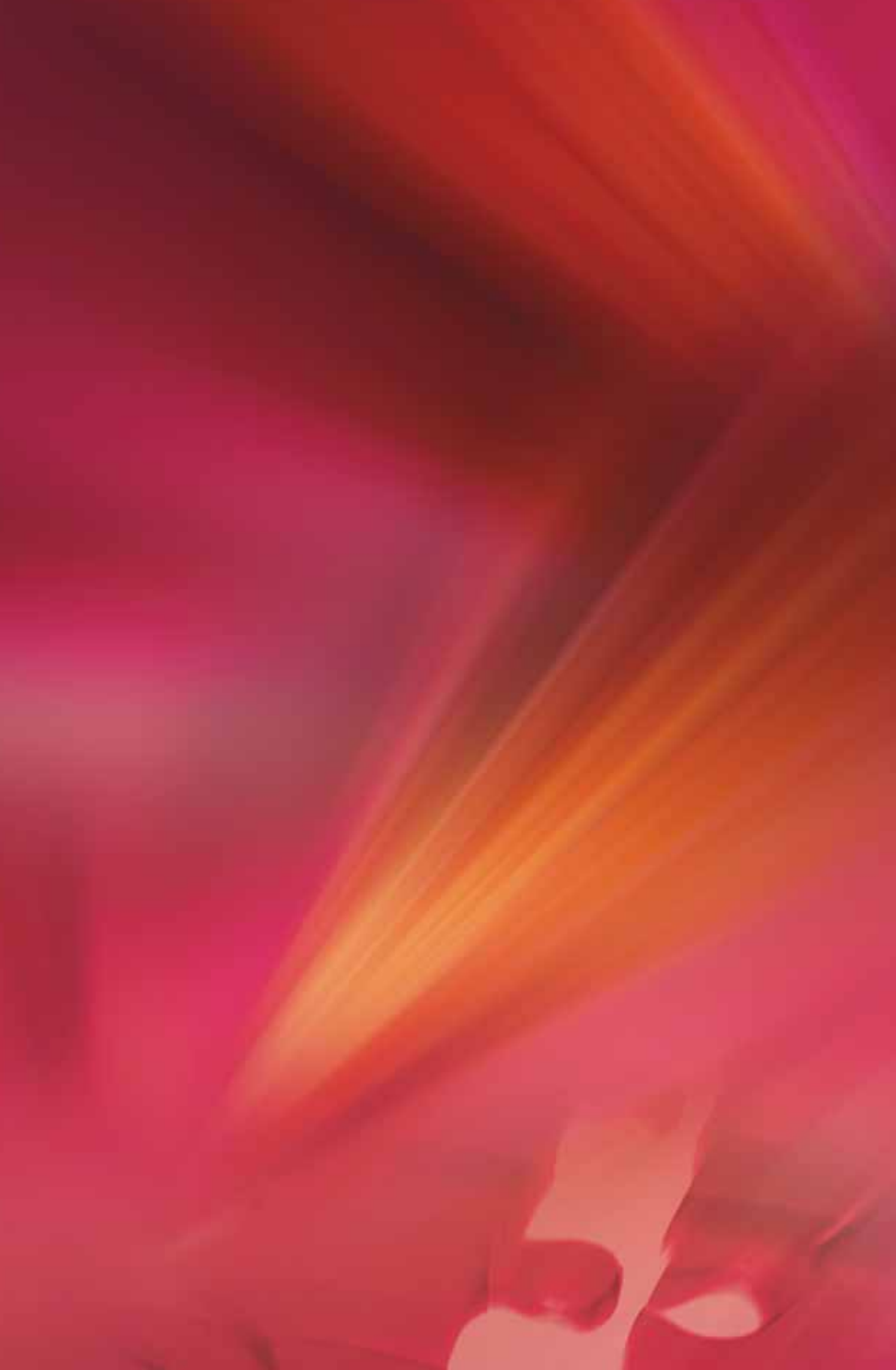


UKIERI AWARDS 2013-14



About UKIERI

UKIERI is being implemented with the aim to bring forth a unique initiative that strengthens the bilateral relationship between India and the UK and set an example of best practice in international cooperation. The initiative is working towards developing programmes that meets the priorities and needs of both India and the UK and bring about a systemic change in the educational sector of both India and the UK.

Phase Two of UKIERI was announced by the UK Prime Minister David Cameron and Indian Prime Minister Dr. Manmohan Singh in July 2010. This phase is being jointly funded by the Indian and UK Government. The main activities under the phase two of UKIERI have been identified based on the experience of UKIERI in phase one, deliberations during various policy dialogue events, outcomes from consultations, roundtable discussions and scoping for the next phase of activity.

UKIERI is a multi-stakeholder partnership programme supported from the UK by Department for Business, Innovation and Skills, Foreign and Commonwealth Office, British Council, Department for Employment and Learning, Scottish Government, Welsh Government and by Ministry of Human Resource Development, Department for Science and Technology, Ministry of Labour and Employment, University Grants Commission and All India Council for Technical Education from India respectively.

Long term Objectives

- Bringing India and UK together through academic engagement
- Developing long term sustainable partnerships with institutions, centres of excellence and knowledge hubs
- Successful integration between research, education and business needs
- Enhancing capacities of institutions through development of sustainable initiatives in leadership, skills development and innovation
- Providing opportunities for joint learning through adapting models, standards and practices prevalent in both India and the UK across sectors

Strand 1: Leadership Development

- Develop and implement an academic Higher Education Leadership programme training over 250 Higher Education institutional heads
- Develop and implement a sustainable and scalable School Leadership Development programme training over 1250 high performing school principals
- Develop and implement an academic Further Education Leadership programme training over 250 technical and vocational college principals and institutional heads

Strand 2: Innovation Partnerships

- Develop institutional partnerships with the aim of stimulating innovation in science, research and knowledge transfer in emerging areas of importance in partnership with DST and UGC
- Support capacity building workshops, conferences and seminars on quality assurance and assessment
- Set up the India UK Joint Working Group on Innovation to provide a strategic direction on activities to be undertaken under this strand

Strand 3: Skills Development

- Support Further Education institutes and SMEs in the UK and India to partner and form consortia for setting up of sustainable partnerships and deliver training and activities in line with Sector Skills Councils (SSCs)
- Enable the development of a strong Indian sector skills infrastructure focusing on employer engagement approaches, developing curriculum and qualifications, certification and assessment and thereby strengthening leadership and delivery capacity of FE institutions, focusing on 21 high growth sectors
- Set up the India UK Joint Working Group on Skills Development to provide a strategic direction on activities to be undertaken under this strand

Strand 4: Enhancing Mobility

- Develop mobility programmes for staff, faculty and students from India to the UK and from UK to India
- Develop institutional partnerships supporting mobility through shared learning, curriculum development and thematic study missions
- Support Work placement programmes to provide opportunity to UK graduates to work with companies and Indian graduates to work with UK businesses
- Develop policies and framework to support mutual recognition and equivalence of learning and achievement through India UK Qualification recognition Taskforce

Policy Dialogues

UKIERI works with key stakeholders, government agencies, thought leaders and partners on policy dialogues to contribute to developing and implementing education policies both in the UK and India. These policy dialogues aim to bring together decision makers and decision influencers to discuss key issues around the Education sector. UKIERI facilitates these dialogues through meetings, consultations, delegation visits, commissioned research and knowledge sharing workshops across both countries and provide a platform for sharing of learning, experiences and best practices.

