

Dated: 02-Jul-2019

**ORDER**

Subject: Research project entitled "**Optical manipulation and trapping single gold shell encapsulated semiconductor quantum dots and application towards bioimaging**" under the guidance of Dr. Sudhir Cherukulappurath, Physics, Goa University, Taleigao, North Goa, Goa-403208.

1. This is in continuation of SERB's sanction order No. "ECR/2016/000531" dated "14 December, 2016 " of **Science and Engineering Research Board (SERB)**.
2. Sanction of the competent authority is hereby accorded to the payment of a sum of **Rs. 570000/-** (Rupees Five Lakh Seventy Thousand only) under 'Grants-in-aid General' to **The Registrar, Goa University, Goa University, Taleigao** being the 4th grant for the financial year 2019-2020 for implementation of the above said project.
3. Sanction of the competent authority is also accorded to the carry forward of unspent balance of **Rs. 151971/-** (Rupees One Lakh Fifty One Thousand Nine Hundred and Seventy One only) (Recurring Rs. 69582 and Non-Recurring Rs. 82389 ) to Goa University, Taleigao from FY 2018-2019 to FY 2019-2020 for the same purpose for which it was sanctioned.
4. Sanction of the grant is subject to the conditions as detailed in Terms & Conditions available at the website ([www.serb.gov.in](http://www.serb.gov.in)).
5. It is certified that provision of GFR 212 relating to Utilization Certificates (Ucs) for the funds released under the grant have been satisfied and the UC/s is/are enclosed herewith.
6. The expenditure involved is debitable to **Fund for Science & Engineering Research (FSER)**  
**This release is being made under Early Career Research Award. (EC Physical & Mathematical Sciences) (GEN).**
7. The Sanction has been issued to Goa University, Taleigao with the approval of the competent authority under delegated powers on **28 June, 2019** and vide Diary No. **SERB/F/2222/2019-2020** dated **01 July, 2019**
8. The release amount of **Rs. 570000/-** (Rupees Five Lakh Seventy Thousand only) (Recurring Rs. 570000 and Non-Recurring Rs. 0 ) will be drawn by the Under Secretary of the SERB and will be disbursed by means of RTGS transaction as per their Bank details given below:

Account Name	The Registrar, Goa University
Account Number	10664493609
Bank Name & Branch	State Bank of India State Bank of India, Goa University Complex, Taleigao Plateau, Goa 403 206
IFSC/RTGS Code	SBIN0004311
Email id of A/C Holder	fo@unigoa.ac.in
Email id of PI	sudhir.c@unigoa.ac.in

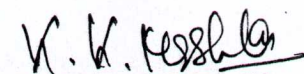
9. The institute will maintain separate audited accounts for the project. A part or whole of the grant must be kept in an interest earning bank account which is to be reported to SERB. The interest thus earned will be treated as credit to the institute to be adjusted towards further installment of the grant.
10. As per rule 211 of GFR the accounts of Grantee Institution shall be open to inspection by the sanctioning authority / audit whenever the institute is called upon to do so.

11. The institute will furnish to the SERB, Utilization certificate(separate for Recurring & Non-Recurring ) and an audited statement of accounts pertaining to the grant immediately after the end of each financial year.

12. After completion of the project unspent balance if any should be returned as Demand Draft drawn in favour of "Fund for Science and Engineering Research" payable at New Delhi.

13. The organization/institute/university should ensure that the technical support/financial assistance provided to them by the Science & Engineering Research Board, a statutory body of the Department of Science & Technology (DST), Government of India should invariably be highlighted/ acknowledged in their media releases as well as in bold letters in the opening paragraphs of their Annual Report.

14. In addition, the investigator/host institute must also acknowledge the support provided to them in all publications, patents and any other output emanating out of the project/program funded by the Science & Engineering Research Board, a statutory body of Department of Science & Technology (DST), Government of India.



