

ICONSAT 2010

Technical Programme Schedule

Thursday, February 18, 2010

Inaugural Session:

9.00 AM - 10.40 AM

- IPL 01** **C. N. R Rao**, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, INDIA
Fascination with Nanocarbons and their Inorganic Analogues

Session 1: Plenary Lectures (PL)

11.10 AM - 12.50 PM

- PL 01** **Mostafa A. El-Sayed**, Georgia Tech, Atlanta, GA, USA
Plasmonic Field Imaging and Coupling: Applications in Material Science, Biology and Cancer Detection & Therapy
- PL 02** **Uzi Landman**, Georgia Institute of Technology, Atlanta, GA, USA
Small is Different: Non-scalable Emergent Phenomena at the Nano Scale

Poster Session 1 & Council Meeting:

2.10 PM - 4.10 PM

Posters: Electronic-Magnetic-Photonics, Energy & Hybrid

Session 2: Keynote Lectures (KN) and Invited Lectures (IN)

4.10 PM - 6.00 PM

Session 2A

- KN 01** **Vinod Labhassetwar**, Lerner Research Institute, OH, USA
Nanoparticle-Mediated Drug Delivery: Biophysical Interactions to Therapeutic Applications
- KN 02** **C. Plank**, Technische Universität München, Munich, GERMANY
Nanomagnetic Delivery of Innovative Therapeutics
- IN 01** **Nguyen Thanh**, The Royal Institution of Great Britain, Univeristy College, LONDON
Design, Synthesis, Chateracterisation of Novel Magnetic Nanoparticles for Biomedical Applications

Session 2B

- KN 03** **Vinayak P. Dravid**, Northwestern University, IL, USA
Corollary to Archimedes' Levers: Nano- and Microscale Levers for Seeing and Sensing the Invisible
- KN 04** **Sri Sridhar**, Northeastern University, MA, USA
Nanomaterials for Nanophotonics

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KN 04 **Sri Sridhar**, Northeastern University, MA, USA
Nanomaterials for Nanophotonics

IN 02 **Hossam Haick**, Technion – Israel Institute of Technology, Haifa, ISRAEL
Diagnosis and Monitoring of Disease from Real Breath Samples using an Artificial Olfactory System Based Nanosensors

Session 2C

KN 05 **M. Samy El-Shall**, Virginia Commonwealth University, Richmond, VA, USA
Nanomaterials and Nanocatalysis for Energy and Environmental Applications

KN 06 **Tim Fisher**, Purdue University, Birck Nanotechnology Center, West Lafayette, IN, USA
Exploiting the Collective Behavior of Carbon Nanomaterials

IN 03 **Swapan K. Pati**, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, INDIA
Transport, magnetic, optical and gas storage Properties of Graphene Nanoribbons/Graphene

Friday, February 19, 2010

Session 3: Plenary Lectures (PL)

9.15 AM - 10.05 A.M

PL 03 **Luis M. Liz-Marzán**, Universidade de Vigo, Vigo, SPAIN
Synthesis, Assembly and Applications of Metal Nanoparticles

Session 4: Keynote Lectures (KN) and Invited Lectures (IN)

10.30 AM – 12.50 PM

Session 4A

KN 07 **Bharat Bhushan**, The Ohio State University, USA
MEMS/NEMS and BioMEMS/BioNEMS Materials and Devices and Biomimetics

KN 08 **Santanu Bhattacharya**, Indian Institute of Science and Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, INDIA
Nanocomposites from Soft Materials

IN 04 **V. Ramgopal Rao**, Indian Institute of Technology Bombay, Mumbai, INDIA
An Ultra-sensitive Polymer Composite Cantilever Technology for Disposable Bio-chemical Sensing Applications

IN 05 **Arindam Ghosh**, Indian Institute of Science, Bangalore, INDIA
Low-frequency Noise in Graphene: Implication to Device and Physics

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Session 4B

- KN 09** **Ganpati Ramanath**, Rensselaer Polytechnic Institute, NY, USA
Molecular Sculpture and Tailoring of Nanostructures, Assemblies and Interfaces
- KN 10** **Paul O'Brien**, The University of Manchester, UK
Defining and Understanding Nanodimensional Crystals
- IN 06** **G. K. Dey**, Bhabha Atomic Research Centre, Mumbai, INDIA
Nanocrystal Formation from Amorphous Phase in Zr and Fe Based Alloys
- IN 07** **Jun Ding**, National University of Singapore, SINGAPORE
Magnetism in ZnO-based Magnetic Semiconductors

Session 4C

- KN 11** **Katsuhiko Ariga**, National Institute for Materials Science, Tsukuba, JAPAN
Supramolecular Systems for Material Sensing, Separation, and Delivery & Hand-operating Nanotechnology
- KN 12** **G. M. Chow**, National University of Singapore, SINGAPORE
Size and Surface Effects on Emission Properties of Lanthanide-doped Upconversion NaYF₄ Nanoparticles
- IN 08** **A. Sundaresan**, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, INDIA
Surface Ferromagnetism and its Implications on Dilute Magnetic Semiconductors
- IN 09** **Mandar Deshmukh**, Tata Institute of Fundamental Research, Mumbai, INDIA
Graphene Based NEMS Devices

Poster Session 2 & Industry Presentation 1:

2.10 PM - 4.10 PM

Posters: Functional Materials & Medicine

Session 5: Keynote Lectures (KN) and Invited Lectures (IN)

