

DST- UK Selected Project

| SERIAL NUMBER | DST Reference No. | TITLE | INDIAN COORDNATOR | UK COORDINATOR |
|---------------|---------------------------|--|--|--|
| 1 | DST/INT/UK/ P-151/2017 | Bioinspired green catalysts for water purification | Prof. Chivukula Sastri, Indian Institute of Technology - Guwahati, | Dr Samuel de Visser, Institution University of Manchester, Oxford Road,Manchester,M13 9PL |
| 2 | DST/INT/UK/ P-152/2017 | Monitoring of PAHs and heavy metals in sediments of industrial estuaries, Glasgow and Yamuna River: PCR based detection of catabolic plasmids/genes in PAHs degrading and multi resistant bacterial isolates and their genotoxic potential | Professor Abdul Malik, Aligarh Muslim University, Department of Agricultural Microbiology, Faculty of Agricultural Sciences, ,Aligarh | Dr. Charles W.Knapp, University of rathclyde, Department of Civil & Environmental Engineering, 75 Montrose Street, Glasgow, Scotland Postcode G1 1XJ |
| 3 | DST/INT/UK/ P-153/2017 | Sensing and Security for Smart IoT | Ranjan Kumar Mallik, Indian Institute of Technology (IIT) Department of Electrical Engineering, Indian Institute of Technology, Hauz Khas, New Delhi | Maged Elakashlan, Queen Mary, University of London, School of Electronic Engineering and Computer Science, Queen Mary University of London, Mile End Road, London, UK (England), E1 4NS |
| 4 | DST/INT/UK/ P-154/2017 | Using sedimentary DNA to unravel the long-term impact of environmental changes on human health and subsistence in India | Dr. Niraj Rai, Birbal Sahni Institute of Palaeobotany, 53, University Road, Lucknow, Uttar Pradesh 226007, India | Prof. Eske Willerslev, University of Cambridge, Department of Zoology Cambridge, CB2 3EJ |
| 5 | DST/INT/UK/ P-155/2017 | An advanced integrated process for the treatment of sewage plant effluent using bio-based antimicrobial metal biosorbents and photocatalytic nanocomposite materials | Dr. Lalit M Pandey, Indian Institute of Technology Guwahati, Near Doul Gobinda Road, Amingaon, North Guwahati, Assam 781039 Phone: 03612583000 India | Dr. K. H. Aaron Lau, University of Strathclyde, Department of Pure and Applied Chemistry, 16 Richmond St, Glasgow, United Kingdom, G11XQ |
| 6 | DST/INT/UK/ P-156/2017 | Capacity building in rhizobacteria mediated plant stress resistance for Indian agriculture | Prof. Meenu Saraf Gujarat University Department of Microbiology and Biotechnology, University School of Sciences, Gujarat University, Ahmedabad- | Prof. Martin Buck, Imperial College of Science, Technology and Medicine (also known as Imperial College London) Room 448, SAFB Department of Life Sciences, London |

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| 7 | DST/INT/UK/ P-157/2017 | Natural-Coloured Functionally Graded Rubberised Geopolymer System: A cement-less solution for optimised concrete paver manufacturing | Dr. Sandeep Chaudhary Indian Institute of Technology Khandwa Road, Simrol, Indore 453552, India | Professor Yong Lu, University of Edinburgh, The School of Engineering, The University of Edinburgh Faraday Building, The King's Buildings, Mayfield Road, Edinburgh, EH9 3JL |
| 8 | DST/INT/UK/ P-158/2017 | An In-depth Analysis of Abuses in Social Media – Integrating Cues from Language, Behavior and Networks | Mr. Tanmoy Chakraborty Indraprastha Institute of Information Technology Delhi (IIIT-D), Okhla Industrial Estate, Phase - III New Delhi - 110020, India | Pete Burnap Cardiff University (Prifysgol Caerdydd) 5 The Parade Roath Cardiff Postcode CF24 3AA |
| 9 | DST/INT/UK/ P-159/2017 | Integration of space based SAR (BIG) data with ground based information for an improved near real time assessment and monitoring of seismic hazard | Mr. Tejpal Singh, CSIR-Central Scientific Instruments Organisation, CSIR-Central Scientific Instruments Organisation Precision Mechanical Systems (V-5) Sector 30 C, Chandigarh, | Dr Tim J Wright University of Leeds School of Earth and Environment Sciences University of Leeds, Leeds, LS2 9JT |
| 10 | DST/INT/UK/ P-160/2017 | Flexible Supercapacitors based on conducting polymer coated metal oxide aerogel nanostructures | Prof. Pravin P. Ingole Indian Institute of Technology Delhi Department of Chemistry, IIT Delhi, Hauz Khas, New Delhi 110016, India | Dr. Stephen Hickey University of Bradford School of Chemistry and Biosciences, University of Bradford Richmond Road, Bradford, BD71DP |
| 11 | DST/INT/UK/ P-161/2017 | UCL-IITI Partnership: Development of 3D Printable Biomimetic Hydrogels (Bio-inks) | Dr. Apurba K. Das Indian Institute of Technology Indore Discipline of Chemistry, Indian Institute of Technology Indore, Khandwa Road, Simrol, Indore 453552, MP India | Dr. Deepak Kalaskar, University College London, Division of Surgery and Interventional Science, Centre for Nanotechnology and Tissue Engineering Royal Free Hospital Campus, UCL, Rowland Street, London, NW3 2AW |
| 12 | DST/INT/UK/ P-162/2017 | In-situ bioremediation of non-aqueous phase liquids (NAPLs) pollution within the Baddi-Barotiwala Nalagarh (BBN) Industrial Area in Himachal Pradesh, India | Dr Brijesh Kumar Yadav Indian Institute of Technology, Roorkee Indian Institute of Technology Roorkee | Professor Paul Wood, Loughborough University, Department of Geography, Loughborough University Loughborough, LE11 3TU |