(Dr. Magesh K K)

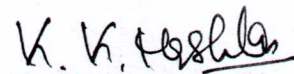
Scientist

ms\_pm@serbonline.in

To,  
Under Secretary  
SERB, New Delhi

**Copy forwarded for information and necessary action to: -**

1.	The Principal Director of Audit, A.G.C.R.Building, IIIrd Floor I.P. Estate, Delhi-110002
2.	Sanction Folder, SERB , New Delhi.
3.	File Copy
4.	<b>Dr. Sudhir Cherukulappurath</b> Physics Goa University , Taleigao, North Goa, Goa-403208 Email: sudhir.c@unigoa.ac.in Mobile: 918805239234
5.	The Registrar, Goa University, Goa University, Taleigao



(Dr. Magesh K K)

Scientist

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**UTILISATION CERTIFICATE**  
**FOR THE FINAL YEAR -(ending on 11-01-2020) Year- 2019-2020**

U.C. Pertains to

First Release	Second Release	Third Release	✓Fourth Release	✓Final Release
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*Is the UC provisional*

: NO

1. Title of the Project/ Scheme : **Optical manipulation and trapping single gold shell encapsulated semiconductor quantum dots and application towards bioimaging**
2. Name of Principal Investigator : **Dr. Sudhir Cherukulappurath**
3. Implementing Institution : **Physics Department, Goa University**
4. SERB sanction order No & date : **ECR/2016/000531, 14-12-2016**
5. Amount brought forward from the previous financial year quoting SERB letter number and date in which the authority to forward the said amount was given : 

: Amount	<b>Rs. 69583/-</b>
: Letter/Order No	<b>ECR/2016/000531</b>
: Date	<b>02-17-2019</b>
- 6.a. Amount received during the financial year (Please give SERB Letter/order no and date for the amount) : 

: Amount	<b>Rs. 570000/-</b>
: Letter/Order No.	<b>ECR/2016/000531</b>
: Date	<b>02-17-2019</b>
- 6.b. Interest earned, if any : **Nil**
7. Total Amount that was available for expenditure Rs. (Excluding Commitments) incurred during the financial year (11-01-2020) : **Rs. 6,39,583/-**
8. Actual Expenditure (excluding commitments) Incurred during the financial year (11-01-2020) : **Rs. 6,27,590/-**
9. Balance amount available at the end of the Financial year (8-9): OR/Negative balance (If expenditure incurred is more than the funds released) : **Rs. 11993/-**
10. Unspent Balance, If any, refunded to SERB (Give details of Cheque/DD No. etc.) : **Rs. 11993/- DD No. 210771 dtd 12-05-2022**
11. Amount to be carried forward to the next Financial year (If any) : **-Nil**


## UTILIZATION CERTIFICATE


Certified that out of **Rs. 570000/-** of **Recurring** grants-in-aid sanctioned during the year **2019-2020** in favour of **The Registrar, Goa University** under SERB letter/order No. **ECR/2016/000531** dated **02/06/2020** and **Rs. 69583/-** on account of unspent balance of the previous year, a sum of **Rs. 627590/-** has been utilized for the purpose for which it was sanctioned and that the balance of **Rs. 11993/-** remaining unutilized at the end of the year will be returned.

Certified that we have satisfied ourselves that the conditions on which the grants-in-aid was sanctioned have been fulfilled/are being fulfilled and that we have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Kinds of checks exercised

- 1.
- 2.

  
Signature of PI  
Date 05/09/2022

  
Signature of Registrar/Account Officer  
Date  
**Finance Officer**  
**Goa University**  
**Taleigao Plateau,**  
**Goa - 403 206**

  
Signature of Head of Institution  
Date  
**Registrar**  
**Goa University**  
**Taleigao Plateau,**  
**Goa - 403 206**

### Guidelines for preparation of U.C.

1. U.C. should be only for the grants released by the SERB. Please do not account for Security deposits/other matching grants/account opening charges and miscellaneous items.
2. SERB sanction No. and Dt should be accurately shown in the U.C.
3. Even if the grants is utilized in the financial year in which the grants was released by SERB a NIL U.C. needs to be forwarded to SERB along with a request for carrying forward the grant to the next financial year. Such grants which are carried forwarded must be shown in the subsequent U.C. as carried forward grant and not amount received in the subsequent year (ref S1 No.5 on pre-page)

### Science and Engineering Research Board

UC has been accepted by

Signature \_\_\_\_\_  
Name of the SERB Officer \_\_\_\_\_  
Designation \_\_\_\_\_