksh Bhavan
New BEL Road, Bangalore - 560 231, India
Telphone: +91 80 2341 5474

Dr K Ganesha Raj Dy. Director, RESPOND

★: 080-23415269/22172269 FAX-080-23412471 email:ddrespond@isro.gov.in

ISRO/RES/3/653/2014-15

June 5, 2014

Dear Prof. Vinay Gupta,

Subject: RESPOND Project - "Development of Platinum based micro heaters/Micro Evapoation Sources(MES) for space mechanism applications"

This has reference to your submission of the above-mentioned research proposal for funding under RESPOND Programme. The domain experts in Department of Space have reviewed the proposal. I wish to inform you that, Chairman, ISRO/Secretary, DOS has approved the following:

 Funding of the project under RESPOND Programme for a period of one year at a total outlay of ₹31.37 Lakhs (Rupees Thirtyone Lakhs and Thirtyseven thousand only) towards meeting the first year expenditure of the project (budget details enclosed).

The approval is subject to fulfillment of the following conditions:

- (a) You will have to submit Annual Progress Report (APR), at the end of the year, indicating the progress of the work accomplished during the first year. However, on conclusion of the project, you will have to send a comprehensive report covering total project activities. The copies of reports should be sent to Director, IISU, Thiruvananthapuram (Attn: Dr B Subramonian, LVIS-SLA, IISU, Thiruvananthapuram) and two copies to the undersigned.
- (b) You will have to submit two copies of the Fund Utilization Certificate (FUC) and Audited Accounts Statement (AAS) on completion of the first year of the project. On completion of the project, you have to send the final FUC and Audited Account Statement for the total expenditure incurred in the project. The FUC and AAS should be sent to the Pay & Accounts Officer, Department of Space, Antariksh Bhavan, New BEL Road, Bangalore 560 231; to Director, IISU, Thiruvananthapuram (Attn: Dr B Subramonian, LVIS-SLA, IISU, Thiruvananthapuram) with a copy to the undersigned.

# बेंगलोर - ४६० ००४ हरभाव : ०८०-३४। ५४७४ तार : रथेश



सं अंवि/विलेअ/अनुदान/२०१३-२०१४/५६६ No.DOS/PAO/GIA/2013-2014/466

रजिस्ट्रार / मिल Romstiar, उनिवासिटी ऑफ देल्ली /University of Delhi, नया चेल्ली/New Delhi-110 007.

महोदय,

Sir,

#### GOVERNMENT OF INDIA DEPARTMENT OF SPACE

intariksh Bhavan

AIGNI

Bangalore - 560 094 ephone : 080-3415474

GRAMS : SPACE

दिनांक : 12/11/2014 Date: 12/11/2014

विषय:- इलेक्ट्रोनिक निधि हस्तान्तरण के द्वारा आपके बैंक खाता संक्या 10851298650 में `30,89,000/- की जमा रेस्पोंड के परियोजना "देव्लोपमेंट ऑफ प्लेटिनम -----अपलीकेशन" के बारे में|

Sub :- Credit of ' 30,89,000/- to your A/c No. 10851298650 through EFT on 11.11.2014- RESPOND - Reg.

विभाग के दिनांक २६.०९.२०१४ के स्वीकृति आदेश संख्या बी.१९०१२/६०/२०१४-॥ के सन्दर्भ में ` 30,89,000 /- की अनुदान राशी खाता संख्या 10851298650 के स्टेट बैंक ऑफ इंडिया, देल्ली उनिवेर्सित्य शाखा के नाम जमा की गई है।

With reference to Department Sanction Order No.B.19012/60/2014-II dated 26.09.2014 the grant amount of ` 30, 89,000 (Rupees thousand only) has been credited to A/c No. 10851298650 of State Bank of India, Delhi University Branch on 11.11.2014 to meet the expenditure towards the Expenditure for the new project entitled 'Development of Platinum based micro heaters/Micro Evaporation Sources (MES) for applications' for a period of one year. Space mechanism

आपसे अनुरोध है कि फैक्स / ई-मेल द्वारा पावित भेजें और उसके बाद डाक द्वारा भी पावति भेजने का अनुरोध किया जाता है |

You are requested to acknowledge immediately through FAX/e-mail/ followed by post.

Contd.....2/-

: 2 ;

FAX / फैक्स :

080 ~ 2341 6770

e-mail / 专-라河:

pr.aospace@isro.gov.in

आपसे यह भी अनुरोध है कि हमारे खातों में अग्रिम भुगतान को बंद करने के लिए अधोहस्ताक्षरी को संगोष्ठी / कार्यशाला / विज्ञान कांग्रेस के समाप्त होने से १२ महीने के अंदर लेखाओं के लेखा परीक्षा विवरण (पावती एवं भुगतान) के साथ निधि उपयोगिता प्रमाण पत्र (प्रति

You are further requested to submit Audited Statement of Accounts (Receipts & Payments) together with Fund Utilisation Certificate (copy enclosed) within 12 months from the date of completion of the Financial Year to the undersigned to close the advance payment in our Books of Account.

कृपया पावती भेजें।

Please acknowledge receipt of the Fund.

सधन्यवादः, Thanking you,

> भवदीय, Yours sincerely,

संलग्नः निधि उपयोगिता प्रमाण पत्र |

Encl: FUC format.

(सुब्रत बोस) (Subrat Bose) वेतन एवं लेखा अधिकारी Pay & Accounts Officer

प्रतिलिपि :- १. प्रोफ. बिनाई गुपता, डेप. ऑफ फिसिक्स & अर्ख्नोफिसिक्स, उनिवर्सिटी ऑफ देल्ली, नया देल्ली११० ००७.|

२. उप निदेशक, रेस्पोंड, इसरो मुख्यालय, बेंगलूरू ।

iopy to:- 1. Prof. Vinay Gupta, Department of Physics and Astrophysics, University of Delhi, New Delhi-110 007.

2. Dy. Director, RESPOND, ISRO HQ, Bangalore.

The Registrar, University of Delhi Delhi-110007 · Email : registrar@du.ac.in

Diary No. 30.7.

Professor Vinay Gupta, Department of Physics & Astrophysics.

Subject:

R&D Project on "Development of Metal Oxide thin film based Low Cost

Reference: Your Project Proposal recived vide letter dated 25/06/2013

Dear Sir,

With reference to your project proposal dated 25/06/2013 and all subsequent correspondences till date for carrying R&D Project on "Development of Metal Oxide thin film based Low Cost Sensor" for GAIL India Ltd, we are pleased to issue this Letter of Award (LOA) on the following terms and conditions:

#### 1.0 **SCOPE OF WORK:**

The detailed Scope of Work regarding carrying the R&D Project on "Development of Metal Oxide thin film based Low Cost Sensor" for GAIL to be carried out by University of Delhi shall be as per the project proposal dated 25/06/2013 submitted by DU Vide letter no.Fin.III(i)/155/GAIL-New.

#### 2.0 CONTRACT VALUE:

The total lump sum Contract value under this Contract shall be Rs.95, 28,000/-(Rupees Ninty Five Lakh Twenty Eight Thousand only) excluding Service Tax. The Service tax shall be extra and payable by GAIL.

#### 3.0 **OBJECTIVE**

Development of low-cost Sensor for detecting CNG & PNG.

Vin Wrighth

#### ) METHODOLOGY AND WORKPLAN:

The Methodology and Work Plan shall be as per the Project Proposal received Vic letter no:Fin.III(i)/155/GAIL-New Dated 25.06.2013.

ाय : 16, भीकाएजी कामा प्लेस, आर के पुरम, नई दिल्ली-110066 Corporate Office: 16, Bhikaiji Cama Place, R.K. Puram, New D

प्राकृतिक गैस - स्वच्छ उर्जा, हरित उर्जा । Natural Gas - Clean Energy, Green Energy

- A Joint Project Team (JPT) by nominating one or two (representatives) each to the JPT. The coordinator of the JPT manhara from Cattra will be Principal Investigator (PI) of the Project. One of the IPT members from GAIL's side shall be the CLAIL's Section 1. side shall be the GAIL's Engineer-In-Charge for the Project. The JPT will be responsible for carrying out a tacknical captain of the Project and shall responsible for carrying out a technical review of the Project and shall prepare a detailed programme for meeting the milestones as per the agreed timelines, in line with the Scope of work and Work Plan, members from GAIL shall be its Engineer-In-Charge for the Project and others as GAIL may nominate
- DU shall submit a Quarterly Progress Report on the Project to GAIL. The JPT shall also 5.2 meet on a Quarterly basis in GAIL' DU to monitor the Project's Progress and final 5.3
- The JPT shall be responsible for review of the Project and its mid-term correction, if necessary. 5.4
- In case, the Project faces any difficulties in meeting the desired Objectives and needs major mid-course correction, the matter shall be appraised by the JPT to GAIL's Research Advisory Council (RAC) for necessary advice and approval.

#### 6.0 RESPONSIBILITY OF DU 6.1

- DU shall undertake Work on the R&D project as per the work plan and also take the responsibility for co-ordination of the activities of this project with any related Institutions (if required) 6.2
- DU shall submit quarterly progress report of the project. 6.3
- Upon completion of the project work DU shall submit a Draft Report (3 hard copies+ 1 soft copy) to GAIL inco-posating inter-alia, the following:
  - Recipe for the preparation of Metal Oxide based sensing element for CH4. ii.
  - Details of experiments and results.
  - iii. Recommendation on further work, if any
  - iv. Way forward for the commercialization of Technology.

Prior to the submission of the final report, a draft shall be submitted seeking comments of GAIL, if any. The final report shall be prepared after incorporation of the comments received by GAIL

#### 7.0 PAYMENT TERMS:

GAIL shall release the Total Project Cost Rs. 95, 28,000/- (Rupees Ninty Five Lakh Twenty Eight Thousand only) is the following stages:

1st Instalment: Upon signing of LOA and formation of Project Team by Principal Investigator (PI) Rs. 6.0 lakh.

2<sup>nd</sup> Instalment: Upon finalisation of specification of equipment Rs. 75.0 lakh

3<sup>rd</sup> Instalment: Upon development of first prototype sensor Rs. 12.0 lakh Vin. \_ Uhr 25/1/2)

Page 2 of 4

- 4th Instalment: Upon development of prototype sensor Rs 2.28 likh. 7.5
- GAIL shall pay service tax, extra at actual at the time of making above payments.
- DGM(F&A), GAIL Info but shall be Paying Authority. 7.6
- COMPLETION OF PROJECT: 8.0
- The Project shall be completed within 24 months reckoned from the date of signing of 8.1 LOA and formation of Project Team by Principal Investigator (PI).
- The Project shall be deemed to have been successfully completed on submission of the 8.2 Final Report by DU to GAIL and acceptance of the same by GAIL. The Final Report shall clearly indicate that all the items mentioned in the Work Plan have been satisfactorily completed.
- 8.3 In case of any delay in the completion of the Project, DU shall duly appraise the matter with full justification of any Project extension.
- 9.0 ENGINEER-IN-CHARGE OF THE PROJECT
- 9.1 Ms S. Barathy Serior Manager (R&D) shall be Engineer-In-Charge (EIC) from GAIL for this Project.
- 9.2 DU, DELHI shall send all correspondence w.r.t. this Project to EIC at the following address:

GAIL Training Institute

Plot No. 24, Sector 16A. Noida 201301 (U.P.)

Tel: 0120-2515353, 54, 55, 63: Fax: 011-26182955 Extn.2779#

Email: barathy@GAIL.CO.IN

10.0 OTHER TERMS & CONDITIONS:

Other terms & conditions shall be applicable as per Project proposal dated 25/06/2013 submitted by University of Delle . Deihi.

