

भारत सरकार, रक्षा मंत्रालय
रक्षा अनुसंधान तथा विकास संगठन
उत्साहस्था भौतिकी प्रयोगशाला
लखनऊ मार्ग, तिमरपुर, दिल्ली-54



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

No. 1115/CARS-53/TS/SPL/16

Dated 25 January 2017

To

Dr. Ajit Kumar Mahapatro, Asst. Prof.
Department of Physics and Astrophysics, Univ. of Delhi, Delhi 110007

SUBJECT: - SANCTION OF THE CARS PROJECT

I am directed to convey the Sanction of the Director SSPL for undertaking the following CARS project in accordance with the powers delegated to him, vide SI. No.2.4 of Govt. Of India, Min of Defence, Defence Research & Development Organization Letter No DRDO/DBFA/FA/ 83226/M/01/ 2031/D(R&D) dated 30th July 2010, as amended time to time, as per the following details:-

1. Title of the Project :- Investigation of Thermoelectric(TE) properties of Calcium Cobalt Oxide ($\text{Ca}_3\text{Co}_4\text{O}_9$) and Graphene Derivatives (as nano-inclusions) for TE Generator Applications
2. Faculty and the Institute to which CARS Awarded :- Dr. Ajit Kumar Mahapatro, Assistant professor, Department of Physics and Astrophysics Univ. of Delhi, Delhi 110007
3. CARS No. :- 1115/CARS- 53 /TS/SPL
4. Total Cost :- Rs. 9.83 Lakhs
5. Start Date :- From the date of receipt of the First Installment by the Institute
6. PDC :- 24 Months
7. Details of Funds :- As under

Estimated expenditure	Rs in lakhs
a) Personnel (JRF @ Rs. 25,000/- PM+HRA 30%= 32,500)	7.80
b) Equipment (computing resources)	NIL
c) other	2.03
Total	9.83

Required schedule of payment (Rs. In lakhs)	Payment
a) Initial Advance	4.75
b) at performance Milestone I of RSQR (after 12 months)	4.90
c) at performance Milestone II of RSQR (after 22 months)	NIL
d) on submission of Final Report.	0.18
Total	9.83

The progress of the CARS will be reviewed periodically (every six months).
Expenditure is debit able to Major Head 2080, Minor Head 110-850/01 of Defense estimates

Mamta Khaneja
(Dr. Mamta Khaneja)
Sc.'F'
D.O. Tech Secrtr.
For Director

- Copy to:-
1. DCDA (R&D) Metcalf House
 2. Registrar, Department of Physics and Astrophysics Univ. of Delhi, 110007
 3. Chairman Research Council, Department of Physics and Astrophysics Univ. of Delhi, 110007
 4. Directorate ER & IPR, DRDO Bhawan, New Delhi-110011
 5. Director PM (MED), DRDO Bhawan, New Delhi-110011

NOO:-

Sr. Accounts Officer, Finance Section, SSPL