

Ultrafast Science 2015 (UFS-2015)
S. N. Bose National Centre for Basic Sciences, Kolkata 700098
19-21 November, 2015

Program Schedule

19th November, 2015

11:00 – 13:00: Registration

13:00 – 14:00: Lunch

14:00 – 14:20: Inauguration

14:20 – 15:00: **Inaugural Lecture** by D. Mathur, TIFR Mumbai

Title: Selective Bond Breaking in Water with Intense, 2-cycle Laser Pulses.

Chairperson: D. K. Palit, BARC, Mumbai

15:00-15:20: Tea

Technical Session I (Chairperson: D. Mathur, TIFR, Mumbai)

3:20 - 3:50: Reji Phillip, RRI Bangalore

Title: Stark Broadening of Emission Lines in an Ultrafast Laser Produced Zinc Plasma.

3:50 – 4:20: H. N. Ghosh, BARC, Mumbai

Title: Subpicosecond Exciton Dynamics in Doped and Alloy Quantum Dot Materials.

4:20 – 4:50: Suman Bagchi, RRCAT, Indore

Title: Initial Results on Heavy Ion Acceleration Using Laser Plasma Accelerator

4:50 – 5:10: Tea

5:10 – 7:00: 2 min presentation each by poster presenters

Chairpersons: P. Sen, S. S. Prabhu, J. R. Mohanty

7:30 – Dinner

20th November, 2015

Technical Session II (Chairperson: D. K. Palit, BARC, Mumbai)

9:00 – 9:30: Pratik Sen, IIT Kanpur

Title: Real Time Quantification of Ultrafast Photo-induced Bi-molecular Electron Transfer Rate: Direct Probing of the Transient Intermediate.

9:30 – 10:00: S. Nath, BARC, Mumbai

Title: Two Dimensional Infrared (2DIR) Spectroscopic studies in confined environments.

10:00 – 10:20: Jyotishman Dasgupta, TIFR, Mumbai

Title: Probing Exciton Dynamics of Conjugated Polymers in Solution through Time-resolved Pump-probe and Stimulated Raman Spectroscopy.

10:20 – 10:40: Suman Kalyan Pal, IIT Mandi

Title: Carrier Dynamics in Dye Anchored Quantum Dots (QDs): Femtosecond Insights.

10:40 – 11:00: Prakriti Ranjan Bangal, ICT, Hyderabad

Title: Intrinsic and Non-intrinsic Outer Sphere Electron Transfer: Test of Marcus Inverted Region.

11:00 - 11:30: Tea and Group Photo Session (Please assemble near Reception)

Technical Session III (Chairperson: A. Ghosh, University of Calcutta)

11:30-12:00: D. K. Palit, BARC, Mumbai

Title: Ultrafast Spectroscopy and Dynamics in Photonic Materials.

12:00 – 12:30: Achanta Venugopal, TIFR, Mumbai

Title: Light Modulation in Photonic and Plasmonic Metamaterials.

12:30-13:00: Bipul Pal, IISER, Kolkata

Title: Photo-tunable Thermo-optical Nonlinearity in Organic Photochromic Materials.

13:00 – 14:00 Lunch

Technical Session IV (Chairperson: S. Basu, SINP, Kolkata)

14:00 – 14:30: D. N. Rao, University of Hyderabad

Title: Formation of Sub-wavelength Surface Structures on Metals and Polymer Films under the Irradiation of Femtosecond Laser Pulses.

14:30 – 15:00: Santosh C., Manipal University

Title: Material Modification by Ultrafast Laser Pulses.

15:00 – 15:30: Parinda Vasa, IIT Mumbai

Title: Form Birefringence in Fused Silica using Intense Ultrashort Pulses.

15:30 – 16:00: Debabrata Goswami, IIT Kanpur

Title: Elucidating Structure and Dynamics under Femtosecond Laser Manipulated Conditions.

16:00 – 18:30: Poster.

Chairpersons: P. Sen, S. S. Prabhu, J. R. Mohanty

19:30: Dinner

21st November, 2015

Technical Session V (Chairperson: D. Goswami, IIT Kanpur)

9:30 – 10:00: Andrzej Maziewski, University of Bialystok, Poland

Title: Impact of Femtosecond Light Pulses on Garnets and Ultrathin Co Films.

10:00 – 10:30: J. R. Mohanty, IIT Hyderabad

Title: Ultrafast Magnetization Dynamics in Magnetic Multilayer.

10:30-11:00 Tea

Technical Session VI (Chairperson: D. N. Rao, University of Hyderabad)

11:00 - 11:30: S. Prabhu, TIFR, Mumbai

Title: Continuous Wave (CW) Tera Hertz (THz) Antenna Structures on C-Irradiated GaAs Substrates

11:30-12:00: S. Venugopal Rao, University of Hyderabad

Title: Ultrashort Laser Pulses and Explosives Detection: Recent Advances

12:00-13:00 Lunch

Technical Session VII (Chairperson: J. Chakrabarti, SNBNCBS, Kolkata)

13:00 -13:15: J. Sinha

Title: Observation of Ultrafast Asymmetric Spinwave Dynamics Using Brillouin Light Scattering

13:15- 13:30: M. Pradhan

Title: Cavity Ring-down Spectroscopy for Biomedical Applications

13:30 – 13:45: R. K. Mitra

Title: The Effect of Salts on the Collective Dynamics of Water: A THz Spectroscopic Study

13:45-14:00: S. K. Pal

Title: TBA

14:00-14:15: R. Biswas

Title: Dielectric and Fluorescence Spectral Relaxation Measurements of Deep Eutectic Solvents: Origin for Picosecond and Slower Dynamics

14:15-14:30: A. Barman

Title: All-Optical and Spin Torque Induced Ultrafast Spin Dynamics in Ferromagnetic Thin Films, Multilayers and Patterned Nanostructures

14:30-15:00: Concluding Session

15:00: Tea and Conference Ends