11.0 Please acknowledge the receipt of LOA.

hanking You,

Very truly,

Vi>Mth

(R P Singh)

R. Print

Chief Manager (C&P)

- 1) Project Proposal dated 250 2013
- 2) Schedule of Rates, Annexum-i



Dr. Anita Aggarwal Scientist D, TDT Division Hall J, Cabin No. 1 Telefax: 011-26862512

Phone: 011-26590343 E-mail: anita.a@nic.in





विज्ञान जीर प्रीक्षोतिको राज्यकर विज्ञान जीर प्रीक्षोतिको विष्कर रेक्कोलांकी चलन, महरीली धार्य

नई दिल्ली : 10016

GOVERNMENT OF INDIA MINISTRY OF SCIENCE AND TECHNOLOGY DEPARTMENT OF SCIENCE AND TECHNOLOGY TECHNOLOGY BHAVAN, NEW MEHRAGI ROAD NEW DELHI-110016

Dated

CO No

No. IDP/IND/28/2010

January 30, 2012

Subject: Indigenous Development of table-top Surface Plasmon Resonance (SPR) set up

Dear Prof. Gupta,

We are glad to inform you that the above mentioned project has been sanctioned at a total of ₹ 40, 71,200/- with a break up ₹24, 71,200/- under General Head and ₹16, 00,000/- under Capital Head, including DST contribution of ₹ 36, 81,200/- and industry contribution of ₹ 3, 90,000/- by M/s Optiregion. Manufacturer & Suppliers of Optical & Scientific Instruments, WP-56, Wazirpur, Ashok Vihar, Delhi-110052 for a period of two years. Please find enclosed the sanction order issued to release the first installment of funds allocated under general installment of funds (₹16, 00,000/-) allocated under Capital budget head (Recurring component) for the project work.

The industry contribution should be received within six months after initiating the project and reflected in the subsequent Utilization Certificates. The proof of receipt of committed contribution should be sent to DST at earliest. The Support from IDP-DST should be duly acknowledged at all the platforms wherever this work is presented.

Kindly do the needful and send the desired information.

With warm regards,

Yours sincerely

(ANITA AGGARWAL)

To

Prof. Vinay Gupta, Department of Physics and Astrophysics, University of Delhi, Delhi-110 007

copy to:

1. The Registrar, University of Delhi, Delhi-110 007

 M/s Optiregion, Manufacturer & Suppliers of Optical & Scientific Instruments, WP-56, Wazirpur, Ashok Vihar, Delhi-110052



#### No. IDP/IND/2010/28 (Capital) Government of India Ministry of Science & Technology Department of Science & Technology

Technology Bhawan New Mehrauli Road New Delhi- 110 016 Dated:30/12/2011

#### ORDER

Subject: Indigenous Development of table-top Surface Plasmon Resonance (SPR) set up by Department of Physics and Astrophysics, University of Delhi, Delhi-110 007 and M/s Optiregion, Manufacturer & Suppliers of Optical & Scientific Instruments, WP-56, Wazirpur, Ashok Vihar, Delhi-110052 -Release of first installment regarding.

With reference to the Sanction Order No IDP/IND/2010/28 (general) dated 17/08/2011 Sanction of the President is conveyed for the payment of ₹16, 00,000/- (Rupees sixteen lakhs only) towards grant for creation of capital assets and release of full amount to The Registrar, University of Delhi, Delhi-110 007, for the expenditure on the project mentioned above for a duration of two years.

2. The items of expenditure for which the total allocation has been approved are given below:

Sr. No.	Items	Budget (₹)			
-	shedown .	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total	
	**Equipment	16, 00,000	-	16, 00,000	
2.	Sub Total (A)	16, 00,000	-	16, 00,000	

\*\*CCD (2D array) and photodiode detectors, Optical and Electronic components (Optical bread boards, Prisms table, polarizers, Lasers, translational stages, piezomotors, power meter, etc.)

- The sanction of the grant is subject to the conditions detailed in Annexure I. Further the project would be monitored by a monitoring Committee comprising of experts and field visits by officers from Department of Science and Technology, Govt. of India.
- 4. It is also certified that this is the first grant towards the project and as such of GFR 212 (1) relating to UCs is not applicable.
- As per Rule 211 (1) of GFRs, the account of grantee Institution shall by open to inspection by the sanctioning authority/ audit whenever the institute is called upon to do so.
- The institute will maintain separate audited accounts for the project. If it is found expedient to keep a part or whole of the grant in a bank account earning interest, the interest earned should be reported to DST. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- Items of equipment sanctioned under the project should be procured as per provisions contained in General Financial Rules 2005 as per DGS&D rate contract, wherever applicable or by dual bid system, technical as well as financial.
- Items of equipment procured, unless these are declared unserviceable and are condemned in 8. accordance with procedures prescribed in GFRs 2005, will not be disposed of without the prior approval of DST.
- The expenditure involved is debitable to Demand No.85, Department of Science & Technology.

Other Scientific Research (Major Head) 3425

60 Others (Sub Major Head)

Assistance to other Scientific Bodies 60.200 -

(Minor Head)

Technology Dev. Programme 26

Grant for creation of capital assets 2011-12 Plan 26.00.35

The PI is requested to place a sticker on the equipment purchased through the grants provided for the on-going projects by DST having the following information:

Name of DST scheme (a)

(b) Title of the project

Sanction number and date (c)

(d) Date of equipment purchased/commissioning

Cost of the equipment (e)

- Information on AMC, if any (f)
- The amount of ₹16, 00,000/- (Rupees sixteen lakhs only) will be disbursed to The Registrar, University of Delhi, Delhi-110 007 as per following details:

Institute Name as per bank account: University of Delhi, Delhi 110007

Account No. : 10851298650

Bank Name : State Bank of India

Branch Address : Delhi University, Delhi 110007

IFSC Code : SBIN0001067

- 12. The sanction has been issued under the powers delegated to the Ministries and with the concurrence of Integrated Finance Division of Department of Science and Technology vide their Sanction Diary No.100/IFD/9009/2011-12 dated 29/12/2011 and Head Diary No 622 dated 16/09/2011.
- 13. It is also certified that Register of Grants for the programme has been maintained with effect from 1. 4. 2011 in the prescribed format GFR-39 and this sanction order has been entered at Sr. No 50 of Grants-in-aid register of 2011-12.

(Anita Aggarwal) Scientist - D

The Pay and Accounts Officer Department of Science and Technology New Delhi- 110 016

Copy for information and necessary action to:

Cash Section (3 copies) for preparing the bill and remitting the amount to the above grantee. 1.

Accounts Section, DST, New Delhi. 2.

IFD, Department of Science & Technology, New Delhi. 3.

The Director of Audit (CW& M-II), AGCR Building, IP Estate, New Delhi. 4.

Prof. Vinay Gupta, Department of Physics and Astrophysics, University of Delhi, Delhi-110 5.

The Registrar, University of Delhi, Delhi-110 007 6.

M/s Optiregion, Manufacturer & Suppliers of Optical & Scientific Instruments, WP-56, 7. Wazirpur, Ashok Vihar, Delhi-110052

Head-TDT 8.

FICCI Cell, Room No. 28

Office Copy 10.

(Anita Aggarwal) Scientist - D



# NATIONAL PROGRAMME ON MICRO AND SMART SYSTEMS



Dr K Vijayaraju, Sc/Er - 'G' Project Director(NP-MASS)

ADA: NP-MASS: ProjSanc:5;6 26th August 2010

#### PROJECT SANCTION LETTER

Reference is made to the project proposal submitted by Indian Institute of Science, Bangalore jointly proposed with five sub projects by IISc. University of Delhi, CEERI-Pilani and IIT-Kanpur. The sanction of the Board for Smart Materials Research and Technology is conveyed as below:

Title of the Project Development of Gas sensor platform for automotive applications

Project Institution Indian Institute of Science,

Bangalore

Principal Investigator Prof. S. Mohan,

Dept. of Instrumentation, IISc, Bangalore

Co-investigators Dr. Vinay Gupta, Uni, of Delhi, Delhi

Dr. V K Khanna, CEERI, Pilani Prof. Navakanta Bhat, IISc, Bangalore

Prof. Shantanu Bhattacharya, IIT- Kanpur, Kanpur

Other participating organization IISc, Bangalore Rs.94.00 Lakhs Sub Project#1

Uni. of Delhi, Delhi Rs.33.93 Lakhs Sub Project#2 CEERI, Pilani Rs.40.99 Lakhs Sub Project#3 IISc, Bangalore Rs.55.78 Lakhs Sub Project#4

IIT-Kanpur, Kanpur Rs.43.70 Lakhs Sub Project#5

(1) Sanctioned Cost Rs.268.40 Lakhs (Total cost)

Amounts sanctioned to individual sub projects as listed

in Annexure - 1

Duration of the project 2 years (PDC 30th September 2012)

Deliverables MEMS based Gas sensors 5 numbers in Quantity of 3

types Calibaration of sensor utilizing IISc

Characterization facility (Please refer Annexure-1 for deliverables in each subproject are mentioned in)

0 Controlling PARC PARC #5

(1) Project Ref No. Project # 5:6

..2

## Programme Cell - NPMASS

Aeronautical Development Agency, P.B. No. 1718, Vimanapura Post, Bangalore - 560 017, India Tel: +91-80-25087385, Telefax: +91-80-25236146, Email: vijay@jetmail.ada.gov.in / npmass@jetmail.ada.gov.in (k) Overall Budget\*

Budget Head	1st Year	and a	(Rs. In Lakhs)	
Manpower	The second secon	2 <sup>nd</sup> Year	Total	
Equipment / Facilities	14.06	11.06	25.12	
Consumables	127.00	0.00	127.00	
Fabrication	18.30	11.40	29.70	
Testing	26.50	5.00	31.50	
	2.00	0.00	2.00	
Contingencies	4.63	3.63		
TA/DA	5.40	4.40	8.26	
Overheads	29.70	5.32	9.80	
Total	227.59	·	35.02	
Total Project Cost in words	Rupees Two Crores Sixty Eighty Lab		268.40	

1 otal Project Cost in words

Rupees Two Crores Sixty Eighty Lakhs and Forty
Thousands only

You are requested to convey the acceptance of the "Terms and Conditions" of sanction and concurrence to abide by the guidelines on IPR enclosed herewith. First installment as listed below will be released on receipt of the acceptance of "Terms and Conditions" of sanction and also your concurrence for the IPR guidelines. You are requested to send the claim for release of funds in the enclosed format along with your acceptance.

Sub project #1	Prof. S. Mohan	IISc	Rs.70 lakhs
Sub-project #2	Dr.Vinay Gupta,	University of Delhi	Rs.24 lakhs
Sub-Project #3	Dr VK Khanna	CEERI, Pilani	Rs.15 lakhs
Sub-Project #4	Prof. Navakanta Bhat,	IISc	Rs.45 lakhs
Sub-Project #5	Prof. Shantanu Bhattacharya,	IIT, Kanpur	Rs.30 lakhs

Yours faithfully,

Sellianest,

To:

Registrar, Indian Institute of Science, Bangalore - 560 012

Director, Central Electronics Engineering Research Institute, Pilani -333 031

Pro-Vice Chancellor, University of Delhi, Delhi 110 007

Dean, Research & Development, IIT- Kanpur, Kanpur. 208016

...3

<sup>\*</sup> Amounts sanctioned will be paid directly to individual organizations, as listed in Annexure 1

Principal Investigator:

Prof. S. Mohan Dept. of Instrumentation,

Indian Institute of Science. Bangalore – 560 012

## Co-Investigators

Dr. Vinay Gupta Dept. of Physics & Astrophysics University of Delhi Delhi- 110 007

Dr. V K Khanna MEMS & MICROSENSORS CEERI, Pilani -333 031 Rajasthan

Prof. Navakanta Bhat Associate Professor Indian Institute of Science Bangalore-560 012

Prof. Shantanu Bhattacharya Department of Mechanical Engg. Indian Institute of Technology IIT- Kanpur, UP- 208 016

#### Copy to:

Chairman, B-SMART
Chairman, PARC#5 – with a request to constitute Project Monitoring Committee
JD (F)
Project file

#### Sub Project # 1

#### Annexure-1

Fitle: Design of micro-heaters & synthesis and characterization of SnO2 and mixed oxide films with specific dopants for methane, CO2 NO2, so2 and hydrogen gas sensing. P1: Prof. S. Mohan, IISc, Bangalore

#### Deliverables:

MEMS based micro-heaters – Three designs – 50 for each design

Sensors films materials and process parameter optimization for two specific gases.

