

INTERNATIONAL CONFERENCE ON PHOTONICS, META-MATERIALS & PLASMONICS (PMP-2019), 14-16 FEB. 2019

TECHNICAL PROGRAM

Thursday, February 14, 2019

09:00-09:30 Registration Conference (Venue: Reception, ABB II)

09:30-10:00 Inaugural Function (Venue: LT4, ABB II)

09:30-09:32 Welcome note by Co-convener

09:32-09:35 Lighting the lamp

09:35-09:38 Dias formation

09:38-09:40 Welcome address by Convener

09:40-09:45 Honour the dignitaries on Dias with Bouquet

09:45-09:46 Request Honourable VC to declare the conference open

09:46-09:50 Request the dignitaries present on the Dias to open the conference proceeding

09:50-09:54 Welcome the guest by Dean (A& R)

09:54-09:58 Welcome address by Honourable VC

09:58-10:00 Proceed for High tea

10:00-10:30 High Tea

Speaker/Authors Session 1 (Venue: LT4): Plasma Physics & Plasmonics

Session Chair: Prof. Rajadurai Chandrasekar (Univ. of Hyderabad)

Time	Talk	Speaker	Title
10:30-11:05	Plenary	Prof. Sudeep Bhattacharjee (IIT Kanpur)	Capillary Guiding and Sub-Micron Structuring using Ion Beams from Microwave Plasmas in a Multicusp
11:05-11:40	Plenary	Prof. V. K. Tripathi (IIT Delhi)	Surface Plasmon Induced Ion Acceleration
11:40-12:00	Invited	Dr. Sarveshwar Sharma (IPR Ahmedabad)	An overview of capacitive discharges: A key tool for plasma processing
12:00-12:20	Invited	Prof. Punit Kumar (Lucknow University)	Spin polarization in magnetized quantum plasma
12:20-12:40	Invited	Dr. Amar Kakad (IIGM Mumbai)	Multi-Spacecraft Observations and Modelling of Electron Holes in the Earth's Magnetosphere
12:40-01:00	Invited	Dr. Mukesh Ranjan (IPR Ahmedabad)	Plasmonic Dense Nanoparticles Arrays for Sensor and Solar Cells

01:00-02:00 Lunch			
Session 2 (Venue: LT4): Plasma Physics & Plasmonics			
Session Chair: Prof. Punit Kumar (Lucknow University)			
02:00-02:35	Plenary	Prof. Tatiana Murzina (Moscow University, Russia)	Nonlinear Optics of Resonant Metamaterials
02:35-03:10	Plenary	Prof. Rajadurai Chandrasekar (Univ. of Hyderabad)	Organic Photonic Micro-Structures – A Single Particle Microspectroscopy Studies
03:10-03:45	Plenary	Prof. Zhengbiao Ouyang (Shenzhen Univ., China)	Metasurfaces and Their Applications
03:45-04:15 Tea Break			
04:15-04:35	Invited	Dr. Ujjwal Sinha (MPIK, Germany)	Polarized light from the transportation of a matter-antimatter beam in a plasma
04:35-04:55	Invited	Dr. Manmohan Singh Shishodia (GBU, Noida)	Surface plasmon assisted molecular energy transfer
04:55-05:15	Invited	Dr. Salahuddin Khan (RRCAT Indore)	Ultrafast Dynamics: A tool to look into devices
05:15-05:25	Oral	Dr. Arghya Mukherjee (IPR Ahmedabad)	Nonlinear propagation of electrostatic waves in relativistic electron-ion plasma
05:25-05:35	Oral	Dr. N. Yogesh (University of Madras)	Terahertz Mode Rotation in an Open Cavity Formed by One-Dimensional Photonic Crystals
05:35-05:45	Oral	Dr. Krishna Gopal (Delhi University)	Laser Wakefield electron acceleration by shaped laser pulse in plasmas
05:45-05:55	Oral	Dr. Shilpa Kulkarni (SRCEM, Nagpur)	Fiber optic detection of kerosene adulteration in petrol
05:55-06:05	Oral	Meenakshi Rana (JIIT Noida)	Investigation on nonlinear optical responses of different pyrrole derivatives: a computational study
05:35-05:40 Photo Session I: ABB II			
Session 3 (Venue: Reception, ABB II) Poster Presentations			
04:15-06:05 Poster Presentations: Plasma Physics & Plasmonics			
8:00 PM Conference Dinner			
Friday, February 15, 2019			
Session 4 (Venue: LT4): Fibre Optics/Photonics			
Session Chair: Prof. N. S. Saini (GNDU Amritsar)			

