

UK-India Network on Electrical Contacts for Radiation Sensors and Solar Cells UK UTP 201100322

Partners

India: Prof. B. Ghosh, Jadavpur University

UK: Dr. A. Lohstroh University of Surrey &

Prof. N.J. Cowern, Newcastle University



Objectives of the Networking

- Development electrical contacting technology to nano-structured
 Materials & Devices
- Joint supervision of PhD program
- Exchanges of researchers
- Enhance future Networking



Work schedule

- Nano-structured films fabricated at Jadavpur University and some was procured at UK.
- Electrical contact was provided on the fabricated films at Jadavpur University.
- Films were characterized at University of Surrey & Newcastle University, UK.
- Optimization of the overall processing are in progress.
- Publications, Patent generation and increasing of networking window.



Action taken

- PhD student selected jointly by the UK Partner and Indian Partner.
- The student joined and working at the Indian University
- Proposed to registered for PhD studies at the University of Surrey, UK in October-2013 session under the joint supervision of Indian & UK partner



Outcome till date

Publications

Journal Paper:

- 1. Thin Solid Films, vol. 531, pp. 203-207, 2013
- Papers at International Conference Proceedings:
- 1. Technical Proceedings of the 2012 Nanotechnology Conference & Exhibition, NST1-Nanotech-12, pp. 196-199.
- 2. Proceeding of 27th EUPVSEC, paper No. 6CV.4.2., 2012.
- 3. Proceeding of the 28th EUPVSEC, paper Nos. 1AV.3.2, 5CV7.9, & 5CO.5.5. 2013.



Future Action Plan

- Forthcoming visit by Indian Researchers
- September-2013 to short out the work schedule and overall supervision of the PhD student.
- June & July-2014 PhD Student to carrying out the research activities related to the work schedule.
- Forthcoming visit by UK Researchers
- April-May, 2014 to evaluate the progress of the overall research work schedule and performance of PhD student.



Problem of Sustainability

- Variation in exchange rate will affect the activities.
- Project need extension for completion of the projected work schedule
- Need for support of Research student for completion his targeted research.



Avenue for Further Networking

- The novel electrical contacting technology increased the application window as a result this developed further networking with many other groups in UK and also in EU and USA.
- The proposed contacting technology proved its potential applications in Graphene, thus another linkage has been developed in between UK, USA and India.
- Some laboratories in EU are also in touch with the partner organizations for further collaboration on this aspect.



THANK YOU