

## DST-UKIERI Thematic Partnerships 2016

**UKIERI**  
UK-India Education  
and Research Initiative

SNo	Project Title	Project Area Theme	UK Lead Institution	India Lead Institution
1	Peptide Based Semiconducting Materials for Organic-electronic devices	Material Science	University of Cambridge	Indian Institute of Technology Guwahati
2	Past, present and future of bats in Western and Central India – impact and implications of climate change on species ranges	Climate Research	University of Bristol	University of Osmania, Hyderabad
3	Methanol Fed High Energy Density Fuel Cell System with Novel Catalyst and Flow Field Design	Physics and Engineering	Loughborough University	PSG College of Technology, Coimbatore
4	Nonlinear Interaction between Extreme Waves and Floating Bodies with Deformable Structures	Climate Research	City, University of London	Indian Institute of Technology Madras
5	Mode of CD40 clustering dictates its functional duality	Human Health	University of York	National Centre for Cell Science, Pune
6	Characterization of Corrosion Pitting and cracking in Metallic Structures	Material Science	University of Manchester	Indian Institute of Science, Bangalore
7	Theoretical and experimental studies of suspensions of magnetic nanoparticles, their applications and generalizations.	Material Science	University of Bath	Indian Institute of Technology Delhi
8	Environmental adaptation and resilience to climate change: investigating the sustainability of the Indus Civilisation (Indus Sustainability)	Climate Research	University of Cambridge	Banaras Hindu University
9	Tidal Energy for Sustainable Village Electricity Supply in the Indian Sundarbans Biosphere	Climate Research	University of Edinburgh	Indian Institute of Technology Kharagpur
10	Development of Cost-effective and Green Assay Technology for the Selective Detection of Toxic Metal Ions using Functionalized Gold Nanoparticles.	Material Science	University College London	CSIR - Institute of Minerals and Materials Technology Bhubaneswar
11	Big Data Aware High Capacity Wireless Network Architecture Using Caching and Machine Learning	Data Science	University of Edinburgh	Indian Institute of Technology Indore
12	Nature and nurture in arsenic induced toxicity of Bihar, India	Human Health	University of Salford	Anugrah Narayan College Patna
13	Facilitating the Intelligent Management of Chronic Wounds in Diabetic Patients: Developing Accessible Wound Monitoring Technologies	Human Health	University of Ulster	Amity University Noida
14	Engineering novel electronic and magnetic states in pyrochlore iridates - multifunctional materials for next generation devices	Material Science	Loughborough University	Indian Association for the Cultivation of Science Kolkata
15	Miniaturised particulate sensors for climate science	Climate Research	University of Cambridge	Indian Institute of Technology Kolkata
16	Investigating BRCAness in epithelial ovarian cancer (EOC) in India to develop stratified surgical and chemotherapy options	Human Health	Newcastle University	Tata Medical Centre Kolkata

17	Understanding Recent Extreme Events in India in the Context of Climate Change	Climate Research	University of Oxford	Indian Institute of Technology Mumbai
18	Investigating the regulation and manipulation of autophagy, mitophagy and xenophagy upon Mycobacterium tuberculosis infection in human embryonic stem cell-derived macrophages.	Human Health	University of Birmingham	International Centre for Genetic Engineering and Biotechnology, New Delhi
19	Concentrated Photovoltaic (CPV) Assisted Tandem Artificial Photosynthetic (AP) Device for Effective Solar-to-Chemical Conversion	Material Science	University of Exeter	Indian Institute of Technology Chennai
20	Data-Driven Intelligent Energy Management for Environmentally Sustainable Energy Access	Data Science	The University of Edinburgh	Indian Institute of Technology Gandhinagar
21	A Wearable Fetal Movement Monitor for Prenatal Care in Community Medicine Practice	Human Health	Imperial College, London	Christian Medical College, Vellore Tamil Nadu
22	Bio-Climate Feedbacks of Melting Himalayan Ice	Climate Research	University of Bristol	Jawaharlal Nehru University
23	Understanding differences in the patterns of osteoarthritis in Indian and Western population: Impact on symptoms, treatment options and their outcome	Human Health	University of Leeds	All India Institute of Medical Sciences, New Delhi
24	Advancing MEG based Brain-Computer Interface Supported Upper Limb Post-Stroke Rehabilitation	Human Health	Ulster University	Indian Institute of Technology Kanpur
25	Estimating silicate weathering in a rising CO2 world from river water chemistry and lab-experiments: implications for future climate models	Climate Research	University of Cambridge	Indian Institute of Science, Bangalore
26	Towards an integrated approach for assessing the impact of climatic stresses on agriculture and the exchange of greenhouse gas on the Indo-Gangetic Plain	Climate Research	University of Leicester	Indian Institute of Technology Kanpur
27	Ultrasound based assessment of tissue biomechanics to enhance the clinical management of foot related pathologies	Human Health	Staffordshire University	SASTRA University, Tamil Nadu
28	Learning Robotic Motor Skills, Visual Control and Perception for Warehouse Automation	Data Science	University of Edinburgh	Indian Institute of Technology Kanpur
29	Investigation of neurodegeneration associated with defective DNA break repair	Human Health	University of Sheffield	Manipal University, Karnataka
30	Pursuit of Novel and Enhanced Optoelectronic Effects in Hybrid Perovskite Based Nanostructures	Material Science	University of Cambridge	Indian Institute of Science Education and Research Pune
31	Role of Entropy and information encoding in Guided Self-Assembly of Materials	Material Science	University of Cambridge	Jawaharlal Nehru Centre for Advanced Scientific Research Bengaluru
32	Non-parametric Smart Sensing Analytics based on Large Spectrum Data and Estimation of Channel Activity Statistics	Data Science	University of Liverpool	Ahmedabad University