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| 13 | DST/INT/UK/ P-163/2017 | Vulnerability Assessment and Sustainable Solutions for Water Quality Management in the Urban Environment | Dr. Manish Kumar, Discipline of Earth Sciences, Indian Institute of Technology Gandhinagar, Palaj, Gujarat -382 355, India | Dr David Werner, Newcastle University Newcastle University, School of Engineering, Room 1.12, Cassie Building Newcastle upon Tyne, NE17RU |
| 14 | DST/INT/UK/ P-164/2017 | 4D Micro-Stereolithography Printing of Scaffolds using Plant Oil Polymers and Graphene for Various Functional Biomedical Applications | Dr.A.S.S.BALAN, VIT UNIVERSITY Center For Innovative Manufacturing Research (CIMR), School of Mechanical Engineering, VIT University, Vellore, Tamilnadu, Pincode: | Dr. Krzysztof K.K.Koziol Cranfield University Cranfield, MK43 0AL |
| 15 | DST/INT/UK/ P-165/2017 | Robust Cyber Security Framework for Longitudinal Smart Energy Monitoring Device Data (CS-SED) | Professor Saikat Kumar Shome, CSIR - Central Mechanical Engineering Research M G Avenue Durgapur-713209 WB India | Professor Vladimiro Sassone, University of Southampton, University Road, Southampton SO171BJ |
| 16 | DST/INT/UK/ P-166/2017 | Longshore Sediment Transport Simulations in a Changing Climate | Dr. Manasa Ranjan Behera, Indian Institute of Technology Bombay IIT Bombay, Powai, Mumbai 400 076, Maharashtra, India | Prof. Dominic E. Reeve, Swansea University (Prifysgol Abertawe) Swansea University College of Engineering, Bay Campus, Swansea SA1 8EN |
| 17 | DST/INT/UK/ P-167/2017 | Photo-Rechargeable Perovskite Batteries for Future Mobility | Dr. Shahab Ahmad, Jamia Millia Islamia, JMI (A Central University) Assistant Professor, Centre for Nanoscience and Nanotechnology, Jamia Millia Islamia (Central University), New Delhi, 110025, India | Dr. Michael De Volder University of Cambridge Institute for Manufacturing (IfM), 17 Charles Babbage Rd, Department of Engineering, University of Cambridge, Postcode CB3 0FS |
| 18 | DST/INT/UK/ P-168/2017 | Automated Continuous Manufacturing Platform for Functional Nanoscale Materials | Dr. Amol A. Kulkarni CSIR-National Chemical Laboratory Dr Homi Bhabha Road, Pashan, Pune - 411008, India | Professor Asterios Gavriilidis University College London, Dept of Chemical Engineering Torrington Place London Postcode WC1E 7JE |

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| 19 | DST/INT/UK/ P-169/2017 | Surface functionalization for food, packaging and healthcare applications | Prof. Suhas S. Joshi, Indian Institute of Technology Bombay, Department of Mechanical Engineering, IIT Bombay Powai, Mumbai | Prof. Stefan Dimov University of Birmingham, Department of Mechanical Engineering ,School of Engineering Edgbaston ,Postcode B15 2TT |
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The above proposals have been recommended by both Indian and UK Subject Expert Committees. The Indian Project Investigators are requested to submit the enclosed check list (Annexure-I), bank details (Annexure-II) and Budgetary details as proposed in the project with sufficient justification for processing the individual cases for sanctioning the Projects from DST side. The documents submitted by post to the following address.