4.10 PM - 6.15 PM

Session 5A

- KN 13** **Thomas Thundat**, Oak Ridge National Laboratory, Oak Ridge, TN, USA
Nanomechanical Sensing with Chemical Selectivity
- KN 14** **L. A. Nagahara**, Physical Sciences – Oncology Centers, National Cancer Institute, Maryland, USA
Convergence of Physical & Life Sciences Perspectives: Emergent Trends in Cancer & Nanotechnology

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- IN 10** **Dulal Panda**, Indian Institute of Technology Bombay, Mumbai, INDIA
Therapeutic and Engineering Applications of Bio-nanopolymers
- CL 01** **T. Premkumar**, Gwangju Institute of Science and Technology, Gwangju, SOUTH KOREA
One-pot synthesis of nanogold with the aid of a macrocycle

Session 5B

- KN 15** **R. Tenne**, Weizmann Institute, Rehovot, ISRAEL
Inorganic Nanotubes and Inorganic Fullerene-likes: A Progress Report
- KN 16** **A. Bansil**, Northeastern University, Boston MA, USA
Confinement and Correlation Effects and Momentum Density in Li and CdSe Nanoclusters
- IN 11** **Nikhil Koratkar**, Rensselaer Polytechnic Institute, NY, USA
Graphene Based Composite Materials
- CL 02** **Deepa Khushalani**, Tata Institute of Fundamental Research, Mumbai, INDIA
Formation of Functional Oxides: Synthetic Approach to Materials For Energy Applications

Session 5C

Panel Discussion: Taking the Nanotechnology Research to Market 2.10 PM - 4.10 PM

Saturday, February 20, 2010

Session 6: Plenary Lectures (PL) 9.00 AM – 10.40 AM

- PL 04** **Prof. D. D. Sarma**, Indian Institute of Science, Bangalore, INDIA
Semiconductor nanoparticles: How do they grow and how do we arrange them?
- PI 05** **Prof. Kostya Novoselov**, University of Manchester, Manchester, UK
QED in a Pencil Trace

Session 7: Keynote Lectures (KN) and Invited Lectures (IN) 11.00 AM - 12.50 PM

Session 7A

- KN 17** **Prof. Neil J. Coville**, University of the Witwatersrand, Johannesburg, SOUTH AFRICA
Carbon Coils
- KN 18** **Satishchandra Ogale**, National Chemical Laboratory, Pune, INDIA,
Functional Nanomaterials for Solar Cells and Other Optoelectronic Applications

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IN 12 **G. P. Das**, Indian Association for the Cultivation of Science, Kolkata, INDIA.
Designing Nanostructures for Hydrogen Storage

Session 7B

KN 19 **Kannan M. Krishnan**, University of Washington, Seattle, USA
Biomedical Nanomagnetism: A Spin through New Possibilities

KN 20 **E. Duguet**, CNRS, Université de Bordeaux, FRANCE
Multipod-like Polystyrene Nanoparticles Obtained from Silica Seeds by Styrene Emulsion Polymerization

IN 13 **Shantikumar Nair**, Amrita Vishwa Vidyapeetham, Kerala, INDIA
Cell targeted Diagnostics and Therapy using Nanomaterials

Session 7C

KN 22 **Keisaku Kimura**, University of Hyogo, Hyogo, JAPAN
Charge Transport Properties of Gold Nanoparticle Assemblies Modified with Thiolate

IN 14 **K. G. Thomas**, National Institute for Interdisciplinary Science and Technology, Trivandrum, INDIA
Heterojunction Properties of Hybrid Nanomaterials

CL 03 **Sascha Dietrich**, Technische Universität Chemnitz, Chemnitz, GERMANY
Dendrimer-stabilized Metal Nanoparticles and their Applications

CL 04 **Mohsen Ashjari**, Iran Polymer & Petrochemical Institute, Tehran, IRAN
Effect of the mixing process on the preparation of nano-Fe₃O₄ doped thermoplastic polyurethane

Poster Session 3 & Industry Presentation 2:

2.10 PM - 4.10 PM

Posters: Fabrication-Devices, Food-Environment & Novel Synthesis

Session 8: Keynote Lectures (KN) and Invited Lectures (IN)

4.10 PM - 5.10 PM

Session 8A

IN 15 **E. A. Rozhkova**, Argonne National Laboratory, Argonne, IL, USA,
Multifunctional Nano-Bio Hybrid Materials

IN 16 **U. Ramamurty**, Indian Institute of Science, Bangalore, INDIA
Nano-mechanical characterization of advanced materials

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Session 8B

IN 17 **S. G. Mhaisalkar**, Nanyang Technological University, SINGAPORE
Nanonets Based Printable, Flexible & Wearable Charge Storage Solutions

IN 18 **Cédric Desplanches**, ICMCB, Université de Bordeaux, CNRS, FRANCE
Photomagnetism: Inorganic, Molecular and Nano-sized Systems

Session 8C

IN 19 **Goutam De**, Central Glass & Ceramic Research Institute, Kolkata, INDIA
Metal Nanoparticles Incorporated Composite Films and their Applications

IN 20 **Amitava Patra**, Indian Association for the Cultivation of Science, Kolkata, INDIA
Fabrication and Optical Properties of Nano-materials

Session 9: Concluding Session and Award Ceremony

5.10 PM - 5.30 PM