Key Achievements

- 209 Higher Education Partnerships involving over 400 institutions to undertake joint research and programme delivery
- 56 Skills Partnerships to support curriculum development and deliver industry relevant training
- 216 Facilitation travel grants for partnership development, sharing of best practices on curriculum & pedagogy and professional development
- Opportunity to 522 British Students to visit India under the Study India Programme
- Constitution of the India –UK Qualification Recognition taskforce
- 22 events in policy dialogue and networking

Strand 1 : Leadership Development

At the India UK Education Forum in January, 2013 Memorandum of Understanding was signed with All India Council for Technical Education (AICTE) in the presence of the Education Ministers from the UK and India. All India Council for Technical Education through the MoU agreed to partner with UKIERI for implementation and delivery of the programme.

Dudley College, UK in consultation with AICTE has been awarded to design and deliver the programme. The programme will be developed in the Indian context and will work with high performing heads in India and the UK to identify specific requirements for developing leadership capacities of individuals that would help in effective management of FE institutions. The FE Leadership Development Programme is focusing towards building and implementing a strategic plan to transform leadership and management in Indian Further Education institutions.

Leadership skills of 250 Principals, Directors and Institutional Heads of Polytechnics and State Technical Departments will be developed under this programme. After the first year of delivery of the programme, participants of the programme will also be given an opportunity to visit the UK and work shadow FE Leaders in the UK.

Strand 2: Innovation Partnerships

UGC Thematic Partnerships Awards 2013-14

S.No	UK Partner	Indian Partner	Project Title	Project Description
1	Edinburgh Napier University	Shanti Niketan, West Bengal	The Scotland-India Continuum of Ideas: The Relevance of Tagore and his Circle	The main aim of the project is to trace the exchange of ideas and people between Scotland and India from mid-nineteenth to mid-twentieth century and reaffirm the relevance of the work and ideas of Tagore and his circle
2	University of Southampton	Indian Institute of Technology, Bhubaneswar	Chemical and Biosensors based on two dimensional layered structures and their graphene based hybrids	The main aim of the project plan is to fabricate efficient chemical and biosensors based on graphene, transition metal dichalcogenides (TMDs) and their hybrids with Au, Ag, Pt nanoparticles.
3	University College London	Indian Institute of Technology, Delhi	Imaging technologies to understand bioseparations	The main objective of the project is to investigate how advanced imaging techniques can enhance our understanding of the fundamental mechanisms causing aging and fouling phenomena.
4	University of Bristol	Osmania University, Hyderabad	Status, taxonomy and conservation of bats in the Andaman Islands, India - building bridges between scientific knowledge and community participation for conservation	The project aims at filling the lacunae of bat studies in the Andaman Islands by understanding current status, taxonomy, diversity and distribution, and to create awareness among stakeholders to conserve bats including two globally threatened species and 6 endemic taxa (including one species).
5	Hull University Business School	Indian Institute of Management, Bangalore	Building sustainable agricultural supply chains in India	The aim of the project is to provide a forum for researchers and practitioners to meet and share current developments and major challenges in the creation of sustainable agricultural supply chains in the Indian context.
6	University of Bath	CSIR-Central Electro Chemical Research Institute, Karaikudi	Metal-Organic Redox Frameworks (MOFs) for Photochemical Textile Processes	The main aim is to synthesise and study new types of dye-loaded MOFs via (i) physisorption and (ii) via post-synthetic covalent attachment and to employ "conformal transformation" of MOFs for the production of novel low density photo-absorber materials based on oxides

S.No	UK Partner	Indian Partner	Project Title	Project Description
7	Cardiff University	CSIR-Structural Engineering Research Centre (SERC), Chennai	Retrofitting and rehabilitation of reinforced concrete beams using ultra high performance concrete and basalt reinforced concrete overlay	The main aim is development of methodologies for Retrofitting and Rehabilitation of Reinforced Concrete (RC) beams using Ultra High Performance Concrete (UHPC) and basalt reinforced concrete (BRC) overlay
8	University of Warwick	Jawahar Lal Nehru University, Delhi	Gendered citizenship: manifestations and performance	The main aim of the project is to apply multidisciplinary research to look at legal, socio-cultural and performative aspects of construction of gender, violence against women, victimhood and public opinion in contemporary times.
9	University of Leeds	National Institute of Technology, Rourkela	Flow modeling for compound channels with non-prismatic floodplains	The main objective is enhanced understanding of flow processes in a two stage non-prismatic compound channel flow having convergent and divergent geometry along the longitudinal sections and to quantify the influence of change in geometry, surface and flow conditions in predicting flow profiles, discharge distribution, boundary shear stress distribution, stage-discharge prediction etc.
10	Imperial College London	Indian Institute of Science, Bangalore	Local and Remote influences on Rainfall over India (LORRI)	The aim of the project is to understand how short-lived climate pollutants (SLCPs) such as aerosols and ozone precursors affect South Asian climate in general, and rainfall in particular.
11	University of Cambridge	Indian Institute of Technology Madras	The interaction of ICT networks structure and downstream trade flows: two case studies from India (IRuralNet)	This project will examine how to remove bottlenecks to Internet access for rural agricultural production and of community based tourism.
12	University of Greenwich	Gujarat Institute of Desert Ecology (GUIDE)	Ecosystem Assessment of the habitats in the Kachchh District planning for biodiversity and livelihoods into the future	The main aim of the project is the rapid spread of the introduced tree Prosopis, which has become important for livelihoods but is simultaneously replacing native vegetation and altering habitats.
13	Queen's University Belfast	Indian Institute of Science Education and Research Thiruvananthapuram	Physics and applications of high-aspect ratio Schottky Junction Devices	This project addresses fabrication of high aspect ratio metal-semiconductor nano-scale Schottky junction (nSJ) devices to investigate electrical transport along these devices and to study their response for developing gas sensors with ultra-high sensitivity (<1ppm for hydrogen).

