

Special Lecture on

“Light Harvesting Nano-materials for Clean Water and Green Energy”

Monday, 27th February 2012

2:00 -3:00 pm

by

Dr. Samir Kumar Pal

*SN Bose Centre for Basic Sciences
Kolkata, India*

Venue:

**Center of Excellence in Nanotechnology
Outreach Building, Asian Institute of Technology**

Biography:

Dr. Samir Kumar Pal is presently an Associate Professor in the Department of Chemical, Biological and Macromolecular Sciences at S.N. Bose National Centre for Basic Sciences in Kolkata, India. He is also one of the investigators in the Unit for NanoScience and Technology of the Centre. He is in collaboration with Professor Joydeep Dutta.



Abstract:

An overview on the beauty in the design of nano-materials in the harvesting of solar light will be discussed. Our continuous efforts for the exploration of the key ultrafast photophysical processes in the wide band gap metal oxide semiconductors involved in the photocatalysis and the Dye sensitized solar cell (DSSC) will be highlighted. The effect of surface defects and the doping on the light harvesting processes will also be discussed. The progress of the synthesis of protein-templated bio-nano-clusters in our laboratory and their detail structural/functional characterization, and potential technological application in Toxic metal detection in aqueous environments will also be intended for the discussion.

All interested participants are most welcome.