



15-18 March 2008

15 March 2008 (Saturday)

12:30 - 03:15 pm Arrival, Check-in (Lunch)

03:30 - 03:40 pm Vinod K. Singh, Symposium Chairman

Welcome address**Biomimetics: Designs Inspired by Living Systems**

Co-ordinators: Ashutosh Sharma (CHE) & Animangsu Ghatak (CHE)

03:40 - 03:50 pm An Overview: Co-ordinators03:50 - 04:20 pm **Biomimetic Models of Protein Aggregation**
Sandeep Verma, CHM04:20 - 04:35 pm **Biomimetic Approach for Synthesis of Artificial Tissue**
Rajesh Vasita, BSBE (PhD student)04:35 - 05:05 pm **Molecular Machines: Packers and Movers, Assemblers and Shredders**
D. Chowdhary, PHY05:05 - 05:20 pm **Bioinspired Design of Patterned Adhesives**
Abhijit Majumder, CHE (PhD Student)05:20 - 05:40 pm **Questions & Answers**

05:40 - 06:05 pm Coffee/Tea

06:10 - 06:50 pm To be announced

Evening Talk
T. Ramasamy, Secretary DST07:15 pm **Ice-breaker followed by dinner****16 March 2008 (Sunday)****05:30 - 08:30 am Temple Visit**

08:30 - 09:45 am Breakfast

10:00 - 10:30 pm **Bioinspired Design or Microfluidic Systems**
Shantanu Bhattacharya, ME10:30 - 11:00 am **Optimum Designs through Principles of Evolution**
P. Chakraborty, CE11:00 - 11:40 am **Evolutionary Photonics: Colour Design Inspiration from the Natural World**
Pete Vukusic, Univ of Exeter, U.K.11:40 - 12:00 pm **Questions & Answers**12:00 - 1:00 pm **POSTER SESSION** with Coffee/Tea

1:00 - 02:00 pm Lunch

Future of Energy

Co-ordinators: A. Agrawal (ME), S.K. Iyer (EE), P. Munshi (ME)

02:30 - 02:40 pm An Overview: Co-ordinators02:40 - 03:10 pm **Biofuels: Growing them in backyard to run the vehicles**
Avinash Agrawal, ME03:10 - 03:25 pm **Laser fired low emission futuristic internal Combustion engines**
Dhananjay Srivastava, ME (MTech student)03:25 - 03:55 pm **Gas turbine combustion and power Generation**
A. Kushari, AE03:55 - 04:10 pm **Tomographic imaging of the Aditya Tokamak**
Nitin Jain, NET (PhD student, NET)04:10 - 04:20 pm **Questions & Answers**

04:20 - 04:45 pm Coffee/Tea

04:45 - 05:15 pm **1st IIT K REACH Symposium, Review**
Manindra Agrawal05:15 - 05:55 pm **Current Status of Fast Reactor & Associated Fuel Cycle Technology in India in the Context of Energy Security and International Developments**
Baldev Raj, IGCAR, Kalpakkam06:00 - 06:30 pm **Excellence in Research - What is the Road Map?**
S.G. Dhande, Director, IIT Kanpur

07:15 Dinner

17 March 2007 (Monday)

07:30 - 08:30 am Breakfast

08:40 - 09:10 pm **Thin Film Solar Cells**
S. Sunder Kumar Iyer, EE09:10 - 09:25 am **Carbon nanotube based solar cells**
Arun Tej Mallajosyula, EE (PhD student)09:25 - 09:55 am **Gas Hydrates**
K. Muralidhar, ME09:55 - 10:25 am **Fuel Cells**
Anil Kumar, CHE10:25 - 10:55 am **The Future of Energy Markets in India: Structure and its Regulation**
Anoop Singh, IME10:55 - 11:15 am **Questions and Answers**

11:15 - 11:40 am Coffee/Tea

Scientific Methodology of Forecasting

Co-ordinators: Pankaj Jain (PHY), D. Kundu (MATH)

11:45 - 11:55 am An Overview: Co-ordinators11:55 - 12:30 pm **Forecasting in the context of Indian : Election Opinion polls and exit polls (Special Talk)**
Rajeev Karandikar, Cranes Software12:30 - 01:00 pm **Use of forecasting in signal processing**
S. Umesh, EE01:00 - 02:00 pm **Lunch**02:30 - 03:00 pm **Forecasting daily spot foreign exchange rates using wavelets and neural networks**
Amit Mitra, MATH03:00 - 03:15 pm **Forecasting and model selection**
Anurag Prasad, MATH (PhD Student)03:15 - 03:45 pm **Integrated approaches for runoff forecasting**
Ashu Jain, CE03:45 - 04:00 pm **Questions and Answers**

04:00 - 04:20 pm Coffee/Tea

04:25 - 05:00 pm **Government Initiatives in Energy Sector and Future Challenges**
Ashish Gupta, IPS, PMO**05:15 - 07:15 pm Sight Seeing**

07:30 pm Dinner

18 March 2007 (Tuesday)

07:30 - 08:30 am Breakfast

08:45 - 09:15 am **Forecasting Daily Monsoon rainfall**
Pankaj Jain, PHY09:15 - 09:45 am **Modelling and forecasting the diffusion of telephones in India**
Sanjay Singh, HSS09:45 - 10:00 am **Artificial neural network based on short-term energy forecasting in competitive electricity market**
Pindoriya N. M., EE (PhD Student)10:00 - 10:15 am **Questions & Answers**10:15 - 10:30 am **Concluding Remarks**
Professor K. Muralidhar, Dean R&D

10:30 - 10:50 am Coffee/Tea

11:00 am Checkout & Departure via Fall

1.30 pm **LUNCH at DHABA**