S.No	UK Partner	Indian Partner	Project Title	Project Description
14	University of St Andrews	Presidency University, Kolkata	Narratives of Migration and Exchange	This interdisciplinary research project will explore, from a variety of approaches, the complicated network of exchange of people, ideas, technologies and capital which mark the colonial legacy in India and in Europe.
15	London School of Economics and Political sciences	University of Hyderabad	Urban Water Supply and Governance: Study of Four Indian Cities	The objective of this project is to evaluate the institutional arrangements of urban water service delivery and governance in India.
16	University of Leicester	National Museum Institute of History of Art, Delhi	Things Encountered: Object Engagements in Museums in India and the UK	Project aims to exchange and share training of museum studies researchers, in the process widening the scope of tomorrow's leading museum studies academics and frontline professionals in both India and the UK.
17	Anglia Ruskin University	ABV Indian Institute of Information Technology and Management (IIITM),Gwalior	Interfacing ad-hoc mobile networks with IP mobile systems	The aim of project is Design and construct a platform framework capable of aggregating together networking resources pertaining to wireless communication devices and develop a Mobile Ad-Hoc 'Resource Sharing' Network (MARS-NET) Protocol
18	Loughborough University	Indian Institute of Technology Delhi	Improving road safety in India and the UK – indepth investigation and analysis of crashes involving vulnerable road users	This project will focus on developing an engineering perspective to accident causation by combining the accident analysis capabilities of Loughborough University in the UK with the simulation and engineering skills of IIT Delhi.
19	University of Reading	Indian Institute of Technology Bombay	Goal-directed future cognition: neural and cognitive mechanisms underpinning the successful completion of planned and intended behaviour and actions	The aim of the project is to examine the impact of imagery perspective in two exemplars of goal-directed thinking to explore the developmental time course of goal-directed future thinking and to investigate the neural correlates of visual imagery perspective in future thinking.
20	London School of Hygiene and Tropical Medicine	Institute of Home Economics, Delhi University	Statistical and epidemiological capacity building to enhance India-UK collaborations	The main aim of project is to provide Indian researchers with current statistical knowledge and skills for evidence-based health care decision making.
21	Cranfield University	Jadavpur University	Significance of pharmaceuticals in the aqueous environment: A global catchment comparison and assessment of treatment processes	The main aim of project is to develop a robust analytical methodology for the determination of pharmaceuticals in wastewaters and surface waters.

S.No	UK Partner	Indian Partner	Project Title	Project Description
22	King's College, London	Institute of Social and Economic Change, Bangalore	Changing nature of the public and the private in school education	The project is envisaged as part of a research study that examines the changing nature of the public and the private in the school education system in India.
23	University of Edinburgh	CSIR- National Chemical laboratory, Pune	NCL-EaStCHEM Network on Sustainable Chemistry	The project will build multifaceted interactions to jointly address key global challenges in sustainable chemistry.
24	University of Oxford	Tata Institute of Fundamental Research, Mumbai	Carbon flux Measurement in Island Rainforest ecosystems	The main objective is to quantify the aboveground carbon efflux rates from soil and tree stem surfaces within two recently-established forest census plots in the Andaman and Nicobar Union Territory,
25	The University of Sheffield	Indian Institute of Management Ahmdabad	Green design to green disposal: Designing the green supply chain for the next generation	The project aims to investigate the current state of green supply various stages of the product life cycle from product design to disposal.
26	University of Manchester	Indian Institute of Technology Kanpur	Adaptive and Reconfigurable Multiband, Multimode and Multifunction Monolithic Millimetre-wave Integrated Circuits (MMICs) Technologies for 5G Wireless Communications	The aim of this project is to nurture the cooperation between the named HEIs in the important research area that brings expertise together to address challenges in millimeter-wave monolithic integrated circuits (MMICs), characterisation and sub-systems design for 5G wireless communications systems.
27	Universit of St. Andrews	Jadavpur University	Comparing Comparative Literature	This is envisaged as the first phase of a long-term project whose aim is to establish (in tandem) lasting research and educational links on comparative literature.
28	Swansea University	The University of Burdwan, West Bengal	A Gerontology Research Centre for the Study of the Impact of Population Ageing, Migration, Environmental and Social Change on Older People and their Families in India	The project aims to establish a Centre of Gerontological Research in Burdwan University by sharing examples of good practice from the Centre of Innovative Ageing (CIA), develop post-graduate research in Ageing Studies in Burdwan by establishing the infrastructure to support research students and initiating a PhD research programme building on existing research conducted by the CIA.
29	University of Southampton	Tezpur University, Assam	Fabrication of p-i-n photovoltaic devices hybridized with core-shell CdSe/TiO ₂ nanostructures for enhanced quantum efficiency.	The aim is to fabricate CdSe/TiO ₂ core-shell nanostructures using colloidal chemistry and to incorporate them in p-i-n structures for making cost effective and environment-friendly solar cell devices.

S.No	UK Partner	Indian Partner	Project Title	Project Description
30	University of Birmingham	Anna University	Performance enhancement of solar water heater integrated with latent heat thermal storage system using nano-enhanced phase change materials.	The main aim is to develop a suitable design methodology for the selected solar water heaters integrated with nano-enhanced PCM based storage system.
31	University of Bath	Indian Institute of Technology Delhi	Electro-optical Properties of Magnetically Modulated Graphene	The main objectives are fabrication of nanomagnets at the surface of graphene and 2D electron gases, theoretical and experimental demonstration of magnetic confinement of charge carriers in graphene and high mobility electron transistors, demonstration of transistor action in graphene Hall bars modulated by single and double magnetic barrier structures obtained by gating graphene with micro-magnets and theoretical and experimental demonstration of the interactions of Dirac fermions with microwaves.
32	University of Southampton	Indian Institute of Technology Delhi	A comparative study of hierarchical materials for biomedical and lightweight applications: manufacture, characterisation and modelling	The main objective of the proposed research is to manufacture and model novel materials having porous architecture for biomedical implants and lightweight structural applications.
33	The Open University	Jamia Millia Islamia University	Intergroup Contact and Collective Action in Educational Settings in India	The aim is to investigate how intergroup contact and collective action tendencies interact in multiple group settings where individuals share a multiplicity of social identities.