Fabrication	4.00	3.00	65.00 7.00
Contingencies	2.00	0.00	2.00
TA/DA	1.00	1.00	2.00
Overheads Total	11.23	1.00	2.00
	86.10	7.90	
Total Total Project Cost in words		7.90	12.26 <b>94.00</b>

#### Sub Project # 2

Title: Growth and Characterization of composite matrices of SnO<sub>2</sub> thin film and nano catalysts for

Dr. Vinay Gupta, Uni. of Delhi PI:

#### Deliverables

Sensing composite matrix of Sno₂ thin film with suitable catalysts.

Sanctioned Budget:		able catalysts.		
Budget Head	1st Year	2 <sup>nd</sup> Year	(Rs. in Lakhs) <b>Total</b>	
Manpower	1.87	1.87	3.74	
Equipment / Facilities	19.00	0.00	19.00	
Consumables	2.80	1.90		
Contingencies	0.63	0.63	4.70	
TA/DA	0.40	0.40	1.26	
Overheads	3.71	0.72	0.80	
Total	28.41	5.52	4.43 <b>33.93</b>	
Total Project Cost in words	D. T. C.			

Rupees Thirty Three Lakhs and Ninety Three **Total Project Cost in words** Thousands only

...5

21.1 11.5

Sub Project # 3

Fitle: Process Development & Fabrication of MEMS Micro heater for Automotive Gas Sensor.

PI: Dr. V K Khanna, CEERI, Pilani

#### Deliverables

Micro heaters for gas sensor fabrication (either in the form of processes 4" dia. Wafer or chips) –
 12 wafers.

Sanctioned Budget:			
Budget Head Manpower	1 <sup>M</sup> Year	2 <sup>nd</sup> Year	(Rs. in Lakhs) Totaf
	4.32	4.32	8.64
Equipment / Facilities	0.00	0.00	0.00
Consumables	5.00	5.00	10,00
Fabrication	5.00	5.00	10.00
Contingencies	1.50	1.50	3.00
TA/DA	2.00	2.00	4.00
Overheads	2.68	2.67	5.35
Total	20.50	20.49	
Total Project Cost in words	Rupees Forty Lakh		40.99 Thousand only

#### Sub Project #4

Title: Design and development of Microsystems platform for gas sensors using general purpose ASIC devices.

PI: Navakanta Bhat, HSc, Bangalore

#### Deliverables

• Qty. 10 Nos. of fully built sensors for one target gas.

• Sensor Microsystems Reference platform for indigenous gas.

Sanctioned Budget:			(Rs. in Lakhs)
Budget Head	1st Year	2 <sup>nd</sup> Year	Total
Manpower	3.00	0.00	3.00
Equipment / Facilities	19.00	0.00	19.00
Consumables	3.00	0.00	3.00
Fabrication	19.50	0.00	19.50
Testing	2.00	0.00	2.00
Contingencies	1.00	0.00	1.00
TA/DA	1.00	0.00	1.00
Overheads	7.28	0.00	7.28
rotal .	55.78	0.00	55.78
Total Project Cost in words	Rupces Fifty Five L	akhs and Seventy	Eight Thousand







# No. 13(17)/2009-CC&BT Ministry of Communications & Information Technology Government of India Department of Information Technology Electronics Niketan 6, CGO Complex

Dated:13.07.2011

To

The Pay & Accounts Officer Department of Information Technology New Delhi-110 003

Subject: Release of Rs. 8.81 lakh(Rupees Eight Lakh Eighty One Thousand only) to Delhi University for the year 2011-12 (Plan).

Status: 'A' - Autonomous Body

Sir,

Sanction of the President of India is hereby conveyed to the release of 1st installment of Rs. 8.81 lakh (Rupees Eight Lakh Eighty One Thousand only) to Dethi University towards grants-in-aid for the implementation of the project entitled "Development of a Low-cost Real-time Monitoring System for Detection of Harmful Gases" by C-DAC Noida & Delhi University for the financial year 2011-12 (Plan).

- 2. The grants-in-aid will be regulated in accordance with the provisions contained in the Terms and Conditions of Department of Information Technology (copy enclosed). The grants-in-aid is also subject to the Chapter 9 of the General Financial Rules, 2005, as amended from time to time, read with the Government of India's decisions incorporated there-under, and any other guidelines which may be issued in this regard, and in particular to the following conditions:
  - i) All relevant information and documents/certificates as required under GFR 209(1) have been received.
  - ii) The pattern of assistance of rules governing such grants-in-aid have received the approval of the Ministry of Finance, as required under Govt. of India Decision No. (1) under DFPR Rule 20.
  - Terms and conditions of the service of the employees employed in DU are not higher than those applicable to similar categories of employees of central Government and where it is not in accordance with above, the relaxation of Ministry of Finance have been obtained for such discrepancies as required under GFR 208(6) (iv) (a).
  - iv) Assets acquired wholly or substantially out of Government Grants shall not be disposed off without obtaining the prior approval of the sanctioning authority of grants-in-aid.

Contd..2 -

The accounts of DU shall be audited by C&AG or by any person authorized vi) by him on his behalf in accordance with the provisions laid down in Section 14 of the C&AG (DPC 1971) as amended from time to time.

vii) The accounts of DU shall be open for inspection by the sanctioning authority and audit, both by the Comptroller & Auditor General of India under the provision of C&AG(DPC) Act, 1971 and internal audit party by the Principal Accounts Office of the Ministry or Department whenever it is called upon to do so.

It is a 1st release and Utilisation Ceritificate will furnish after utilized the viii) grants-in-aid i.e. upto December 2011.

ix) DU may furnish their performance-cum-achievement report on or before December 2011 to the Sanctioning Authority.

Noted at Sl. no. 11 in the Register of Grants. X)

- xi) DU will spend grants-in-aid Exclusively in pursuance of the objectives envisaged in rules/memorandum of DIT and for the purpose it is being sanctioned.
- Grants-in-Aid to DU is subject to the Economy Instructions issued from time xii) to time by the M/o Finance or by the Competent Authority.
- Grants-in-Aid shall be utilized before the end of the current financial year xiii) 2011-12 and unspent balance, if any, will be refunded by DU to the Government of India.
- DU will maintain and will present their annual accounts in the standard xiv) format, as required under GFR 209(xiii).
- In case of Non-recurring Grant for specified object, xv)
  - a) DU will have to spend the amount sanctioned to them up to 2011-12
  - b) Utilization Certificate received of grants-in-aid sanctioned during the year 2010-11 from DU as required under GFR 202(1) read with Form GFR 19-A.
- Other provisions may be inserted keeping in view the special requirement of xvi) each institution
- 3. The grantee organization (an Autonomous Body) is exempted from the execution of Surety Bond and is governed by the terms & conditions annexed herewith.
- 4. The amount of Rs. 8.81 lakh (Rupees Eight Lakh Eighty One Thousand only) to DU will be drawn by Drawing and Disbursing Officer, Department of Information Technology, New Delhi and disbursed to DU as per bank details given below:

i) Bank Name, Branch code & Address : State Bank of India, Delhi University ii) IFSC Code

iii) Account No. & Type

: SBI N0001067

: 10851298650 : 110002030

iv) MICR No.

Contd... P-3/-

- 5. The expenditure involved will be met from within the Sanctioned Budget Grant of Department of Information Technology under Demand No. 15, Department of Information Technology, Major Head: 2852, Industries:07 Telecommunication & Electronics Industries; 07.202, Electronics, 02 Convergence, Communication and Strategic Electronics Programme; 02.02.31-Grants-in-Aid: (Plan) for the year 2011-12 (Plan).
- 6. This sanction has been issued with the concurrence of IFD's vide OPA No. 23921 dated 06.07.2011.
- 7. Sanction I.D. No.

Yours faithfully,

K Sadani)
Director

#### Copy to:

- 1. The Principal Director of Audit, Scientific Deptt., IP Estate, Near ITO, New Delhi.
- 2. The Director of Audit, Scientific Department, AGCR Building, New Delhi.
- 3. Drawing & Disbursing Section, DIT(2 copies)
- 4. Finance Division, DIT
- 5. Dr. George Varkey, Executive Director, C-DAC, Noida
- 6. Dr. P.C. Jain, Head, School of Electronics, C-DAC, Noida
- 7. Dr. Vinay Gupta, Reader, Department of Physics & Astrophysics, University of Delhi
- 8. GC(BMB)/ Dir(SKS)
- 9 Sanction File

Yours faithfully

(SK Sadani) Director







#### UNIVERSITY OF DELHI

Vice-Regal Lodge, University Road, Delhi-110007. (INDIA)

Ph.: 011-27666227 (O), 27667725/Extn.: 1107 Fax: 011-27662284, 9811054232 (M)

E-mail: dean\_research@du.ac.in

Prof. Madan Mohan, *Ph.D., LL.B., FNA; FNAAS* Dean (Research) Chairman, IPR Cell and Patent Fund

Director, Centre for Genetically Modified

Plants: Biosafety & Legal Issues

Professor, Department of Plant Molecular Biology

Dean(R)/ 2009/868 December 11, 2009

Subject: DU/DST - PURSE GRANT

Dear Prof. Gupta,

The Hon'ble Vice-Chancellor is pleased to sanction you a research grant of Rs. 38, 18,600/- under the above mentioned scheme. You are requested to utilize the funds as per the budget submitted by you (enclosed). The budget of first year is being released. Please note that the funds need to be spent latest by March 31, 2010 and the bills need to be sent to the Finance Branch latest by April 15, 2010.

It is in our best interest, if we can adhere to the above mentioned dates so that my office can work more efficiently. In case you cannot spend the funds by **March 31, 2010**, you need to request an extension time of a maximum of 3 months. The next round of funding (2 years) would only be released after my office receives utilization certificate of these funds.

Looking forward to your cooperation.

With best wishes for productive research & a Happy New Year (2010).

Thanking you,

Yours Sincerely,

Prof. Madan Mohan

Prof. Vinay Gupta
Department of Physics
University of Delhi
Delhi – 110007

Development of multifunctional metal-oxide thin films for wave-guiding and optoelectronic device applications

#### Revised Budget:

S. No	Budget head	I Year	II Year	III Year	Total (in Rs.)
Fixed C	omponent		The second secon		(
1.	Manpower				
	(Farash @Rs.7,500/- for	22,500	67,500	NIL	90,000
	01 year)				
	(RA @ Rs. 16,000/- for 07	40.000	72,000	NIL	1,12,000
	months)				
	(JRF @ Rs. 12,000/-	NIL	NIL	93,600	93,600
	HRA for 6 months)				
2	Contingency	9,000	40,000	36,000	85,000
3.	Seminar/Conference	NIL	NIL	NIL	-
4.	Maintenance	14,000	92,000	14,000	1,20,000
5.	Travel	NIL	20,000	18,000	38,000
Flexible	Component				
<u>б.</u>	Equipment	NIL	8,80,000	NIL	8,80,000
7	Consumables (Chemicals,	5,00,000	17,00,000	2,00,000	24,00,000
	Gases/substrate/wafers etc.)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	_,,,,,,,,	21,00,000
8.	Networking (Software)	NIL	NIL	NIL	NIL
9	Infrastructure	NIL	NIL	NIL	NIL
	TOTAL (Rs.)	5,85,500	28,71,500	3,61,600	38,18,600

Total: Rupees 38.186 Lakhs (Rupees Thirty eight lakh eighteen thousand six hundred only)

Vinay Gupta )
(Principal Investigator)



भारत सरकार, रक्षा मंत्रालय रक्षा अनुसंधान तथा विकास संगठन

# ठोसावस्था भौतिकी प्रयोगशाला

लखनऊ मार्ग, तिमारपुर, दिल्ली-54

No. 1115/CARS-32/TS/SPL/12



GOVERNMENT OF INDIA

MINISTRY OF DEFENCE (R & D ORGN.)

