

Summary Report

UK-India Dialogue on Advanced Manufacturing

Bengaluru, India
12 September 2014

Jointly organised by:
UK Science & Innovation Network India
and
UK Trade & Investment

with support from:
University of Cambridge

For more information on this workshop, please contact:

[Dr Vijay Iyer](#)

UK Science & Innovation Network India

AGENDA

- 0830 – 0900 Registration and Welcome
- 0900 – 0910 Introduction to UK Science & Innovation Network
- 0910 – 0925 Looking Back and Moving Forward: UK-India partnership in manufacturing
Sir Mike Gregory – University of Cambridge
- 0925 – 0955 Industrial Strategy: review of national plans and recent developments
- **Prabhat Ranjan – Technology, Information, Forecasting and Assessment Council**
 - **Sir Mike Gregory – University of Cambridge**
- 0955 – 1035 Translational mechanisms and institutions: recent developments
- **David Wright – Innovate UK**
 - **Sabyasachi Dasmohapatra – Global Innovation Technology Alliance**
 - **Ian Collier – High Value Manufacturing Catapult**
 - **P. V. Shashi Kumar – Central Manufacturing Technology Institute**
- 1035 – 1100 Tea/Coffee
- 1100 – 1120 Research – Key research themes for bilateral partnerships
- **Sukanya Kumar-Sinha – Research Councils UK, India**
- 1120 – 1230 Round table discussion
- Future of manufacturing
 - UK-India Manufacturing Action Group (UIMAG)
 - Rolling one year programme of activities
 - Industry-academia interactions
- 1230 – 1330 Lunch



Summary of potential UK-India collaboration opportunities

EDUCATION

- Exchange of personnel for access to each other's expertise and facilities
- Revamping manufacturing curricula to include substantial 'hands-on' component
- Training/skilling of teachers
- Forward-looking skills development
- Initiation of small scale manufacturing campaigns by national academies of two countries
- Early engagement with young generation (programmes at high school level)
- Joint programmes for creating job-ready engineers
- Creation of 'training centres' for next-generation manufacturing skills

RESEARCH

- Work on problems of common interest for cost-effective research
- Industry participation in jointly funded projects
- Mapping the 'manufacturing ecosystem' in each country to identify priority areas
- Combining 'big data' and 'manufacturing' for mutually beneficial outcomes
- Develop a database to record 'requirements' and 'expertise' of the UK and India
- Joint projects at process technology level
- Focus on joint projects with technology readiness level (TRL) 4-6

POTENTIAL JOINT PROJECTS

- Education, training, and skills for manufacturing
- Collaboration between UK catapult centres and India's MSME tool rooms
- Determination of enablers for growth in manufacturing in India and the UK

INDIA-SPECIFIC DEVELOPMENTAL NEEDS

- Socio-economic and cultural factors need to be incorporated when implementing manufacturing policy and programmes
- Risk identification and management, project and programme management, effective execution of complex programmes, and safety, health and environment
- Innovation laboratories with advanced prototyping facilities to bridge the 'valley of death' for early stage technologies
- Initiatives to build capacity across TRL 4-10
- Incorporation of a 'systems' approach in manufacturing projects