Strand 2: Innovation Partnerships

DST Thematic Partnerships Awards 2013-14

S.No	UK Partner	Indian Partner	Project Title	Project Description
1	Loughborough University	Institute for Plasma Research, Gujarat	Plasmonics incorporated CZTS based solar cells	The aim is to develop a CZTS based solar cell and incorporate the plasmonic layers for higher efficiency and develop a bottom-up process to produce ordered silver nanoparticles arrays over large area for enhanced light trapping and to grow mechanism of various CZTS layers
2	University of Oxford	All India Institute of Medical Sciences, Delhi	Safety, Suitability and Clinical Effectiveness of Unicompartamental Knee Replacement in the Indian population	The purpose of the project is to establish the pattern of knee OA in Indian setting and to assess the suitability, safety and clinical effectiveness of UKR for managing end-stage knee OA in the Indian population for the transfer of technology to assess implant position
3	Queen's University Belfast	CSIR-Central Salt & marine Chemicals Research Institute, Gujrat	Development of domestic and -selective electro dialysis unit for community supply of desalinated potable water enriched with essential minerals	The aim of the project is to modify the ion-exchange membrane (IEM) by conducting polymer and develop the selective electro dialysis unit for producing nutritious ions (Ca ²⁺ , Mg ²⁺ , HCO ₃ ⁻ and SO ₄ ²⁻ etc) enriched desalinated water.
4	Queen Mary University of London	CSIR-Central Electronics Engineering Research Institute, Rajasthan	Micro/Nano fluidics for Health and diagnostics	The project aims to explore the possibility of developing an integrated microfluidic platform for health monitoring and diagnostic applications and to explore different technologies for the realization of microfluidic system components such as micropumps, reservoirs, filters, sensors, electrodes and mixers and Simulations for mixing applications, electrokinetic flow control using gate electrodes, FET (field effect transistor) based bio-sensing with fluidics integration
5	University of Cambridge	Indian Institute of Science, Bangalore	Multiple Carrier Generation in Fission Enhanced Polymer Solar Cells	In this project the aim is to develop and characterize singlet fission-enhanced organic solar cells. The future performance of conventional solar cells is constrained by the Shockley-Queisser efficiency limit, Substitution of polymers for nanocrystals would lead to easier fabrication and reduces toxicity, but requires polymers with efficient electron transport and suitable energy levels, which will be developed at IISC Bangalore

S.No	UK Partner	Indian Partner	Project Title	Project Description
6	University College London	Indian Institute of Technology Kanpur	Direct scaffolding with living cells for engineering 3D multi-cellular functional tissues	The major aim of the project is the development of novel nanocomposites together with exploration of nanomaterials in the area of tissue engineering and regenerative medicine and to measure the effects of varying voltage, needle size and configuration (single versus concentric) on fibre direction and dynamics, and the biomechanical properties of cellularised constructs prepared using cell electrospinning, the viability and behavior of different cell-types of interest:
7	University of Nottingham	Indian Institute of Technology Delhi	Nanoscale Surface Engineering in Inorganic Hetero-structures with Enhancement Photocatalysts Activity for Sustainable Solar Hydrogen Production	The project aims aim to develop low cost and high performance visiblelight active novel nano-catalysts for photoelectrochemical splitting of water for solar hydrogen production. The approach consists of by layerby-layer deposition of material combinations and surface modifications for achieving the desired characteristics.
8	Loughborough University	KVSR Sidhartha College Of Pharmaceutical Sciences, Vijayawada	Microneedle Assisted Transdermal Delivery Of Antimigraine and antihypertensive drugs	The partnership proposal aims to develop microneedle systems for transdermal delivery of anti-migraine and anti-hypertensive drugs for better therapeutic efficacy, Hence, alternate route of administration, e.g., transdermally, is an ideal choice for these drugs
9	Coventry University	Indian Institute of Technology Mandi	Smart Multi-Terminal DC $\bar{\nu}$ -grids for autonomous Zero-Net Energy Buildings	The main objective to enable the development of autonomous zero net energy building.
10	University of Leicester	CSIR-Institute of Genomics and Integrative Biology , Delhi	Study of the molecular basis of the choice between miRNA mediated translational suppression and RNA instability in neural cell types.	This proposal aims to address a lacuna in our understanding of the mechanism by which microRNAs regulate targets.
11	University of Hertfordshire	Indian Agricultural Research Institute, New Delhi	Understanding Pasteuria spore attachment for exploitation as a natural control agent of root-knot and cyst nematode crop pests	This project aims to focus on their interactions with the bacterial group of parasites closely related to Pasteuria penetrans which has potential as a biological control agent.

S.No	UK Partner	Indian Partner	Project Title	Project Description
12	University of Reading	Indian Association for the Cultivation of Science, Kolkata	To study the gelation mechanism of self-assembling peptide based new hydrogelators for the application of sustain release of drugs	The purpose of the project is to make peptide hydrogel based new biomaterials with greater enzymatic (present inside the human body) stability (due to the presence of naturally occurring, non-protein amino acid residues) compare to those of existing peptide hydrogel based biomaterials and to use these biomaterials for sustained release of cancer drugs and also to explore the in depth knowledge of hydrogel formation by different techniques.
13	Queen's University Belfast	Indian Institute of Chemical Technology, Hyderabad	Novel Biomaterials for localised drug delivery for bone regeneration	The main aim of the project is Design, development and delivery of bisphosphonate anchored / immobilized mesoporous silica materials for effective bone tissue repair and regeneration
14	University of Cambridge	Indian Institute of Science, Bangalore	Design and Prototype Development of an Active Matrix Sensor-Actuator User Interface for Social HealthCare	The project proposed involves the development of a large area sheet (flexible or rigid) with an array of pixels- with each pixel having a sensor, a circuit that takes information from the sensor, and an actuator that is driven by the circuit in response to the sensor input
15	Heriot Watt University	Centre for Nano Science and Engineering, Indian Institute of Science Bangalore	Femtosecond laser-micromachined microfluidics, integrated Surface Enhanced Raman Scattering (SERS) sensors for point-of-care diagnostics	The main objective of this proposed collaboration is to develop a novel platform for early disease detection and diagnosis.
16	University of Sheffield	Indian Institute of Science, Bangalore	Integrative In vitro and In silico Modelling of Arterial Mechanobiology for Health and Disease	This project brings together two leading experimental and computational AM research groups. This synergistic research collaboration will enable: (i) the establishment of a research collaboration between the INSIGNEO institute of in silico medicine (University of Sheffield) and the Indian Institute of Science; (ii) novel experimental and computational research on arterial mechanobiology; (iii) transfer of knowledge and expertise between institutes.
17	Heriot Watt University	National Institute of Science & Technology, Odisha	Development of solution processed CdTe@ZnTe core/shell nanocomposite plasmonic solar cells	The aim of the project is to develop low cost, high efficient solar cells that can facilitate widespread commercialization to address the world's energy and environmental challenges.