SOLID STATE PHYSICS LABORATORY
LUCKNOW ROAD, TIMAR PUR, DELHI-54

	67	Feb	2012
Dated	 i		

To

The Registrar University of Delhi Delhi - 110007

#### Sub:- AWARDING OF CARS

Director, SSPL has accorded his approval for awarding the CARS entitled "Multilayer Metallization & PLG for Advance MEMS Devices" at a cost of Rs. 9.96 Lakhs and PDC of 12 Months effective from the date of release of 1st Instalment of Rs. 6.36 Lakhs.

A copy of MoU will be sent to you duly consummated by Director.

This is issued with the approval of Director.

Dr. ♥R BALAKRISHNA Sc. 'F' OI/C Tech. Sectt. For DIRECTOR

Copy to:

Prof. Vinay Gupta
Dept. of Physics & Astrophysics
University of Delhi
Delhi - 110007

ारत सरकार, रक्षा मंत्रालय रक्षा अनुसंधान तथा विकास संगठन ठोसावस्था भौतिकी प्रयोगशाला लखनऊ मार्ग, तिमारपुर, दिल्ली–54



GOVERNMENT OF INDIA
MINISTRY OF DEFENCE (R & D ORGN.)
SOLID STATE PHYSICS LABORATORY
LUCKNOW ROAD, TIMAR PUR, DELHI-54

Nο	1115/CARS-32/TS/SPL/13
₹0.	

	10-10-2013
Dated	

To

Prof. Vinay Gupta
Dept. of Physics & Astrophysics
University of Delhi
Delhi — 110007

Fax: 011-27667036

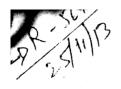
## "SSPL Sanctioned CARS - 32"

The subject CARS entitled "Multilayer Metallization & PLG for Advanced MEMS Devices" with the revised PDC of April 2013 has since been over. You are requested to kindly send us with the Final Completion Report and the Audited Statement of Fund alongwith the Utilization Certificate duly audited at your end by Chartered Accounts for the entire amount already released.

Any unspent balance funds needs to be returned by cheques / DD in favour of PCDA (R&D).

Kindly accord top priority as our audit team is likely to visit for audit during the last week of October.

Technical Officer 'C'
For DIRECTOR





### UNIVERSITY OF DELHI Delhi-110007

No.Fin.III(i)/155/BRNS-176

Date: 21.11.2013

32

15780

## **CLEARANCE CERTIFICATE**

It is certified that nothing is outstanding against Prof. Vinay Gupta, Department of Physics and Astrophysics in respect of BRNS Project entitled "One time grant.....Labs".

Assistant Registrar (Finance - II)

Prof. Vinay Gupta
Department of Physics and Astrophysics
University of Delhi,
Delhi-110007



#### Government of India Department of Atomic Energy (DAE)

Board of Research in Nuclear Sciences (BRNS)

G.N. Pandey Programme Officer (BSC) BRNS Secretariat, 1st Floor, CC, BARC, Trombay, Mumbai-400085

Phone: 25595386 FAX: 022-25505151

e-mail: gnpandey@barc.gov in

No.2008/37/52/BRNS/ 3041

Date: 16/3/09

#### OFFICE MEMORANDUM

Sub: One time Grant-in-aid to Delhi University for purchase of equipment for the Nuclear Physics & Solid State Physics Labs.

On the recommendations of Board of Research in Nuclear Sciences (BRNS), the President of India is pleased to sanction one time grant-in-aid not exceeding Rs.3,00,00,000/-(Rupees Three Crores only) for purchase of equipment\* for the Nuclear Physics & Solid State Physics Labs. during the year 2008-2009.

- List of Equipment is enclosed in Annex-1
- 2. The expenditure involved is debitable to:

Grant No.	-	05	Atomic Energy
Major Head	-	3401	Atomic Energy Research
Minor Head	-	00 004	Research & Development
Sub Head	-	08 02	Board of Research in Nuclear Sciences (BRNS)
Detailed Head	-	08 0231	Grant-in-aid

3. This issues with the concurrence of Scientific Secretary, BRNS and IFA, DAE.

ed/:-(G.N. Pandey)

Pay & Accounts Officer, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai - 400 001. Copy forwarded to

Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai - 400 001

- 2 -

- Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001 2
- 3 Registrar, University of Delhi, Delhi 110 007

Prof. R. K. Shivpuri, Director, Centre for Detector & Related Software Technology. Room No.189, Multistory Building, Department of Physics and Astrophysics, University of Delhi, Delhi 110 007.

The total grant is being released in full through Pay & Accounts Officer, DAE by means of A/C payee Demand Draft. You are also requested to submit the following documents

- Utilisation Certificate to the effect that grant received were utilized for the (A) purpose for which they were sanctioned (Form-III)(form enclosed) as on 31st March, 2009.
- AUDITED Statement of Accounts in Form-IV (enclosed) from a Statutory (B) Auditor (Govt. Auditor) or a Chartered Accountant for the entire grant received and utilized as on 31st March 2009.
- An Inventory of Equipment (Form-V) (form enclosed). (C)

Unspent balance, if any, may be refunded vide Demand draft drawn in favour of 'Pay & Accounts Officer, DAE' alongwith with the above cited documents by rounding off to the nearest rupee.

- AAO (Bills II), DAE, Anushakti Bhavan, CSM Marg, Mumbai 400 001 With a 5. request that the amount sanctioned may be released immediately.
- Sanction file. 6.

(G.N. Pandey) .

#### \*\* Note:

- All the documents as applicable be sent in time to avoid delays and unnecessary 1. correspondence.
- Please quote the Sanction Number (No.2008/37/52/BRNS) all your 2. correspondence with BRNS.



#### Research Council

University Of Delhi

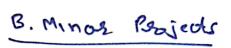


cof. Ajay Kumar Member, Dean Research (PS&MS)

Pami Dua, Member, Dean Research (H&SS)

Frof. M. M. Chaturvedi, Member, Dean Research (LS)

Dr. Deepika Bhaskar, Dy.Dean Research





RC/2015/9677

October 15, 2015

Prof. Vinay Gupta

Department of Physics & Astrophysics University of Delhi Delhi-110007

Subject: Research & Development grant 2015-16.

Dear Sir/Madam,

You have been sanctioned the following grant under the Research & Development scheme 2015-16 of the University of Delhi.

The budget heads under which the grant has been sanctioned are as follows:

Bridirer Heads	Amount (in bu.)
Consumables	1,35,000
Travel	30,000
Minor Equipment	55,000
Contingency	80,000
Total	3,00,000
Total in Words	Rupees Three lakhs only

#### Kindly note the following:

- The guidelines issued at the time of application and additional guidelines attached have to be strictly followed.
- The sanctioned amount can be used only under the approved budget-heads.
- The grant is sanctioned for a period of one year starting from 15.10.2015.
- A quality publication must be reported along with a copy of the same by the end of the year along with the final report for any further consideration for the grant for next year.
- The support received from the University as R&D grant must be acknowledged in the publication from the research undertaken in the scheme.

The Utilization Certificate along with a final report in the form of a research paper must reach the office of the Research Council by October 30, 2016.

With best wishes for productive research.

Yours sincerely,

Prof. Malashri Lal

#### **Research Council**

University Of Delhi





Prof. M. M. Chaturvedi, Member, Dean Research (LS) Dr. Deepika Bhaskar, Dy.Dean Research

Prof. Malashri Lal, Chairperson, (Chairperson) Prof. Ajay Kumar, Member, Dean Research (PS&MS) Prof. Pami Dua, Member, Dean Research (H&SS)

RC/2014/6820

October 15, 2014

Prof. Vinay Gupta
Department of Physics & Astrophysics
University of Delhi
Delhi-110007

Subject : Research & Development grant 2014-15.

Dear Sir/Madam,

The Hon'ble Vice-Chancellor is pleased to sanction a grant of Rs. 3,00,000 (Rupees Three lakh only) under the Research & Development scheme 2014-15 for the Project entitled "Fabrication of BTO/BFO multilayered structures for energy harvesting application"

The budget heads under which the grant has been sanctioned is as follows:

marine 1994 (c	1
2,50,000	
50,000	
3,00,000	
	2,50,000 50,000

- The sanctioned amount can be used only under the approved budget-heads and the guidelines issued at the time of application have to be strictly followed.
- An undertaking must be submitted before utilization of the travel head mentioning that it will not be used for travel to home town or areas near it.
- The grant does not cover maintenance/AMCs. Any minor repair related to research proposal can be covered in the contingency head.

The grant has to be utilized upto September 30, 2015. The Utilization Certificate is to be sent to the Research Council accompanied by a report of 2000 words on how the money has been utilized for furthering your research activities and enhancing the publication profile before October 5, 2015.

The contribution made to your research work and publication by the R & D grant must be duly acknowledged.

With best wishes for productive research.

Thanking you

Yours sincerely,

(Prof. Malashri Lal)



Prof. Malashri Lal, Chairperson, (Dean, Academics)
Prof. Ajay Kumar, Member, Dean Research (PSeIMS)

Prof. Girishwar Misra, Member, Dean Research (Helss) Prof. M. M. Chaturvedi, Member, Dean Research (LS)

Dr. Deepika Bhaskar, Dy. Dean Research



2 / October, 2013

DRCH/R&D/2013-14/ 4155

Prof. Vinay Gupta
Department of Physics & Astrophysics
University of Delhi
Delhi

Subject:

Scheme to strengthen Research & Development by providing funds to

University Faculty (2013-14).

Dear Sir/Madam.

The Hon'ble Vice-Chancellor is pleased to sanction you a research grant of Rs. 2.8 lakhs (Rupees two lakh and eighty thousand only) under the above mentioned scheme. You can spend the approved amount in the budget- heads, as specified below:

Consumables, Softwares, Photocopies, Purchase of books, Computers peripherals etc.	60-100%
Travel (local & within India related to research) Minor equipment & maintenance of equipment	Up to 10%
Contingencies	Up to 20% Up to 10%

You are requested to utilize the funds latest by March 15, 2014 and send the Utilization Certificate to the Finance Branch. A report of 2000 words on how the money has been utilized for furthering your research activities and enhancing the publication profile is to be submitted along with a copy of the Utilization Certificate to the Research Council latest by April 07, 2014.

The contribution made to your research work and publication by the R and D grant must be duly acknowledged.

The findings of R and D projects may be presented at a Seminar after the submission of the report.

With best wishes for productive research.

Thanking you,

Yours sincerely,

ML

(MALASHRI LAL)



# UNIVERSITY OF DELHI **DELHI - 110007**



Dean(R)/R&D/2012/ 9/7 July 03, 2012

Subject:

Scheme to strengthen R & D Doctoral Research Programme by

providing funds to University Faculty.

Dear Prof. Gupta,

The Hon'ble Vice-Chancellor is pleased to sanction you a research grant of Rs. 2,50,000/under the above mentioned scheme. You are requested to utilize the funds as per the norms given on the website of Delhi University. Please note that the funds need to be spent latest by February 15, 2013 and the bills need to be sent to the Finance Branch latest by March 1, 2013. You can spend this grant as per the budget proposed by you which is as follows:

1.	Chemicals	-	Rs. 40,000/-
2.	Sputtering Targets and Evaporation Sources	-	Rs. 58,000/-
3.	High purity Gas Cylinders and gases	-	Rs. 45,000/-
4	Substrates	-	Rs. 55,000/-
5.	Other Consumables	-	Rs. 52,000/-

It is in our best interest, if we can adhere to the above mentioned dates so that my office can work more efficiently in the future. The next round of funding would only be considered after my office receives utilization certificate of these funds and a budget proposal by April 25, 2013.