Mr. S.K. Varshney
Scientist – ‘G’
International Bilateral Cooperation Division
Department of Science & Technology
Ministry of Science and Technology
Government of India Technology Bhavan,
New Mahrauli Road New Delhi – 110016
Email: skvdst@nic.in

CHECKLIST

I. GENERAL INFORMATION

1. Title of the Project :
2. Initiating Institute of project .:
3. Sponsoring Agency/Ministry :
 1. Total cost of the project :Nature and Quantum of foreign collaboration sought
 - (i) Financial support: :
 - (ii) Equipment support :
 - (iii) Technical support :
 - (iv) Manpower training :
5. Is there any possibility, however :
remote of use of data, information
of result of the work which may
impinge on India's national security?
If yes, the nature of such a use may
be indicated. (In case the concerned
scrutinizing Ministry do not have clear
answer, the matter should be referred
to the DRDO and MHA for examination).

II. ORIGIN OF THE PROJECT AND ITS SPONSORS :

6. If the proposal is foreign-originated,
what is the background of the foreign
agency or organization which is sponsoring
the project? Information available, if any on
past collaboration by foreign agency with
Indian Institution.

7. Are the foreign agency, organization, scientists concerned, known to have taken up any project of military significance in the past or are known to be associated with any military organization or project?

(if the above information is not known or if there is definite information that there is no such association, these should be clearly indicated).
8. Is the proposer (Indian) known to the foreign collaborator and his group for some time and has this emerged naturally from the research work done by the two sides?

III. FUNDING OF THE PROJECT

9. Is the foreign source known to have funded research into sensitive and national security areas in its own country or in other countries?
10. Are there reasons to believe that the foreign source is a cover name for some other sponsor?

IV. ADMINISTRATION AND CONTROL OF THE PROJECT

11. Give a list of the likely places of visit :
within the country planned by the foreign collaborator. Also give a list of the institutions which the collaborator is likely to visit.
12. Will any sensitive source material be referred to during the course of the research?
13. (I) Does the collaboration involve
 - a) Transfer of biological material(s) :
 - b) Use of radioactive materials :
 - c) Use of environmentally or otherwise hazardous material(s) :
 - d) Use of Genetically Modified Organisms :
 - e) Field trials or testing :
 - f) Ethical issues :
 - g) Issues related to Intellectual Property Rights (IPR) :

14. If answer to any section of question 13 is yes, are the investigators/ proposers aware of the relevant regulations and have they agreed to abide by them?
15. Will the research be conducted in accordance not only with the country's own ethical and environmental standards, but with international standards as well?
16. Certified that above information is true to the best of our knowledge

Signature of the Project Coordinator

Signature of the Head of the Institution

ECS Details for Electronic transfer of the grant
International Cooperation Division
Department of Science & Technology
Bank details for transfer of DST fund electronically

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| Agency name as registered with DST CPMS | |
| Agency Code as per CPMS | |
| Account Holders name/ designation | |
| Name of Bank and address | |
| Saving Bank Account Number | |
| IFSC Code | |
| MICR Code | |

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| Sanction No. | DST/INT/ |
| Name of Principal Investigator | |
| E-mail (Agency/PI) | |
| Mobile No. (Agency/PI) | |
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I do hereby certify that the above mentioned account is an interest bearing account and I take all responsibility for declaring the interest so accrued on the released grant from DST in the SE/UC to be furnished to DST.

Signature of Finance Authority with seal

(Please note that Agency name and Account holders name should be identical.)

VISIT PROPOSAL

1. Project Title:

2. DST's Sanction Order No: _____ Dated: _____

3. Name and position with full official address of the visiting scientist:
(including his/her Phone, Fax , Email)

4. **VISIT DETAILS:**
 - (i) Period of visit : _____ From: _____
 - (ii) Duration (in days): _____
 - (iii) Place(s) to be visited: _____

5. Whether any visit (s) have taken place previously under this project:
(if yes, please fill the following table in chronological order):

| Period of visit | | Name(s) of scientist(s) |
|-----------------|----|-------------------------|
| From | To | |
| | | |
| | | |

6. Name, position and address of the host scientist (**attach a copy of the invitation letter, only in case of visit by Indian scientists**)

7. Brief status of the work achieved so far (in general terms):

8. Brief Work Plan and purpose of the proposed visit.

9. FINANCIAL STATUS (in Rs.)

| Sanctioned amount | Amount released | Expenditure incurred | Balance |
|-------------------|-----------------|----------------------|---------|
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10. Weather you need further release of grant? (if yes, please ensure wheather you have submitted the visit report of each one mentioned in table 5 to DST alongwith the statement of accounts)

*Certified that the visiting scientist is presently working on the above mentioned project and is affiliated to the institute/department/laboratory/University as...Associate Professor...from..... Till present.....

(*Only for Indian participants)

Name & Signature of the Indian PI

Forwarded by

Head of the Department/Institute