S.No	UK Partner	Indian Partner	Project Title	Project Description
18	University of Bath	National Centre for Cell Sciences, Pune	'A Novel strategy for Reprogramming of somatic cells to induced pluripotent stem (iPS) cells by a single Non-coding RNA - Ginir for applications in regenerative medicine'	The aim of the project is to develop methodologies for establishment of iPS cells from fibroblasts using nc RNA Ginir and Compare attributes of iPS generation achieved through nc RNA- Ginir with known cocktail of transcription factors like Oct4, Sox2, Klf-4 and c-myc.
19	University College London	National Chemical Laboratory, Pune	Efficient Waste Water Treatment using Novel Catalysts	This project aims to develop a treatment approach that can simultaneously remove multi-contaminants such as methaldehyde, synthetic colour and pathogens from water.
20	University of Manchester	National Institute of Pharmaceutical Education and Research , Hyderabad	To evaluate the role of AMPK mediated signal transduction in models of chemotherapy induced peripheral neuropathy (CIPN) using pharmacological approaches.	This Project leads to enhanced axonal protein synthesis and activation of channel subunits responsible for excitatory neurotransmission in pain signaling pathways.
21	The Open University	National Institute of Technology Durgapur	Graphene Assisted Low-cost Energy-efficient Solar cell (GALES)	The main of the project is to produce functionalised graphene nanosheets (FGNS)-based dye synthesised solar cells. This work identifies a new class of electro-catalysts with potential of low cost photovoltaic devices.both the partners propose a novel approach that opens new means to efficiently harvest energy by using a combination of chemical synthesis and atmospheric plasma functionalisation to achieve desired properties.
22	John Innes Centre	Indian Institute of Science, Bangalore	Developing topoisomerase targets for TB therapy	The project will involve knowledge and personnel exchange to capitalise on opportunities for developing gyrase and topo I as TB targets, Thus, the main aim of this proposal is to exploit and expand our current knowledge-base on these essential enzymes (TB gyrase and topo I) in order to develop them further as drug targets and to find new inhibitors that affect their function.
23	Queen Mary University of London	Postgraduate Institute of Medical Education and Research, Chandigarh	Identification and characterization of novel germline mutations causing pituitary disease.	To identify novel gene mutation causing pituitary adenoma and to perform in vitro functional studies on the identified mutations.

S.No	UK Partner	Indian Partner	Project Title	Project Description
24	University of Surrey	University of Hyderabad	The Energy Cube of the Future	This project will demonstrate an integrated, inexpensive allotropic carbon system-based “energy cube” solution, for organic photovoltaic (OPV) energy harvesting, nanotechnology-enabled energy storage, and its energy-efficient utilisation using nanomaterials throughout.
25	Northumbria University	Sri Venkaswara University, Tirupati	Development of Efficient low Cost Photovoltaic Solar Cells Based on the use of Tin Sulphide Absorber Layers	This aim will be achieved through study of deposit layers of SnS using thermal evaporation (UNN task) and using wet chemical processes, spray pyrolysis (SVU task) and to optimize the layers for PV solar energy conversion, deposit a range of Cd-free buffer layers e.g. ZnIn ₂ Se ₄ , ZnMgO and ZnS, and to optimize these materials for use as buffer layers in SnS based solar cells and to produce PV devices using the optimized layers and characterization of the devices with the aim of maximizing the solar conversion efficiency.
26	University of Southampton	Tea Research Association, Assam	Climate-smartening Assam’s tea plantation landscapes: defining socio-ecological ‘safe spaces’ for future sustainability	This research will investigate the nexus of livelihoods, climate change and agricultural practice to locate “safe spaces” for tea plantation landscapes in Assam, India.
27	Heriot-Watt University	Thapar University, Patiala	Green Polymers for Waterborne Pathogen Detection and Treatment	The main aim of this project is to identify natural biopolymers (i.e. green) polymers for waterborne pathogen monitoring and treatment applications and to employ the high-throughput arrays systems for the identification of natural biopolymers which promote or prevent adhesion of waterborne protozoan pathogens.
28	University of Ulster	Indian Institute of Technology Kanpur	A BCI Operated Hand Exoskeleton based Neurorehabilitation System for Movement Restoration in Paralysis	Develop a lightweight three-finger exoskeleton with embedded sensors, capable of replicating human motion for physical practice. It will be controlled by users’ EMG and EEG signals in assist-as-needed mode and develop a novel brain-computer interface (BCI) that facilitates EMG and EEG for controlling the exoskeleton and provides visual neurofeedback to ensure focused physical and MI practices.
29	University College London	Indian Space Research Organisation, Thiruvananthapuram	Collaborative scientific and mission definition studies and development of space plasma and planetary instrumentation for future space missions	A collaborative study of an innovative mission concept involving a piggy back nano-satellite on-board future space and planetary missions of ISRO, ESA and the UK. Also identify related technology requirements for scientific payloads such as plasma analysers and for the nano-satellite.

S.No	UK Partner	Indian Partner	Project Title	Project Description
30	University of Central Lancashire	Indian Association for the Cultivation of Science, Kolkata	Multifunctional hybrid nanocomposites for the separation of toxic and microbial contaminants from water	The specific objective of the project is to exploit multifunctional hybrid nanocomposites for the removal of toxic (arsenic) and using the recently developed novel surface chemistry to tackle the bacterial contaminants such as Legionella, E-Coli , Shigella and Salmonella from water.
31	University of Exeter	CSIR-Central Salt & Marine Chemicals Research Institute, Gujarat	Sustainable Energy Production Through Biomass Gasification Integrated With Solar Thermal Conversion	The broad objective of this proposal is to develop a technology package for economic production of energy carrier through hydrogen gas from biomass integrated concentrating solar thermal system.
32	University of Exeter	Indian Institute of Science, Bangalore	Water Security and Infrastructure Resilience under Climate Change	Aims to improve the understanding and knowledge for managing water security and infrastructure resilience in a changing climate by investigating new methods and further developing the expertise at both institutions.
33	University of Bradford	National Chemical Laboratory, Pune	Morphological structuring of polymeric matrices as a novel approach for controlled drug release.	To develop a detailed understanding of the effects of semicrystalline polymer morphology on the release of a bioactive agent from such polymer matrices and to share cross-disciplinary expertise, infrastructure and networks across the proposed complementary groups for the development of platform technologies.