Looking forward to your cooperation.

With best wishes for productive research.

Thanking you,

Yours sincerely, Agan Kumar

(AJAY KUMAR)

Prof. Vinay Gupta Department of Physics & Astrophysics University of Delhi Delhi-110007





grance of /

#### Government of India Department of Atomic Energy (DAE) Board of Research in Nuclear Sciences (BRNS)

D K Dalal Programme Officer (PFRC) ERNS Secretariat.1st Floor. CC. BARC. Trombay, Mumpai-400085Phone +91-2225594683 Email: dkdalal@barc.gov.in

No: 39/14/24/2016-BRNS/34177

Date: 18/07/2016

#### OFFICE MEMORANDUM

Sub: R/P entitled "Laser-plasma interaction in strong coupling regime" under Dr. Devki Nandan Gupta, Assistant Professor, University of Delhi, Main Campus, Delhi- 110007 bearing sanction 39/14/24/2016-BRNS with PFRC, BRNS.

On the recommendations of the Board of Research in Nuclear Sciences (BRNS). I am pleased to convey the administrative approval and sanction of the President of India for the captioned project for 3 years beginning from financial year 2016-2017 with a total grant of Rs. 19,16,400/- (Rupees nineteen lakh sixteen thousand four hundred only) for the project as under:

Item of expenditure	Year 1	Year 2	Year 3
	(2016-2017)	(2017-2018)	(2018-2019)
Equipments	300000	5	0
Staff Salary - JRF	300000	300000	0
Staff Salary - SRF (1)	0	Ō	336000
Travel - PI	100000	100000	100000
Contingencies	50000	50000	50000
Overheads	52500	30000	32700
Total(INR)	802500	480000	518700

Note: \* Computer Workstation System, Softwares

JRF salary calculated @25,000/- p.m. for first two years and on redesignation by committee on in third year as SRF @ 28,000/- p.m. RA salary calculated @ 36,000/- p.m.

Overheads calculated @ 7.5% of the other heads except contingency. The remaining 7.5% towards overheads (Rs. 1,15,200/-) shall be released only on meeting the requirements specified (See Annex-B).

- I am also pleased to convey the sanction of the President of India to incur an expenditure of Rs. 8,02,500/towards grant for the year 2016-2017.
- 3. The expenditure involved is debitable to: 04 3401 00 004 27 0231.

This issues with the concurrence of Scientific Secretary, BRNS and IFA.

fel DK Dalal
(DK Churtamari Das

Pay & Accounts Officer, DAE, Mumbai - 400 001.

- Director of Audit, Scientific Department, AEAP, OYC, CSM Marg, Mumbai-400 001.
- Joint Secretary (R&D), DAE, Anushakti Bhavan, CSM Marg, Mumbai-400 001. 1.
- Registrar, University of Delhi, Main Campus, Delhi- 110007. 2.
- Registrar, University of Delhi, Main Campus, Principal Investigator(PI): Dr. Devki Nandan Gupta, Assistant Professor, University of Delhi, Main Campus, 3.
- 4. Delhi- 110007.
- First year grant is being released in full along with this Sanction Letter through Pay & Accounts Officer. Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai-400 001 directly. You may await a Money transfer (MT) through ECS and The amount would be credited electronically to A/C No: 10851298650. A/C Name: Registrar, University of Delhi, IFSC: SBIN0001067, State Bank of India, Delhi University, Delhi-110007
- Acceptance of this sanction and the MT for the amount sanctioned for the first financial year may please be acknowledged (Form-I).
- ii) THIS SANCTION IS FURTHER SUBJECT TO THE CONDITIONS STIPULATED IN ANNEX (ENCLOSED), WHICH MAY BE GONE THROUGH CAREFULLY.
- Second year Sanction Letter will be issued automatically in the month of April/May of the 2nd financial year. however, the grant will be released (unspent balance of previous year and Interest earned will be adjusted) after the PI submits the following documents to the Programme Officer PFRC:
- a) Claim in Form-II quoting the reference of the sanction issued for the first year.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year should be updated on the website. Interest earned in previous year should be reflected in the Statement of Accounts. A printout of the same should be sent to BRNS after it is duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant.
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee, should be uploaded in a single pdf file under the file head "Staff Appointment Details". In addition, the details of the appointed staff should also be updated in the available menu.
- e) The inventory of equipment also should be updated in the menu, besides uploading the purchase order of the items costing more than 1 Lakh.
- f) A One Page report on the progress of work during first year.
- C. Third and subsequent years (if any) the Sanction Letter and the grant will be released on fulfillment of the
- Renewal/ Extension Application: Principal Investigator (PI) is required to upload by January 15 a pdf copy of duly signed renewal/ extension application in the prescribed form-(PRA) after logging into his/her account at www.daebrns.gov.in. All applications received shall be examined by experts from the field and PIs may be invited to a Technical Programme Discussion Meeting (TPDM). Renewal of the project will be based on the recommendations of the TPDM, Advisory Committee and the Board.
- ii) Sanction Letter: If the progress is found to be satisfactory the renewal sanction for the year will be issued in the beginning of that financial year in April/May.
- iii) Claim: On receipt of the renewal sanction, the PI shall claim the funds sanctioned by submitting the following documents to Programme Officer PFRC, BRNS Secretariat, First FLoor, Central Complex, BARC,
  - a) Claim in Form-II quoting reference of the renewal sanction.
- b) Utilisation Certificate (UC) as on 31st March of the preceding financial year in Form-III duly audited by the Internal Auditor of the University/ Institution or a Chartered Accountant, should be reflected in the Statement of
- c) Statement of Accounts (SA) as on 31st March of the preceding financial year including the amount of Interest earned in previous year and duly audited by the Internal Auditor of the University/ Institution or a
- d) Copy of appointment order and joining report of the staff appointed for the project along with minutes of the Selection Committee.
  - e) An inventory of equipment and the copy of Purchase order of equipments costing more than 1 Lakh
- D. At the end of Terminal Year the Settlement Grant and the Balance 7.5% Overheads will be released on fulfillment of the following requirements:
  - a) Claim Form-II if any,
- b) The final Consolidated Statement of Accounts (SA) and Consolidated Utilization Certificate duly audited by an external Chartered Accountant or the Statutory (Govt.) Auditor. It is mandatory to include the amount of

pank interest earned on the grant released into the SA.

Final Consolidated Progress Report and a brief report as per format given in Form-VII.

AAO (Cheque), DAE, Anushakti Bhavan, CSM Marg, Mumbai - 400 001 - With a request that the amount 5. granted for the first year of the project may be released. 6.

Member Secretary (PFRC): Dr. Ravi A. V. Kumar, ravi@ipr.res.in; Ph:+91-9825366039 7.

Co-Investigator (CI): Avinash Khare, Professor Department of Physics and Astrophysics, University of Delhi, North Campus, Delhi-110007, Email: ak0005@uah.edu 8.

Project Collaborator (PC): Amita Das, Professor, Institute for Plasma Research (IPR), Bhat, Gandhinagar-382424, India, Email: amita@ipr.res.in

You or your nominee may please be the DAE representative for selection of Research Fellow/ Research Associate for the project.

D K Dalai

Note:

Please quote the Sanction Number 39/14/24/2016-BRNS in all your correspondence with BRNS



Telegram

Scienctech

दूरभाष/Tel

26962819, 26567373,

फैक्स Fax

26562134, 26562122 (EPBAX) 26569908, 26864570.

26863847, 26862418

No. INT/FRG/DAAD/P-253/2015

भारत संग्कार

विज्ञान और प्रौद्योगिकी मंत्रालय विज्ञान और पौद्योगिकी विभाग, टेक्नोलॉजी भवन, नया महरौली मार्ग,

नर्ड दिल्ली - 110 016

GOVERNMENT OF INDIA

MINISTRY OF SCIENCE AND TECHNOLOGY, DEPARTMENT OF SCIENCE AND TECHNOLOGY TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD,

NEW DELHI-110 016

Dated: 10-4-2015

ORDER

Sanction of the President is hereby accorded for implementation of the Indo-German (DST-DAAD) joint research project entitled "Electron and Ion Accelerations from Laser-Plasma Interactions" at a total cost of Rs. 9,64,000/- (Rupees Nine Lac Six Four Thousand Only). The duration of the project shall be 2 years from date of issue of this sanction order. The requests for extension of the project beyond this validity shall NOT be considered in any case.

The composition of the project team is as below:

Indian side	German side
i.) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007 ii.) Mr. Krishnagopal, Doctoral student	

The change/ replacement of project participants is not allowed. The participating scientists should be working on the project and affiliated with the Institute/University holding the indicated position at the time of start of the project as well as at the time of exchange visits under the project. The expenditure related to approve visits of participating scientists, as mentioned above, only can be met from the project grant.

4. The break-up of estimated expenditure is as indicated below and no re-appropriation shall be allowed under this project:-

project.	Estimated expenditure(s)		
<b>Headings</b>	1 <sup>st</sup> year	2 <sup>nd</sup> year	Total
1. Expenses for Indian scientists to visit Germany under	(2 visits)	(2 visits)	(4 visits)
the project	(28&60 days)	(28&60 days)	
(i) International air-fare (by IATA excursion/ economy class	1,30.000/-	1,30,000/-	2,60,000/-
by shortest route) including surface travel from place of			
work in India to place of work in Germany & back; Visa			
charges; Medical Insurance etc @ Rs. 65000/- per visit			
2. Expenses for German scientists to visit India under the	(2 visits)	(2 visits)	(4 visits)
project	(28&60 days)	(28&60 days)	
(i) Accommodation charges @ Rs. 1500/- per day	1,32,000/-	1,32,000/-	2,64,000/
(ii) Per-diem charges @ Rs. 2500/- per day	2,20,000/-	2,20,000/-	4,40,000/
3. Total	4,82,000/-	4,82,000/	9,64,000/

(Rupees Nine Lac Six Four Thousand Only)

Contd. p/2

Sharma 10/04

- 5. The local hospitality (which includes per-diem, accommodation, etc.) for Indian scientists visiting Germany and the International travel related expenses with the German Scientists visiting India under the project shall be bentied by DAAD (Germany) through the German Co-PI of the project.
- 6. Sanction of the President is also accorded for the release of Rs. 4,82,000/- (Rupees Four Lac Eighty Two Thousand Only) as an initial installment for incurring expenditure during the first year of the project and payment of this amount may be made electronically to The Registrar, University of Delhi, Delhi-110007 as per the Bank details given below:

1. Name of the account (as per Bank record)	University of Delhi
<ol> <li>Name and Designation of A/C holder (as per Bank A/C)</li> </ol>	Registrar, Delhi University
3. Bank Account No.	10851298593
4. Bank Name and Branch Address	State Bank of India, University of Delhi, North Campus, Delhi-110007
5. IFSC Code	SBIN0001067

The release of this grant is subject to:-

- Obtaining prior approval of this Department on all project related visits to be undertaken by the scientists from the either side in connection with the implementation with of this project separately in prescribed format, on a case to case basis, at-least 4 weeks in advance before incurring any expenditure for this purpose.
- Submission of Utilization Certificate (UC) and a Statement of Expenditure (SE) along with up to date progress report at the end of each financial year for the grants already received under the project and seeking specific approval of this Department for carry forward of unspent funds to the
- iii) The international / domestic air-travel connected to visits under this project is to be performed only as per the prevailing norms and regulations of Government of India.
- The grantee Institute/University shall maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The Interest earned should be the institute to be adjusted towards further installment of grant.
- v) It must be ensured that all the Utilization Certificate (UC) and Statement of Expenditure (SE) in respect of the project and the final completion report is submitted within one year from the scheduled date of completion of the project.
- 8. The accounts of the grantee institution shall be open to inspection by the sanctioning authority /audit whenever the institution is called upon to do so, as laid down under Rule 211(1) of General Financial Rules.
- 9. The expenditure involved is to be debited under the budget head Demand No. 86, Department of Science and Technology Major Head-3425, other scientific research 60.798-International Cooperation 12- S&T Cooperation with Other Countries 12.00.31-Grants-in-aid (Plan) during the current financial year 2015-2016.
- 10. This issues under the delegated powers to the Ministries/Departments and with the approval of Secretary, DST and financial concurrence of IFD vide Dy no. C/169/2015-2016 dated 9-4-2015.

