

# CHEMFEST-2009

(An In-House Symposium of the Department of Chemistry, IIT Kanpur)

**Venue:** Outreach Auditorium

**Date:** October 31, 2009 (Saturday)

8:55 - 9:00 **Prof. V. Chandrasekhar**, Head, Department of Chemistry  
*Introductory remarks*

## SESSION I (9:00 - 10:30)

**Chairman:** **Prof. J. N. Moorthy**

9:00 - 9:30 Prof. Y. D. Vankar  
*Development of Newer Methodologies in Carbohydrate Chemistry en route to Some Biologically Important Molecules*

9:30 - 10:00 Prof. A. Chandra  
*Hydration and dynamics of protonic defects in aqueous media*

10:00 - 10:15 Ms Dipti Shukla  
*S<sub>N</sub>2-Type Ring-Opening of Aziridines and Azetidines: Enantioselective Synthesis of Morpholines and Homologues*

10:15 - 10:30 Mr. Tapas Goswami  
*Simultaneous effect of chirp and polarization on the control of femtosecond molecular fragmentation*

10:30 - 11:00 **TEA Break**

## SESSION II (11:00 - 12:30)

**Chairman:** **Prof. V. Chandrasekhar**

11:00 - 11:30 Prof. S. Sarkar  
*Carbon Whiskers, Cuboids and Quantum Dots*

11:30 - 12:00 Prof. S. Verma  
*Ordered Biomolecular Assemblies: From Pentapeptide to Proteins*

12:00 - 12:15 Ms Anindita De  
*Tyrosinase Modeling. Aromatic Ring Hydroxylation: A Rationale from CuII2/CuI2 Redox Potential Values*

12:15 - 12:30 Mr. Satyajit Saha  
*Organocatalysts with enhanced hydrogen bonding potential for enantioselective Aldol, Michael and Biginelli Reactions*

### SESSION III (14:15 - 15:30)

**Chairman: Prof. A. Chandra**

14:15 - 14:45 Prof. J. K. Bera  
*Cooperative Reactivity*

14:45 - 15:15 Prof. M. Ranganathan  
*Impurity Effects in Crystal Growth from Solutions*

15:15 - 15:30 Mr. Srirambalaji  
*1,3-Bis(2-pyridyl)imidazol-2-ylidene Stabilized Trinuclear Copper(I) Cluster and its Properties*

#### Special Lecture

15:30 - 15:55 Prof. V. Chandrasekhar  
*Safety in Chemistry Labs*

#### 16:00 - 18:00 TEA/POSTER SESSION

##### POSTERS:

1. "Coordination, luminescence and aggregation of a modified adenine-silver complex" by Mrituanjay D. Pandey, Vadapalli Chandrasekhar, Sandeep Verma
2. "Vibrational Spectral Diffusion and Hydrogen bond Dynamics in Liquid Methanol: An ab initio Molecular Dynamics Study" by Vivek K. Yadav, J. RoyChoudhuri, A. Karmakar and Amalendu Chandra
3. "Silver-Adenine Frameworks"  
by Jitendra Kumar, A. K. Mishra, C. S. Mishra and Sandeep Verma
4. "Spectrally resolved femtosecond photon echo spectroscopy of astaxanthin" by Ajitesh Kumar, S. K. Karthick Kumar, Vivek Tiwari, Debabrata Goswami
5. "Activation of Cyclooctadiene (COD) at the Iridium Center: An Experimental and DFT Study" by Wahidur Rahaman and Jitendra K. Bera
6. "A Multifaceted N-Heterocyclic Carbene" by Arup Sinha and Jitendra K. Bera
7. "Homo-/Hetero-bimetallic Complexes of Pyridine/Pyrazine Amide Ligands: An Account" by Sharmila Pandey and R. N. Mukherjee
8. "Base-catalyzed fragmentation of norbornyl hydroxy oxetanes" by G. Hari Mangeswara Rao and F.A. Khan
9. "Degradation of N,N-dimethylformamide by paracoccus species – Cloning of DMFase" by Shiv Swaroop and Gurunath Ramanathan

10. "CAN catalyzed azidation of 1,2-anhydrosugars: Applications in the synthesis of structurally diversified sugar derived morpholine triazoles and sugar oxazine-2-ones as glycosidase inhibitors" by Y. Suman Reddy and Y. D. Vankar
11. "Functional Coordination Polymers Built with Semi-flexible Ligands" by Prem Lama and P. K. Bharadwaj
12. "Modulation of Iron Displacements and Axial Ligand Orientations in a Nonplanar Porphyrinic Environment" by R. Patra and S. P. Rath\*
13. "Synthesis and Characterizations of Cofacial Zinc Bisporphyrins: Enhanced Pacman Flexibility through Axial Coordinations" by S. Brahma, A. Chaudhary, A. Iqbal and S. P. Rath\*
14. "Triarylbiaryls as atom-efficient multi-coupling reagents in organic synthesis" by Debasis Banerjee and M. L. N. Rao
15. "Binuclear Pd-NHC Carbene via Transmetalation: Structural and Spectroscopic Characterization" by Biswajit Santra, R. Srirambalaji and G. Anantharaman