Strand 3: Skills Development

Institutional Capacity Building Awards 2013-14

S.No	UK Partner	Indian Partner	Project Title	Project Description
1	Dudley College UK	Mahatma Gandhi International School Sheth Hirabhai Motilal Bhavan Mithakali Ahmedabad	To establish Skill Based Teacher's Training documented and supported by Multi Media at MGIS	Through this project proposal MGIS will design and articulate Teacher's Training methodology which identifies dry areas of teaching such as science and sex education. All the teaching aids would be Multi Media based like - films and Documentaries implementing the vocational element of studies.
2	Burton and South Derbyshire College (BSDC)	MAEER'S Maharashtra Institute of Technology, MIT Academy of Skill Development Pune	International Curriculum Development In Construction	This project will equip the workforce with construction vocational skill and employability skills, each individual will have Individual Learning Plan (ILP) to ensure that they gain vocational qualification and soft skills such as communication, interview techniques, application forms. Additional health and safety skills/ qualification will also be offered that are required in the construction industry
3	City College Plymouth	Future Sharp Skills Limited Mumbai	Hospitality Entrepreneurship Employability and Enterprise Partnership (HEEEP)	Project partners will share good practice regarding embedding employability, and entrepreneurial spirit, whilst ensuring that learners gain the best opportunity to enter Tourism and Hospitality sector. Through this project project partners will to increase quality measures, build a sustainable and relevant curriculum, meeting the needs of employers and to share good practice regarding new and inspiring teaching methodologies.
4	Bradford College	Kannur Government Polytechnic Kerala	Skills Development in Garment Manufacture (SDGM)	The project is aimed to develop innovative approaches for employer engagement and develop technical and entrepreneurial skills for employment and progression purposes and to also work with leading fashion & textile companies in both regions on applications of the latest technology for commercial products.

S.No	UK Partner	Indian Partner	Project Title	Project Description
5	Pearson Education Ltd	MART Advance Training Institute Noida	Creation of Vocational Trainers in rural India	The broad aim of this project is that Pearson will work with MART to build capabilities through curriculum and academic framework design, content development and delivery of programs, facilitate collaborations and connect with the larger international community. The overarching aim of the project is to introduce vocational qualifications for trainers in rural India
6	Reid Kerr College	National Accreditation Board for Education and Training (NABET), Quality Council of India (QCI) New Delhi	Building Training Capacity in Central and State Government Funded Industrial Training Institutes (Reporting to Directorate General of Employment and Training, Ministry of Labour and Employment, Government of India)	The objective of the project is to create a local capacity of qualified and trained master trainers for Government Industrial Training Institutes in line with International Standards. SQA Certified Master Trainers will be utilized for training of faculties, students etc. in the identified 5 sectors. 5 identified sectors are – Retail, Construction, Food Processing, Healthcare and Telecom
7	Colleges Northern Ireland	Mechatronics Department, TeamLease Skills University Bangalore	Mechatronics Curriculum and Faculty Development for Greater Employability and Enterprise among Formal and Informal Sector Workforces	This project will see Colleges NI and Team Lease work together to benchmark, review and re-engineer Mechatronics curriculum and training methodologies which are relevant for the needs of industry in the India
8	Belfast Metropolitan College (Belfast Met)	Bombay Chamber of Commerce & Industry (Bombay Chamber) Mumbai	Building Organisational Efficiencies for Small and Medium Enterprises (SMEs)	The project will improve organisational efficiencies by developing effective and efficient business and operational processes which will enhance business and financial performance. These processes will be integrated and embedded through the development and implementation of series of workshops and master classes utilising a business process manual. This will be further enhanced by the development of a training module specifically focused on marketing and supply chain management.

S.No	UK Partner	Indian Partner	Project Title	Project Description
9	Hackney Community College	Mehr Chand Polytechnic College Jalandhar	Community College for Skills Development in Punjab.	The main focus of this project is to provide thorough practical training and skill knowledge to the intended staff group. A Faculty exchange and training program between India and UK will be the key towards development of intellectual capital, promoting knowledge and effective management and staff skills.
10	Edinburgh College	Government Women's Polytechnic College, Bhopal	Scottish Textiles, Indian Textiles - Collaborative Hub (STITCH)	The aim is to expand and enhance the Textile and Fashion Curriculum through training of staff and students by UK and Indian experts; Create new delivery materials in the form of 'you-tube' style video demonstrations and e-booklets. Offer training, networking and web based marketing opportunities to local industry and retail and facilitate the development of micro businesses
11	University of East Anglia	Institute of Nursing Sciences, K.L.E. University Belgaum	Enhancing midwifery and neonatal care through capacity building of midwifery lecturers	The project will involve enhancing the maternal and neonatal educational provision in Belgaum, India whilst developing research in the arena of women and child health in both institutions. The project will also aim to develop UK midwifery and nursing education by giving students the tools to understand and engage in global responsibilities for health.
12	NESCOT , Epsom, Surrey	Govt.Polytechnic College, Palakkad	Pedagogical Strategies in Skill Development	The project will focus on Pedagogical strategies in skill development. It will look into ways to develop strategies to enhance student skills by inspiring and engaging students both inside and outside the classroom.
13	Stow College	Ludhiana Polytechnic College Ludhiana	The delivery of UK TVET qualifications in the Punjab, India.	The primary aim of this project is to work with Indian colleges to build their capacity to deliver internationally recognised qualifications alongside their existing local qualifications. The project will undertake pilot work on the introduction of a UK (Scottish Qualifications Authority) Higher National Certificate into Indian colleges. This will involve staff development for the Indian faculty, sharing of curriculum materials and establishment of SQA assessment and quality assurance processes.

S.No	UK Partner	Indian Partner	Project Title	Project Description
14	Highbury College	Larsen & Toubro Limited Construction Skills Training Institute Kanchipuram	Institutional strengthening and building capacity to deliver holistic vocational programs within the Construction Sector in India	The partnership will focus on: Skill standards, Training curriculum, Training the trainers and create master trainers, Training pathways and progression plan, Introduction of new tools, technology and facilities on campus, Introduction of eLearning and technology-aided blended learning pedagogy at CSTI, Apprenticeships and accreditation.
15	City & Islington College	TSEI - Town Schools Education Initiatives New Delhi	Impact	Project will create collaboration by forming partnerships between vocational education & skill development institutions from India & UK, with the objective of development of industry driven Indian Skills, and their standardized quality delivery capacity, thereby contributing towards building capacity in vocational education in the country.
16	Bournville College of Further Education	Confederation Of Indian Industry New Delhi	Capacity Building for Entrepreneurship Development for Marginalised Sections of India	The programme aims to help entrepreneurs succeed by filling this gap and mentoring them through robust programme for 100 entrepreneurs from marginalized sections by inculcating leadership skills and creating platforms for networking and Liaoning with relevant target customers.
17	Exeter College	BigSpring Pvt. Ltd. Mumbai	Beyond Borders - A Transnational Approach to Skills Training	The proposed project aims to develop and pilot a range of parallel and integrated vocational and English skills development programmes that will be used by trainees in both the UK and India.
18	Superact UK CIC	Don Bosco , Tech Society New Delhi	Women Empowerment	Developing employability and personal effectiveness amongst unemployed women in India through team and individual study using the performing arts.
19	Bradford College	Lucknow Excellence Cluster, Lucknow	Enhancing Employability Skills for SME's in the Automotive Sector.	The project aims on building & improving the craftsmanship, technical, communication, behavioural and managerial skills of workforce in order to improve competency and capability of enterprise. It aims to develop curriculum related to these training. It also aims to produce highly skilled trainers/teachers using latest pedagogical methods and equipped to deliver industry relevant training that enhances employability and enterprise capability.