Cont next page/-



11. The expenditure on account of this Sanction Order has been entered in grant register at Page

R K Sharma Scientist E

To,

The Pay & Accounts Officer, Dept. of Science and Technology, New Delhi

#### Copy to -

- 1) Office of the Principal Director & Audit, Illrd Floor, AGCR Bldg., IP Estate, New Delhi 110002.
- 2) Cash Section (3 copies), DST, New Delhi
- 3) I.F. Division/Accounts Section, DST, New Delhi
- 4) The Registrar, University of Delhi, Delhi-110007
- 5) Dr. Devki Nandan Gupta, Assistant Professor, Department of Physics and Astrophysics, North Campus, University of Delhi, Delhi-110007
- 6) Sanction folder
- 7) FICCI Cell, DST- for website requirements

R K Sharma Scientist E



Telegram

Scienctech

दूरभाष/Tel

26962819, 26567373,

फैक्स/Fax

26562134, 26562122 (EPBAX) 26569908, 26864570,

26863847, 26862418

वेबसाइट/website : www.dst.gov.in

No.INT/RUS/RFBR/P-186

Dated: 06.01.2016

OF SIGNICE AND TECHNOLOGY

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MENTOFINDIA

#### ORDER

Implementation of the Indo-Russian project entitled "Tunable radiation source Subject: from laser plasma based nonlinearities" coordinated by Dr. D.N. Gupta, Department of Physics & Astrophysics, University of Delhi, Delhi with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow under DST-RFBR programme.

Sanction of the President is hereby accorded for an DST and Russian Federation project entitled: "Tunable radiation source from laser plasma based nonlinearities" under the MoU with RFBR at a total cost of Rs.15,98,520/- (Fifteen lakh ninety eight thousand five hundred twenty only) for a period of two years as under:

Item of Expenditure		Amounts in (Rs.)		
		First year	Second year	
<u>l.</u>	Consumables:	50,000/-	50, 000/-	
2.	Mobility of Scientists: (One visit each year)	2, 36, 600/-	2, 36, 600/-	
	<ul> <li>For visit of Indian Scientists to Russia</li> <li>For visit of Russian Scientists to India</li> </ul>			
3.	Contingency:	50, 000/-	50 000/	
4.	Manpower: JRF-1 @ Rs.25,000+30% HRA	3,90,000/-	50, 000/- 3, 90, 000/-	
5.	Year-wise Cost	7,26,600/-	7 26 600/	
6.	Overhead @ 10%	72,660/-	7,26,600/-	
7.	Total year-wise Cost	7,99,260/-	72,660/-	

Total Cost = Rs.15,98,520/-

Sanction of the President is hereby accorded for release of 1st installment as initial grant of Rs. 7,99,260/- (Rupees Seven lakh ninety nine thousand two hundred sixty only) and the payment of this amount may be made to DDO, DST by means of electronic transfer to the following a/c:

1.	Name & Designation of A/c holder Bank A/c Number	Registrar, University of Delhi 108 51 298 593
3.	Bank name & Branch address	State Bank of India, Delhi University, Delhi-
4.	IFSC Code	SBIN 000 1067
5.	MICR Code	11000 20 30
6.	E-mail (Agency/PI)	dngupta2001@gmail.com

-2-

- 3. The expenditure involved will be dubitable to the budget Head, Demand No. 86, Department of Science & Technology, Major Head-3425 B- Other Scientific Research 60 others- Minor Head 60.798 -International Co-operation S&T Co-operation with Other Countries, 12.00.31 Grants-in-aid (general) during the current financial year 2015-16 (PLAN).
- 4. The Project will be coordinated by **Dr. D.N.** Gupta, Department of Physics & Astrophysics, University of Delhi, Delhi 110007, India with his Russian counterpart Dr. V.V. Kulagin, Moscow State University, Moscow, Russia, from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 5. **Dr. D.N.** Gupta, Department of Physics & Astrophysics, University of Delhi, Delhi, India is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 6. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant for exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

a) Break up of expenditure on each visit of Indian Scientists visiting collaborative Institute is calculated broadly as below: (All conversion US \$ 1 = Rs.60).

1.	International Fare Delhi-Moscow-Dehli by excursion economy class	(In Rs.)
		60, 000/-
2.	Medical Insurance (Silver class)	5, 000/-
3.	Domestic Travel related to visit	2, 000/-
4.	Visa Fee (as per actual)	10, 000/-
5.	Accommodation @ US \$ 125 for 14 days	1, 05, 000/-
6.	Cash Allowance a. US \$ 40 for 14 days	33, 600/-
7.	Local transport @ US \$ 25 for 14 days	21, 000/-
	Total (Col. 1 to 7)	2, 36, 600/-

Contd.3/-

- 7. The institute/university will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure//Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- 8. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India.
- 9. It must be ensured that the final statement of expenditure, utilization certificate and project completion report is submitted within one year after the scheduled dated of completion of the project.
- 10. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub/head of expenditure and copies of claims may be called by DST if required. This sanction order has been issued in current financial year 2015-16 and is valid up to 31.03.2016 only. For incurring any expenditure in next financial year (2016-17), PI should apply to DST for carry forward of unspent balance to 2016-17 during April 2016. For seeking carry forward approval/sanction order, Indian Project coordinator should furnish the requisite utilization certificate immediately at the end of the each financial year (ending 31<sup>st</sup> March) along with the audited statement of expenditure and project progress report.
- 11. As per rule 211 (1) of GFR, the accounts of project shall be open to inspection by sanctioning authority/audit whenever the institution is called upon to do so.
- 12. This issues under the delegated powers to the Minister/Departments and with the financial approval and concurrence of Director (IFD) vide Diary No C/ 4595/IFD 2015-16 dated 23.12.2015.
- 13. This Sanction Order has been entered at S. No in Grant-in-aid Register (2015-16).
- 14. "There is provision for manpower in the-project. For recruitment of manpower there should be nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications & post should be sent to DST. Positions of manpower are co-terminus with duration of the project and DST would have no liability to meet these manpower cost beyond the duration of the project. Project staff should be selected as per the DST norms, as indicated in DST Office Memorandum no. SR/S9/Z-09/2012 dated: October, 21 2014 which is available at www.dst.gov.in"

- 15. As per instructions issued by the Ministry of Finance, Department of Expenditure, the Institute/Organization shall enter, upload and confirm feeding of the details of Utilization Certificate (Receipt and Expenditure of the Grand-In-Aid) in the Public Finance Management System Portal (PFMS) besides sending it in Physical form to DST, failing which, carry forward, further release and closure of the Project shall be put on the HOLD.
- 16. This sanction order being 1<sup>st</sup> installment for implementation of this project, no SE/UC is due from GJ/PI, against this project.

(S. K. Varshney) Scientist 'G' / IBCD, DST

To

The Pay & Accounts Officer,

Dept. of Science and Technology, New Delhi

#### Copy to:

- 1. Office of the Principal Director & Audit III<sup>rd</sup> Floor, AGCR Bldg., IP Estate, New Delhi-2
- 2. Cash Section (3 copies), DST
- 3. I.F. Division/Accounts Section, DST
- 4. Dr. D.N. Gupta, Assistant Professor, Department of Physics & Astrophysics, University of Delhi, Delhi 110 007.
- 5. Director, University of Delhi, Delhi 110 007.
- 6. Registrar, University of Delhi. Delhi 110 007.
- 7. Sanction folder.

(S. K. Varshney) Scientist 'G' / IBCD, DST

#### INT/RFBR/P-120 Government of India Ministry of Science & Technology (International Division)

INT/RFBR/P-120

Date: 20.11.2012

#### ORDER

Sub: - Implementation of Indo-Russian project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. Under DST-RFBR MoU.

Sanction of the President is hereby accorded for an Indo-Russian joint project entitled "Investigation on Ultra -short-pulse petawatt laser interaction with plasmas & its applications for particle acceleration & generation of terahertz radiation" coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India. with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992, Russia, under the MoU with Russian Foundation for Basic Research (RFBR) at a total cost of Rs. 7,88,340/-(Rupees seven lakh eighty eight thousand three hundred and forty only) for a period of two years as under:

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- 2. Sanction of the President is hereby accorded for release of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) to the Registrar, University of Delhi
- 3. DDO DST will draw the amount of Rs. 2,44,170/- (Rupees two Lakh forty four thousand one hundred and seventy only) from PAO DST Ministry of Science & Technology and disburse by means of electronic transfer (E-transfer) in favour of Registrar, University of Delhi. as details given below:

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- 4 The expenditure involved is debitable to:-
  - (i) Demand No. 85-Department of Science and Technology
  - (ii) Major Head-3425 B-Other Scientific Research
  - (iii) 60 others Minor Head 60.798 International Co-operation S&T Co-operation with other Countries
  - (iv) 12.00.31 Grants-in-aid during the current financial year 2012-13 (PLAN).

- 5. The Project will be coordinated by Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India with his Russian counterpart Dr. Vistor V. Kulagin, Sternberg Astronomical Institute of Moscow State University, Universitetsky Prosp.13, Moscow-119992 from Indian and Russian side respectively and will be presumed to commence from the date of issue of this sanction.
- 6. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India, is required to submit technical progress report periodically (at least once in six months) and a final report at the end of project.
- 7. As and when required, proposal for a visit under the project should be sent to DST at least six weeks prior to the initiation of the visit. The grant tor exchange visit is to be operated subject to the condition that the prior approval of this Department would be obtained on all project related visits to be undertaken by the scientists from either side in connection with the implementation of the project on a case to case basis before any expenditure is incurred in this regard. Break up for proposed expenditure on each exchange visit will be calculated broadly as below:

#### For Indian Scientist visiting Russia (for an average duration of two weeks)

a. International Fare (Delhi- Moscow-Delhi) by cheapest econo	my class	Rs.45,000/-
b. Per diem @ US\$ 40 per day (on average of 2 weeks 14 x 40 ;	c 57)	Rs.31,920/-
c. Medical Insurance (silverclass) & Visa fee		Rs. 5,000/-
d. Domestic travel		Rs.10,000/-
e. Accomodation Rate @ US\$ 100 per day (14 x 100 x 57)		Rs.79,800/-
f. Local transport in Russia @ US\$ 25 per day (14 x 25 x57)		Rs. 19,950/-
	Total (for one)	Rs.1,91,670/-

- 8. Local hospitality including cost for the stay of Indian scientists in Russia for the total duration is to be met by the receiving side as per the provision of MoU between Department of Science & Technology and Russian Foundation for Basic Research.
- 9. "The institute will maintain separate audited accounts for the project and the amount of grant will be kept in a bank account earning interest. The interest earned should be reported to DST while submitted the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the institute to be adjusted towards further instalment of the grant".
- 10. As per MoF instructions, it has been decided that in all cases of air travel, both domestic and international, where the Government of India bears the cost of air passage, the officials concerned may travel only by Air India. For travel to stations not connected by Air India, the officials may travel by Air India to the hub/point closest to their eventual destination, beyond which they may utilize the services of another airline which should also preferable be an alliance partner of Air India
- 11. No re-appropriation will be allowed from one item/sub head of expenditure to another item sub head of expenditure and copies of claims may be called for by DST if required. This sanction order has been issued in current financial year 2012-13 and is valid upto 31.03.13 only, For incurring any expenditure in next financial year, PI should apply to DST for carry forward of unspent balance to 2013-14 during April 2013 for seeking carry forward approval/sanction order. Indian Project Coordinator should furnish the requisite Utilization Certificate immediately at the end of the each financial year (ending 31st March) alongwith the audited Statement of Expenditure and progress report.
- 12. The account of the grantee institution shall be open to inspection by the sanctioning authority/audit whenever the institution is called upon to do so, as laid down under Rule 211(i) of General Financial Rules.

