

Prof. Vinay Gupta
Physics-Astro Physics

VOL-II DRDO-328

9810176792 (Nid)
7027439589 (Va)
Title

FILE No. _____

Finance - III (1)
26/3/2019 to 25/3/2022
Tenure: - ~~4/4/2019~~ to 31/03/2022

Extended upto 25/3/2022

Title: - Fabrication

to Applications"

Total Cost: - 4,58,067.9207-

Name

Address

Subject

From

To

Transferred to Miranda House
on 29/8/2022

9818079287
GUNJAN

Transferred
to Miranda House

Record File

No. 450

FILEWELL®

Email : erip_er@hqr.drdo.in
Tele : 011-23017661
Fax : 011-23017582



DRDO-328
Finance Branch - III (1)
Diary No. 365
Date 14/3/19

No. ERIP/ER/201706006/M/01/1749
Directorate of Extramural Research & Intellectual Property Rights (ER&IPR)
Defence Res & Dev Orgn (DRDO)
DRDO Bhawan, Rajaji Marg
New Delhi-110 011

Dated: 1 Mar 2019

To Prof. Vinay Gupta
Dept. of Physics and Astrophysics
University of Delhi
Delhi - 110 007

Sub: Grants-in-Aid for research project titled "Fabrication of Lamb Wave Devices on SiO₂/Si Membrane for Strategic Applications"

Approval of the competent authority DG (TM) is hereby conveyed for a grant of **Rs. 428.032 Lakh (Rupees Four Hundred Twenty Eight Lakh Three Thousand Two Hundred Only)**, to University of Delhi for pursuing the research on the subject titled project by Prof. Vinay Gupta, Dept. of Physics and Astrophysics, University of Delhi, Delhi - 110 007 as Principal Investigator and Dr. Monika Tomar, Miranda House, University of Delhi, Dr. Pradeep K. Jha, DDU College and Dr. Anjali Sharma, ARSD College as Co-Investigators.

2. The grant shall be spent as follows:

Expenditure on ↓ (Rs in lakh) during →	Year 1	Year 2	Year 3	Line Total
Staff- JRF - 02 @ Rs. 25, 000/- p.m. + 24 % HRA for first two years and SRF in the third year @ Rs. 28,000/- p.m.	7.44	7.44	8.34	23.22
b) Equipment (including spares thereof)	254.862	0.00	0.00	254.862
c) Operation and maintenance	0.00	6.66	2.36	9.02
d) Expendables	23.00	16.00	15.00	54.00
e) Travel	0.50	0.50	0.50	1.50
f) Contingencies	1.00	1.00	1.00	3.00
g) Visiting Faculty	6.00	6.00	6.00	18.00
i) Procured services (other than (g)) and metered utilities	0.00	0.00	0.00	0.00
j) Institutional Overheads	21.48	21.48	21.47	64.43
Column Totals	314.282	59.08	54.67	428.032

Grand total: **Rs. 428.032 Lakhs (Rupees Four Hundred Twenty Eight Lakh Three Thousand Two Hundred Only)**.

3. The project will last for **03 years** from the **date of release of the first installment by the PCDA (R&D)** and it will be governed by the terms and conditions given overleaf.

4. The deliverables of the project are:

- I. 20 Lamb Wave Devices to SSPL and Sitar each (frequency of operation: 100 to 200 MHz) for detection of DMMP and DBS (upto 100 ppb) with high sensitivity, repeatability and shelf life.
- II. 10 high frequency Lamb wave devices to SSPL and Sitar each (frequency of operation > 300 MHz) for detection of DMMP and DBS (upto 100 ppb) with high sensitivity, repeatability and shelf life.
- III. 10 lamb wave pressure sensors to sitar for pressure detection upto 20 psi.
- IV. 2 processed wafers of moderate frequency and high frequency operation to sitar for further packaging and testing

ARF-II
2/17/3

JRF/589
12/3/19

AR(F)II/3020
12/03/2019

JR/FA
MS



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No. ERIP/ER/201706006/M/01/1749

Govt of India, Ministry of Defence
Defence R&D Organisation (DRDO)
Directorate of Extramural Research and
Intellectual Property Rights
DRDO Bhawan, Rajaji Marg
DHQ PO, New Delhi -110011.