S.No	UK Partner	Indian Partner	Project Title	Project Description
20	University of Bath Innovation Centre	Centre of Management Studies, Dibrugarh University, Assam	UK-India Entrepreneurship Programme	The proposed Project will fund the customisation of the Bath entrepreneurship Programme for nascent entrepreneurs who want to create ambitious high-growth businesses in India and the UK. The Project will train an initial cohort of internationalised entrepreneurs and provide a legacy of teaching materials and relationships that will be the foundation of future exchanges of Indian and British entrepreneurs who will go on to create innovation, business growth and wealth in and between our respective economies.
21	Worktree, Milton Keynes, UK	Gram Tarang Employability Training Services Pvt Ltd, Odisha	Work Tarang Job Readiness Partnership	The project brings together two partners with the same goal to assist young people, without the advantage of quality and higher education, to succeed in the job market. Through this partnership, the two organisations will meet their respective goals through a mix of exposure visits, product testing and development, and training of trainers.
22	Edinburgh College	Sardar Vallabh Bhai Polytechnic College, Bhopal	Renewables Industry Partnership Project for Learning Exchange (RIPPLE)	The design of this project is to facilitate the widest possible dissemination through the spoke and hub model, by training the trainer. In Madhya Pradesh alone there are over 60 polytechnics who can quickly develop the capacity to deliver future training, similarly in Scotland our participation in Colleges Scotland's Energy
23	Rural Skills Training Centre, Royal Agricultural University.	National Skills Foundation of India (NSFI), Gurgaon	Evaluation of the "UK Agricultural Training Group model" for local delivery of training, education and knowledge transfer to learners in the agriculture and food chain, and its opportunity to transfer to India to facilitate sector up skilling	The project will suggest the methodology in line with UK Agricultural Training Group Model for the Indian Agriculture Sector. In India, agriculture is much diversified and a large number of organisations are working on various training models. This gives an added advantage to the Indian Agriculture Sector for exploring the opportunity of adopting the Agricultural Training Group Model, by exploring UK best practices simultaneously

S.No	UK Partner	Indian Partner	Project Title	Project Description
24	Asset Skills (UK Sector Skills Council)	All India Management Association (AIMA), New Delhi	Creation of a Management and General Skills SSC	This project aims to work with key stakeholders such as existing SSC's, Confederation of Indian Industry (CII) and Federation of Indian chambers of Commerce and Industry (FICCI) to establish AIMA as the Sector Skills Council for Management and General skills (including employability skills) to underpin the economic goals and ambitions of India.
25	Department of Architecture and Civil Engineering, University of Bath	Government Polytechnic, Mayem, Goa	Development of structural concrete with the help of plastic waste as partial replacement for sand	The proposal looks to utilise these waste plastics as a replacement for up to 10% of the sand in concrete, with a small effect on compressive strengths. This has the dual benefits of using a waste product in a new way while reducing the damaging mining of sand from riverbeds (the indiscriminate mining of which is banned in most states). In addition, studies on workability, durability and crack control will be undertaken by considering the utilisation of chemical admixtures as well as plastics.

Strand 3: Skills Development

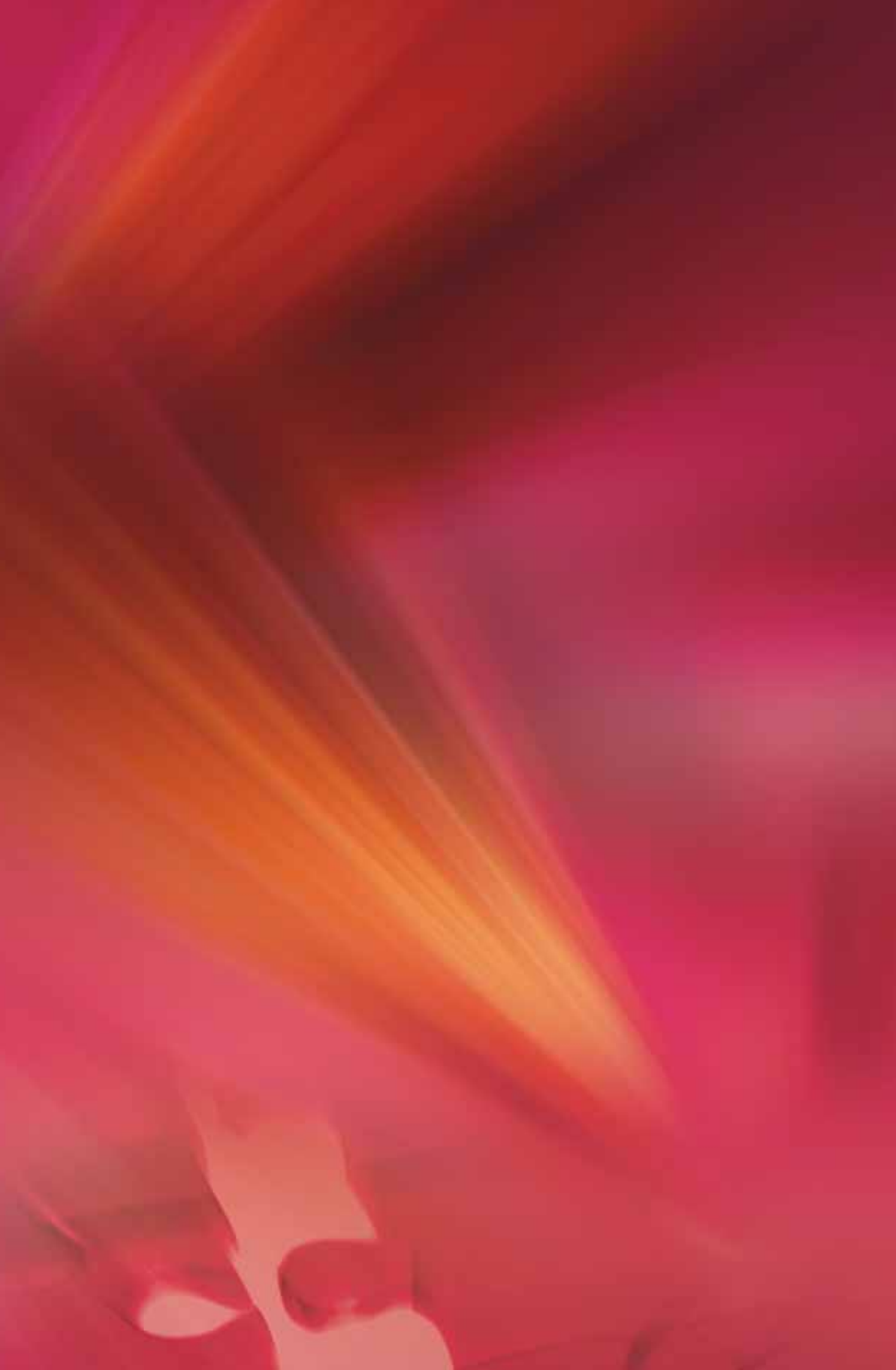
Sector Skills Collaboration Awards 2013-14