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- 13. This issues under the delegated powers to the Minister/Departments and with approval of Integrated Finance Division vide San No.100/IFD/ 5554/2012-13 dated: 16/11/12
- This sanction has been entered in grants-in-aid register at Sl.No. 3119 dated: 20/11/12

(S.K.Varshnoy) For US (IC)

To,

The Pay & Accounts Officer, Department of Science & Technology, New Delhi-110016 Copy to:

- 1. Principal Director of Audit, AGCR Bldg., IP Estate, New Delhi-110002.
- 2. Cash Section (3 copies), DST.
- 3. I.F. Division/Accounts Section, DST.
- 4. Sanction Folder
- 5. Dr. Devki Nandan Gupta, Department of Physics & Astrophysics, North Campus, University of Delhi, Delhi-110007, India.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminous with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 6. Registrar, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.
- 7. Accounts Officer, University of Delhi, Delhi-110007.
  - There is provision of manpower in the project. For recruitment of manpower there should be a nominee from DST also in selection committee. As soon as someone is appointed his/her name, copy of joining report, appointment order, qualifications and post should be sent to DST. Positions of manpower are coterminus with duration of the project and DST would have no liability to meet these manpower costs beyond the duration of the project.

8. Project file.

(S.K.Varshney)
For US (IC)

SR/FTP/PS-076/2011

# Science and Engineering Research Board

(A Statutory Body under Department of Science and Technology)

Technology Bhavan New Mehrauli Road New Delm - 110 016

Dated 27.06.2012

#### ORDER

Subject:-Financial assistance for the research project entitled "Ultrafast laser interactions with plasmas by particle-in-cell simulations" by Dr Devki Nandan Gupta, Department of Physics and Astrophysics, University of Delhi, De'hi – 110 007, Delhi.

Sanction of the Science and Engineering Research Board (SERB) is hereby accorded to the above-mentioned project at a total cost of Rs 23,76,000/- (Rupees twenty three lakh seventy six thousand only) with break-up of Rs. 10,50,000/- under Capital head and Rs. 13,26,000/- under General head for a duration of three years. The items of expenditure for which the total allocation of Rs. 23,76,000/- has been approved for a period of three years, are given below:

SI. No	Head	Total (in Rs.)
Α	Non-recurring (Capital Items)	
1.	Minor Equipment	10,50,000/-
	Computing system, 3D PIC with 10 node simulation code	
A'	Total Capital	10,50,000/-
В	Recurring Items (General)	
B.1	General A	9,30,000/-
	[Manpower (1), Consumables, Travel, Contingencies]	
B.2	General B	3,96,000/-
	(Overhead Charges)	
B'	Total General (B.1 + B.2)	13, 26, 000/-
С	Total cost of the project (A' + B')	23,76,000/-

- Overhead expenses are meant for the host Institute towards the cost for providing infrastructural facilities and general administrative support etc. including benefits to the staff employed in the project.
- The sanction of the Board is also accorded to the payment of Rs. 10,50,000/- (Rupees ten lakh fifty thousand only) under 'Grants for creation of capital assets' and Rs. 4,40,000/-(Rupees four lakh forty thousand only) under 'Grants-in-aid General' to the Registrar, University of Delhi, Delhi - 110 007 being the first installment of the grant for the year 2012-13 for implementation of the said research project.
- Sanction of the grant is subject to the conditions as detailed in Annexure -1.
- 5 The expenditure involved is debitable to Grant-in-aid for the year 2012-13 (Plan Expenditure- Capital) - Rs. 10,50,000/-

Grant-in-aid for the year 2012-13 (Plan Expenditure- General) - Rs. 4,40,000/-This release is being made under OYS Scheme.

The sanction has been issued with the approval of the competent authority in SERB vide Dy. No. SERB/F/1801/2012-13 dated 27.06.2012.

The amount of Rs. 14,90,000/- (Rupees fourteen lakh ninety thousand only) meant pawing and Disbursing Officer of the SERB and it will be disbursed by means of cheque/DD according to the Registrar, University of Delhi, Delhi – 110,007.

- The Institute will furnish to the Board, utilization certificate and audited statement of accounts pertaining to the grant immediately after the end of each financial year
- While providing operational flexibility among various subheads under head General-A, it should be ensured that not more than Rs 1.5 lakh each should be spent for travel and contingency.
- 10 The manpower sanctioned in the project, if any, is co-terminus with the project and SERB will have no liability to meet the fellowship etc. beyond the duration of the project
- All purchases of equipments etc. would be as per GFR and the disposal of the same would be done with prior approval of SERB.
- The institute will maintain separate audited accounts for the project. It is found expedient to keep a part or whole of grant in a bank account earning interest. The interest earned should be reported to the SERB, New Delhi. The interest thus earned will be treated as a credit to the institute to be adjusted towards further installment of the grant.
- 13 As per Rule 211 GFRs, the accounts of the project shall be open to inspection by the sanctioning authority / audit whenever the Institute is called upon to do so.
- As this is the first grant being released for the project, no previous U/C is required.

(Praveen Kumar S)
Scientist `D`

Copy forwarded for information and necessary action to:

- The Principal Director of Audit, III Floor, A.G.C.R Building, I.P Estate, New Delhi 110 002.
- The Drawing and Disbursing Officer, SERB (2 copies).

#### 3. Dr Devki Nandan Gupta

Department of Physics and Astrophysics University of Delhi Delhi - 110007, Delhi

The Registrar
 University of Delhi
 Delhi - 110007, Delhi

- 5. Sanction folder SERB
- 6. OSD, SERB
- 7. SERB Secretariat

(Praveen Kumar S)
Scientist `D`



"Fulbright House" 12, Hailey Road New Delhi – 110 001

#### AWARD LETTER

IUSSTF/JC/High Energy Physics Experiments/19-2009/2010-2011

30 April 2010

Sub: Indo-US Science & Technology Forum (IUSSTF) Award for supporting Indo-US Joint Networked R & D Centre on 'Accelerators and Detectors for future High Energy Physics Experiments' and release of grants in the two year period (2010-2011 and 2011-2012)

Award of Indo-US Science & Technology Forum (IUSSTF) is hereby accorded for supporting Indo-US Joint Networked R & D Centre on 'Accelerators and Detectors for future High Energy Physics Experiments' to be coordinated by Dr. Kirti Ranjan, Department of Physics & Astrophysics, University of Delhi (Indian PI) and Prof. Shekhar Mishra, Fermi National Accelerator Laboratory (Fermilab), Illinois, USA (US PI).

The nodal host institution for the subject Indo-US Joint Networked R & D Centre will be Fermi lational Accelerator Laboratory (Fermilab), Batavia, Illinois, USA – (Project Coordinator: Shekhar Mishra.) The Indian Host Institution will be Department of Physics & Astrophysics, University of Delhi (Dr. Kirti Ranjan, Indian PI).

IUSSTF award support for the project will be for a two-year period effective from the award letter date and release of grants for the first year of the Project. The other partnering institutions and Co-investigators in India and US for the Joint Networked R & D Centre will be as follows:

#### India:

1. Prof. R. K. Shivpuri, University of Delhi - (Mentor and Advisor)

2. Mr. Y.P. Prabhakara Rao, Additional General Manager, Integrated Circuits, Mask Fab, Bharat Electronics Ltd, Bangalore (Co PI)

3. Ms. Rejeena Rani Y, Integrated Circuits Mask Fab, Bharat Electronics Ltd, Bangalore (Co PI)

#### SA:

# Dr. Harry Weerts, Argonne National Laboratory, Illinois, USA (Co PI)

The subject Indo-US Joint Networked R & D Centre is aimed towards sharing resources, man-power and expertise in an interesting, topical and fast developing area of accelerator and detector technology. The proposed International Linear Collider (ILC) program at the Nodal host institute at Fermilab would provide a tool for scientists to address many of the most compelling questions of the 21<sup>st</sup> century including questions about dark matter, dark energy, extra dimensions and the fundamental nature of matter, energy, space and time. The Joint Centre will support bilateral collaboration and travel of scientists from US and Indian partnering institutions for achieving the aims and objectives as mentioned in the project proposal.

period starting in the financial year 2010-11 (effecting from Award date and release of es.). The grants will be released to the host institution in India i.e. University of Delhi, who be administering the grants for the Joint R & D Centre.

	First Year Amount (Rs.)	Second Year Amount (Rs.)	Total (Rs.) In Lakh (\$=Rs.45.00)
Exchange visits of US Researchers  Fravel for US faculty  (i) Exchange visits per year by US  faculty:-  2 Nos. per year i.e. a total of 4 visits in 2 years  (\$ 2000 per visit = Rs.90,000.00)  (1US \$= Rs. 45.00)  Airfare cost @ 2000 USD per visit  02 visits per year x 2000 USD = 4000 USD  i.e. USD 4000 x Rs. 45/- = Rs.1,80,000.00  (Air tickets for travel to be provided by  IUSSTF travel desk by economy class and shortest route)	(02 Visits) 1,80,000.00/-	(02 Visits) 1,80,000.00/-	(04 Visits) 3,60,000.00/-
Per Diem (Subsistence Allowance) for US  Researchers in India  (i) Exchange visits of US faculty:-  (Per diem for visits of 24 days each  (a) Rs. 1000 per day) = Rs. 24,000.00/-  02 visits per year x 24 days x Rs.1000 =  Rs.48,000.00/-  (To be disbursed and settled strictly as per the actual duration of visits)	(02 Visits) 48,000.00/-	(02 Visits) 48,000.00/-	(04 Visits) 96,000.00/-
Accommodation for US Researchers in India  (i) Exchange visits of US faculty:- (Accommodation for visits of 24 days each @ Rs. 1400 per day) = Rs. 33,600.00/- 02 visits x 24 days x Rs. 1400 = Rs. 67,200.00 (To be supported with receipts as per the actual duration of visits)	(02 Visits)	(02 Visits) 67,200.00/-	(04 Visits) 1,34,400.00/-
Related Travel Costs  (Visa, travel insurance, airport transfers for US scientists)  (i) Exchange visits of US faculty:-  02 visits per year @ US \$ 200 per visit 02 visits x US \$ 200 x Rs. 45 = Rs. 18,000/-  (To be disbursed against supporting receiptionly)	(02 Visits)		

of Indian faculty & students/post docs		. a. 1	
Exchange visits per year by Indian aculty:-			
4 Nos. per year i.e. a total of 8 visits in 2 years (\$ 2000 per visit = Rs.90,000.00/-) 1US \$= Rs.45)	(04 Visits)	(04 Visits)	(08 Visits)
Airfare cost @ 2000 USD per visit per year 4 visits x USD 2000 = USD 8,000 USD 8,000 x Rs. 45 = Rs. 3,60,000.00/-	3,60,000.00/-	3,60,000.00/-	7,20,000.00/-
(Air tickets for travel to be provided by IUSSTF travel desk by economy class & shortest route)	*		
(ii) Exchange visits per year by Indian  students/post docs:-  1 visit per year i.e. a total of 2 visits in 2 years  (\$ 2000 per visit = Rs. 90,000.00/- )  (1US \$= Rs. 45)	(01 Visit)	(01 Visit)	(02 Visits)
Airfare cost @ 2000 USD per visit per year  1 visit x USD 2000 = USD 2000/-  USD 2000/- x Rs. 45 = Rs. 90,000.00/-  (Air tickets for travel to be provided by	90,000.00/-	90,000.00/-	1,80,000.00/-
IUSSTF travel desk by economy class & shortest route)  Perdiem (Subsistence Allowance) for Indian Researchers in US:			
(i) Exchange visits of Indian faculty:- (Per diem for visits of 25 days each @ US \$ 50	A COLUMN TO THE	( 04 Visits)	(08 Visits)
per day i.e. US \$ 1250 per visit = Rs. 56,250.00 per visit 04 visits x US \$ 50 per day x 25 days x Rs.45 = Rs. 2,25,000/-	( 04 Visits) 2,25,000.00/-	2,25,000.00/-	4,50,000.00/
(ii) Exchange visit of Indian students/post docs:-			
(Per diem for visits of 03 months each @ \$ 1000 per month i.e. US \$ 3000 per visit = Rs. 1,35,000.00/- per visit	(01 Visit) 1,35,000.00/-	(01 Visit) 1,35,000.00/-	(02 Visits) 2,70,000/-
01 visit x US \$ 1000 per month x 3 months x Rs. 45 = Rs. 1,35,000.00/-	1,55,500.00		
(To be disbursed and settled strictly as per the actual duration of the visit)		27.71-	

period starting in the financial year 2010-11 (effecting from Award date and release of beands). The grants will be released to the host institution in India i.e. University of Delhi, who be administering the grants for the Joint R & D Centre.