18 October 2019

To

Prof Vinay Gupta
Dept of Physics and Astrophysics
University of Delhi
Delhi - 110 007

Corrigendum

Subject: Sanction for additional funds under Equipments head and revision of fellowship from 1 January 2019 for the project under Grants-in-aid titled "Fabrication of lamb wave devices on SiO₂/Si membrane for strategic applications"

References:

1. Your request letter dated 23-Aug-19.
2. Project sanction letter of even No. dated 01-Mar-19

In exercise of power delegated vide Sl. No. 3.1 of Gol, Mod letter No. DRDO/DFMM/PL/83226/M/01/1174/D(R&D) dated 28 June 2018, the sanction of competent financial authority of DRDO i.e. DG (TM) is hereby conveyed for additional funds under Equipments Head and revision of fellowship w.e.f. 1.1.19 for the subject project. The following amendments are made in sanction letter of even No. dated 01-Mar-19:-

FOR: Table as per para 2 of sanction/corrigendum letter dated 01-Mar-19:-

Expenditure on	Year 1	Year 2	Year 3	Line total
Staff salary : JRF-2 @ ₹ 25000/- + 24% HRA pm for first two years and SRF-2 @ ₹ 28000/- + 24% HRA pm for last third year	744000	744000	834000	2322000
Equipments & accessories	25486200	0	0	25486200
Operational & Maintenance	0	666000	236000	902000
Expendables/Consumables	2300000	1600000	1500000	5400000
Travel Domestic	50000	50000	50000	150000
Contingencies	100000	100000	100000	300000
Visiting Faculty/Research Consultancy	600000	600000	600000	1800000
Procured Services	0	0	0	0
Institutional Overhead	2148000	2148000	2147000	6443000
Column Total	31428200	5908000	5467000	42803200

(Grand Total: ₹42803200/- (₹ Four crore twenty eight lakh three thousand two hundred only)

READ: Table after revised grant of Equipments Head salary revision:-

Expenditure on	Year 1	Year 2	Year 3	Line total
Staff salary : JRF-2 @ ₹ 31000/- + 24% HRA pm for first two years and SRF-2 @ ₹ 35000/- + 24% HRA pm for last third year	922560	922560	1041600	2886720
Equipments & accessories	27986200	0	0	27986200
Operational & Maintenance	0	666000	236000	902000
Expendables/Consumables	2300000	1600000	1500000	5400000
Travel Domestic	50000	50000	50000	150000
Contingencies	100000	100000	100000	300000
Visiting Faculty/Research Consultancy	600000	600000	600000	1800000
Procured Services	0	0	0	0
Institutional Overhead	2148000	2148000	2147000	6443000
Column Total	34106760	6086560	5674600	45867920

(Grand Total: ₹45867920/- (₹ Four crore fifty eight lakh sixty seven thousand nine hundred twenty only)


All other entries as mentioned in the sanction letter of even No dated 01-Mar-19 remain unchanged.

This issue with concurrence of IFA(R&D) vide their UO No IFA/R&D/0031/ER&IPR/2019/Vol-I/1003 dated 9.10.19.


(Anil Kumar Aggrawal)
Director, ER&IPR

Copy to :-

1. The Registrar, University of Delhi, Delhi - 110 007
2. Dr Monika Tomar, Miranda House, University of Delhi, Delhi-110007 - as Co-Investigator
3. Dr Pradeep Kumar Jha, DDU College, Sec-78, Dwarka, New Delhi - 110 078 - as Co-Investigator.
4. Dr Anjali Sharma, ARSD College, Dhaula Kuan, New Delhi-110021 -- as Co-Investigator.
5. PCDA(R&D), DRDO Cell, RK Puram, New Delhi-110 066.
6. IFA(R&D), DRDO Bhawan, New Delhi.
7. The Director, SSPL, DRDO, Lucknow Road, Timarpur, Delhi - 110054
8. Sh JS Rawat, Sc 'G', SSPL, DRDO, Lucknow Road, Timarpur, Delhi - 110054
9. DGADS L-2 Block, New Delhi - 110 001.


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on SIC members
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