S.No	UK Partner	Indian Partner	Project Title	Project Description
1	Skills of Logistics	Sectors Skills councils for logistics chennai	Sharing best practice and opening up future partnerships in logistics skill development-India/UK collaboration.	This project will develop a key relationship which will support India SSC and UK counterparts by drawing on the experience of SFL-UK, CII will be well placed to create a SSC which will effectively develop National Occupational Standards, a Qualification reform and to develop activities around certification, accreditation and centres of excellence.
2	Lantra (UK Sector Skills Council for Land-based & Environmental Industries)	Rubber Skill Development Centre (India Sector Skill Council for Rubber Sector) New Delhi	Supporting innovation in understanding the labour market and occupational requirements of the Rubber producing and manufacturing sector in India	Development of integrated systems for skills management and occupational data significant benefits for the ongoing activities related to developing occupational standards, defining curricula and collecting information on skills gaps and shortages in the rubber plantation and manufacturing sectors increased levels of engagement with businesses in the sector impact on skills development within the workforce.
3	Lantra (UK Sector Skills Council for the Land-based & Environmental Sector)	Agriculture Skill Council of India (ASCI) Gurgaon	Promoting the take up of Occupational Standards in the Indian Agriculture Sector through developing a unique system for managing their development and review.	The project will help utilize the best practices of UK SSC for occupational standards development and utilization and suggest the model for Indian SSC in terms of occupational standards development and utilization. This will also create the opportunity to share such best practice with other Indian SSCs.
4	Skills for Health	Healthcare Sector Skill Council New Delhi	Development of Competency based Curriculum and Course Content aligned with Occupational Standards, developed by HSSC for Healthcare Job-Roles	The Healthcare Sector Skill Council wishes to accelerate the pace of development in Occupational Standards across all job roles, supported by building the capacity of Indian Health Care trainers to deliver high quality training which meets national standards. Furthermore, there are no benchmarks for Train-the-Trainers with regard to teaching methodologies. This has resulted in poor quality of allied health and paramedics professionals, leading to compromises in patient care, health and safety. This project will focus on these.

Future Opportunities

1. **Higher Education Leadership and Development Programme** – UKIERI in partnership with Ministry of Human Resource Development will be working to support leadership and capacity building initiatives under RUSA (Rashtriya Uchattar Shiksha Abhiyan). RUSA is India's flagship mission on Higher Education which is a centrally sponsored scheme proposed by the Ministry of Human Resource Development to ensure holistic planning at the state level and enhancement of allocations for the state institutions with focus on state higher educational institutions. Through UKIERI, we aim to support the capacity building initiatives by facilitating a consortium of UK universities and agencies like QAA, HEFCE and LFHE for developing leadership modules, quality assurance mechanisms and professional development of state higher education institutions.
2. **School Leadership Research** – UKIERI through the school leadership development programme has been working successfully with National College for Teaching and Leadership and National University of Administration and Planning (NUEPA) to build and enhance the leadership capability of current and aspiring school leaders in state schools. Currently the programme is being piloted in Rajasthan and Tamil Nadu. The four strands of Leadership development are: curriculum and material development, capacity building, institutional development and networking, and research and development. Through UKIERI, we now aim to bring together a consortium of UK universities to jointly partner with Indian agencies and organisations on school leadership themes specifically to create a research consortium and develop a systemic approach to school leadership and share learning's.
3. **Partnership Opportunities** – Through Knowledge Transfer Partnerships, we aim to facilitate the transfer of knowledge, technology and skills from the academic institute to the company, which would otherwise have no access to this information. It benefits the academic institution through applying their knowledge and expertise to important business problems, developing business-relevant teaching and research materials, identifying new research themes and undergraduate and postgraduate projects, gaining a relevant and improved understanding of business requirements and operations etc. Through Community college partnerships, UKIERI is looking at supporting mentoring and capacity building partnerships with 25 identified Community colleges under MHRD.
4. **Study India Programme** – Study India Programme is a flagship programme under UKIERI that enables undergraduate students from UK universities and colleges to visit India for three weeks to gain experience of Indian culture, way of life, people, arts, politics, economy and language and it also provides opportunity to the UK undergraduate students to explore for further study or work in India. The SIP students also get an opportunity for a one-week work placement or internship with Indian companies during their visit. The UKIERI Study India programme started in 2009 and till date 915 UK students have got a chance to travel to India and learn about new culture and enterprise skills. The marketing and promotion for SIP 2014 will commence in February and March.

5. **Faculty exchange programmes** – UKIERI is looking at providing short term faculty and programme development exchange visits in partnership with Indian agencies like DST and UGC. This will provide access and capacity building for staff, researchers and enhance professional and thematic capacities.
6. **FE Leadership Development Programme** – UKIERI in partnership with All India Council for Technical Education (AICTE) will be working to support development of leadership skills of 250 Principals, Directors and Institutional Heads of Polytechnics and State Technical Departments. Dudley College, UK has been selected as the delivery partner and the participants for the programme will be selected in consultation with AICTE. Upon successful completion of the training programme, participants will be assessed and will be accredited for the training programme. After first year of the delivery selected participants of the programme will also be given an opportunity to visit the UK and work shadow FE Leaders in the UK.
7. **National Career Services** - UKIERI in partnership with Ministry of Labour and Employment will be working to support development of employment services in India on the lines of Careers Service in the UK. UKIERI will be working closely with Ministry of Labour and Employment and with Employment exchanges across the country for designing a mechanism to provide Career Services to the India youth either in training or looking for employment.
8. **Community Colleges** – UKIERI in partnership with MHRD will facilitate development of links between Indian community colleges in the priority states and sectors as recommended by MHRD and further education colleges in the UK. A maximum of 25 partnerships will be supported and these would be developed as models for replication
9. **Policy Dialogues & Capacity building workshops** – UKIERI will be partnering with Indian government agencies and Ministries to debate, discuss and brainstorm on areas around quality assurance, research performance, teacher training, industry & employer engagement, sector skill councils, leadership development, Employment Services, sustainable development etc which will provide a platform for UK and Indian institutions to share their ideas and models for best practice.



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