E	be administering the grants for the Joint R & Budget Heads	First Year Amount (Rs.)	Second Year Amount (Rs.)	Total (Rs.) In Lakh (\$=Rs.45.00)
	Exchange visits of US Researchers			
	Iravel for US faculty  (i) Exchange visits per year by US faculty:-  2 Nos. per year i.e. a total of 4 visits in 2 years (\$ 2000 per visit = Rs.90,000.00)  (1US \$= Rs. 45.00)  Airfare cost @ 2000 USD per visit 02 visits per year x 2000 USD = 4000 USD i.e. USD 4000 x Rs. 45/- = Rs.1,80,000.00  (Air tickets for travel to be provided by IUSSTF travel desk by economy class and shortest route)	(02 Visits) 1,80,000.00/-	(02 Visits) 1,80,000.00/-	(04 Visits) 3,60,000.00/-
	Per Diem (Subsistence Allowance) for US  Researchers in India  (i) Exchange visits of US faculty:-  (Per diem for visits of 24 days each  (a) Rs. 1000 per day) = Rs. 24,000.00/-  02 visits per year x 24 days x Rs.1000 =  Rs.48,000.00/-  (To be disbursed and settled strictly as per the actual duration of visits)	(02 Visits) 48,000.00/-	(02 Visits) 48,000.00/-	(04 Visits) 96,000.00/-
	Accommodation for US Researchers in India  (i) Exchange visits of US faculty:- (Accommodation for visits of 24 days each @ Rs. 1400 per day) = Rs. 33,600.00/- 02 visits x 24 days x Rs. 1400 = Rs. 67,200.00 (To be supported with receipts as per the actual duration of visits)	(02 Visits)		100 00/
	Related Travel Costs  (Visa, travel insurance, airport transfers for Uscientists)  (i) Exchange visits of US faculty:-  02 visits per year @ US \$ 200 per visit 02 visits x US \$ 200 x Rs. 45 = Rs. 18,000/-  (To be disbursed against supporting receivable)	(02 Visits		

of Indian faculty & students/post docs			
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Exchange visits per year by Indian			
aculty:-	7-15 m		
4 Nos. per year i.e. a total of 8 visits in 2 years (\$ 2000 per visit = Rs.90,000.00/-) (1US \$= Rs.45)	(04 Visits)	(04 Visits)	(08 Visits)
Airfare cost @ 2000 USD per visit per year 4 visits x USD 2000 = USD 8,000 USD 8,000 x Rs. 45 = Rs. 3,60,000.00/-	3,60,000.00/-	3,60,000.00/-	7,20,000.00/-
(Air tickets for travel to be provided by IUSSTF travel desk by economy class & shortest route)			
(ii) Exchange visits per year by Indian  students/post docs:-  1 visit per year i.e. a total of 2 visits in 2 years  (\$ 2000 per visit = Rs. 90,000.00/- )	(O1 Vizia)	(01 Visit)	(02 Visits)
(1US \$= Rs. 45)	(01 Visit)	(OI VISIL)	(02 113113)
Airfare cost @ 2000 USD per visit per year  1 visit x USD 2000 = USD 2000/-  USD 2000/- x Rs. 45 = Rs. 90,000.00/-  (Air tickets for travel to be provided by  IUSSTF travel desk by economy class &	90,000.00/-	90,000.00/-	1,80,000.00/-
Perdiem (Subsistence Allowance) for Indian Researchers in US:		з	The second
(i) Exchange visits of Indian faculty:-	a section of the sect		
(Per diem for visits of 25 days each @ US \$ 50 per day i.e. US \$ 1250 per visit = Rs. 56,250.00	( 04 Visits)	( 04 Visits)	(08 Visits)
per visit 04 visits x US \$ 50 per day x 25 days x Rs.45 = Rs. 2,25,000/-	2,25,000.00/-	2,25,000.00/-	4,50,000.00/
The result of the last of the			
(ii) Exchange visit of Indian students/post			
docs:-	(01 Visit)	(01 Visit)	(02 Visits)
(Per diem for visits of 03 months each @ \$1000 per month i.e. US \$ 3000 per visit = Rs.			Participal de l'arrange de
\$ 1000 per month i.e. US \$ 3000 per visit = Rs. 1,35,000.00/- per visit 01 visit x US \$ 1000 per month x 3 months x Rs. 45 = Rs. 1,35,000.00/-	1,35,000.00/-	1,35,000.00/-	2,70,000/-

mouation for Indian Researchers	in		
Exchange visits of Indian faculty:-			
(Accommodation for visits of 25 days each US \$ 60 per day i.e. US \$ 1500 per visit = Rs 67,500.00/- per visit 04 visits x US \$ 60 per day x 25 days x Rs. 4 = Rs. 2,70,000.00/-	s. (04 Visit	(0 / 7/3/	(00 115115
(ii) Exchange visits of Indian students/post			Town Br.
(Accommodation for visit of 03 Months each \$ 1000 per month i.e. US \$ 3000 per visit = R 1,35,000/- 01 visit x US \$ 1000 per month x 03 months x Rs.45 = Rs. 1,35,000.00/-	s.	(or visit	(*= *10163)
(To be supported with receipts as per actual duration of visits)			
Travel Related Costs (Visa, travel insurance, airport transfers for Indian Scientists)			
(i) Exchange visits of Indian faculty:- 04 visits per year @ US \$ 200 per visit	(04 Visits)	(04 Visits)	(08 Visits)
45 = Rs. 36,000.00/	36,000.00/-	36,000.00/-	72,000.00/-
(ii) Exchange visits of Indian students/post .	71. "		
01 visit per year @ US \$ 200 01 visits x US \$ 200 x Rs. 45 = Rs. 9,000.00/-	(01 Visit)	(01 Visit)	(02 Visits)
only)	9,000.00/-	9,000.00/-	18,000.00/-
Associated Costs (i.e. consumables, equipment atilization and dissemination of educational materials and reports, publications etc.)  Released to the Indian Host Institution)	20,000.00/-	20,000.00/-	40,000.00/-
nstitutional Overheads @ 10% on S.No A(2- , B(2-4) & C	96,320.00/-	96,320.00/-	1,92,640.00/-
**Reference of Budget S.No A(1-4), B(1-4)  & D  Quivalent in US\$	16,89,520.00/- (\$37,545.00)	16,89,520.00/- (\$37,545.00)	33,79,040.00/- (\$75,090.00)
dvance Grant being released to Indian Host stitution as per Sr. No A(2-4), B(2-4), C & as per IUSSTF award letter	10,59,520.00/-	10,59,520.00/-	

Exchange rate 1 US\$ = Rs.45.00 (as on 30th April 2010)

grand total of funds approved by IUSSTF for the subject Indo-US R&D Network center is 3.33,79,040.00.00 (Rupees Thirty three lakhs seventy nine thousand and forty only) for the two rear period effective from the award letter date.

The grant for the first year of the project i.e. in FY 2010-2011 amounting to Rs. 10,59,520.00 Rupees Ten lakhs fifty nine thousand five hundred and twenty only) is being released by cheque no. 853289 dated 30.04.2010 of Union Bank of India favoring "The Registrar, University of Delhi". (Host Institution in India)

The first year grants are released as per the prevailing Exchange Rate of US \$ as on 30<sup>th</sup> April 2010. The Indian Host Institution should settle the amounts as per the actual exchange rate prevailing on the date of disbursements along with exchange rate conversion supported with receipts/vouchers. The second year grant will be released on settlement of UC/SE for the grants released in the first year by the Indian Host Institution i.e. University of Dethi.

The grants for the second year as approved will be released only after the completion of the first year and subject to satisfactory progress of scientific work plan & aims and objectives as detailed in the pject proposal and on receipt of utilization certificate and statement of expenditure (UC/SE) from the Indian host institution. (University of Delhi)

Note: The Indian and US PIs should ensure full utilization of exchange visits as approved from either side in each year. No carry-forward of unutilized exchange visits will be permissible.

# The grantee Institute /PI may please note the following towards Strict Compliance:

The Air tickets for all exchange travel visits under the centre will be provided by the IUSSTF travel desk only by economy class and shortest route. Advance intimation of travel schedule must be provided to IUSSTF by Indian Project Coordinator so as to facilitate the ticketing by IUSSTF travel desk.

The Indian Project Coordinator will furnish the Certificate/confirmation of all travel undertaken under the exchange visits immediately after each travel (format enclosed).

Re-appropriation of heads of expenditure is not admissible, without prior approval of IUSSTF.

The grantee institute will have to submit a Utilization Certificate and Statement of Expenditure to the Indo-US S&T Forum at the end of first and second financial year. The UC/SE should strictly conform to the budget heads of grant as in this award letter. The format for submission of UC/SE is enclosed.

Any unspent balance at the end of each financial year must be refunded to Indo-US S&T Forum by a demand draft payable at New Delhi.

If required, the grantee institute will have to submit the original bills/vouchers in support of the expenditure to IUSSTF.

(vii) At the end of the first and second year, University of Delhi along with other collaborating partners in the subject Indo-US Joint Centre will have to submit a detailed progress report along with the review committee report on the activities of the Centre and specifically the bilateral scientific activities accomplished by the Centre.

presentations at conference emanating out of the Centers activities.

J. Varadorgan

(R. Varadarajan)
Controller

To,

- 1. Dr. Kirti Ranjan, Department of Physics & Astrophysics, University of Delhi. (kirti@fnal.gov)- (Indian PI.)
- 2. Prof. Shekhar Mishra, Fermilab, Illinois, USA (mishra@fnal.gov)- (US PI & Project Coordinator.)
- 3. Prof. R. K. Shivpuri, University of Delhi (shiv@fnal.gov) (Mentor & Advisor)
- 4. Mr. Y.P. Prabhakara Rao, Integrated Circuits, Mask Fab, Bharat Electronics Ltd, Bangalore (Indian Co PI)
- 5. Ms. Rejeena Rani Y, Integrated Circuits, Mask Fab, Bharat Electronics Ltd, Bangalore (Indian Co PI)
- 6. Dr. Harry Weerts, Argonne National Laboratory, Illinois, USA (US Co PI, email: weerts@anl.gov)
- 7. Registrar, University of Delhi Request for disbursal of grants as per the award letter.
- 8. Vice Chancellor, University of Delhi for kind information
- 9. Project File

3. Varadargan

(R. Varadarajan)
Controller