09:00-09:35	Plenary	Dr. Ranjan Singh (NTU Singapore)	Twisting the THz light with chiral metamolecules
09:35-10:10	Plenary	Prof. B. D. Gupta (IIT Delhi)	Plasmonics based Fiber Optic Chemical and Biosensors
10:10-10:30	Invited	Dr. Sachin Kumar Srivastva (IIT Roorkee)	Plasmonic nanosculptured thin films for sensing applications
10:30-10:50	Invited	Dr. Ritwick Das (NISER, Bhubaneswar)	Optical parametric oscillators: A road to reach inaccessible spectral bands
10:50-11:20 High Tea			
11:20-11:40	Invited	Dr. Rakesh Kumar Singh (IIT BHU)	Holographic imaging with a single pixel detector
11:40-12:00	Invited	Dr. Umesh Tiwari (CSIR-CSIO, Chandigarh)	The Recent Developments and Challenges in Immobilized Optical Fiber Biosensors
03:15-03:35	Invited	Dr. Bhaskar Kanseri (IIT Delhi)	Synchronized cavities for applications in non-linear and quantum domains
12:20-12:40	Invited	Dr. Yogita Kalra (DTU Delhi)	Zero Index meta-materials
12:40-01:00	Invited	Dr. Mukesh Kumar (Thapar University)	Refractory conductive ceramics for plasmonic application
01:00-02:00 Lunch			
Session 5 (Venue: LT4): Plasma Physics/THz/Photonics			
Session Chair: Dr. Ranjan Singh (NTU Singapore)			
02:00-02:35	Plenary	Prof. Achanta Venu Gopal (TIFR)	Parametric Far- and near-field properties of plasmonic structures
02:35-02:55	Invited	Dr. Sanjay K. Mishra (DRDO, Dehradun)	Easing atmospheric effects for underwater laser communication
02:55-03:15	Invited	Dr. Girija Moona (NPL Delhi)	Laser systems in dimensional metrology: an emerging trend
03:15-03: 50	Plenary	Prof. A. K. Chaudhary (Uni. of Hyderabad)	Evaluation of some indigenously grown organic nonlinear crystals for efficient Terahertz generation and its applications in time domain spectroscopy
03: 50-04:00	Oral	Jyoti Rajput (NIT Jalandhar)	Resonance assisted enhanced electron acceleration in the presence of self-generated magnetic fields due to circularly polarized laser in plasma

03:55-04:25 Tea Break			
04:25-04:45	Plenary	Prof. R. P. Sharma (IIT Delhi)	Parametric Instabilities and their nonlinear saturation in Laser Plasma Interaction
04:45-05:05	Invited	Prof. N. S. Saini (GNDU Amritsar)	Nonlinear Electrostatic Structures in an Ion Beam Superthermal Plasma
05:05-05:25	Invited	Dr. Sandeep Kumar (Manav Rachna University)	Temporally-coherent terawatt attosecond XFEL synchronized with a few cycle laser
05:25-05:45	Invited	Dr. A. P. Misra (Visva Bharti Uni., Santiniketan)	Surface plasmons in graphene and semiconductor plasmas
05:45-06:05	Invited	Dr. Anil Malik (C.C.S.U. Meerut)	Perspective: 2018 terahertz science roadmap
Saturday, February 16, 2019			
Session 6 (Venue: LT4): Plasma Physics/THz/Metamaterials			
Session Chair: Dr. Ranjan Singh (NTU Singapore)			
09:00-09:35	Plenary	Prof. Rajdeep Singh Rawat (NTU Singapore)	Plasma synthesized high performance energy storage and energy conversion nano-assemblies
09:35-10:10	Invited	Dr. V. B. Pathak (GIST, IBS South Korea)	All Optical Control on Laser Wakefield Acceleration
10:10-10:30	Invited	Dr. Shikha Bhadoria (MPIK Germany)	Laser-driven shock acceleration of quasi-monoenergetic ions in the ultra-relativistic regime
10:30-10:50	Invited	Dr. D. N. Gupta (Delhi University)	Laser Wakefield accelerations for Energetic Electron Beam Generation
10:50-11:20 High Tea			
11:20-11:55	Plenary	Prof. H. K. Malik (IIT Delhi)	Valorizing Ions and Electrons
11:55-12:15	Invited	Dr. Niti Kant (LPU)	Terahertz wave generation by obliquely incident laser beams beating in magnetized plasma with surface density ripple
12:15-12:35	Invited	Prof. S. C. Sharma (DTU Delhi)	Terahertz (THz) Radiation Emission from Plasma Wave Pumped Free Electron Laser
12:35-12:55	Invited	Dr. Naveen Nischal (IIT Patna)	Securing Information through Light

12:55-01:05	Invited	Dr. Gunjan Purohit (DAV Dehradun)	Generation of terahertz radiation from beating of two intense cosh-gaussian laser beams in magnetized plasma
01:05-02:00 Lunch Break			
Session 7 (Venue: LT4): Plasma Physics/THz/Metamaterials			
Session Chair: Prof. H. K. Malik (IIT Delhi)			
02:00-02:35	Invited	Dr. Amol Choudhary (Uni. of Sydney, Australia)	High-performance Integrated Microwave Photonics.
02:35-02:55	Invited	Dr. Somnath Ghosh (IIT Jodhpur)	Device level implementation of hidden singularities in photonic structures
02:55-03:15	Invited	Dr. Dibakar Roy Chowdhury (MEC Hyderabad)	Modulating Resonances in Terahertz Metamaterials
03:15-03:35	Invited	Dr. Promod K. Basoya (University of Exeter, UK)	Natural photonics: what biology can do for optics and vice versa?
03:35-03:55	Invited	Dr. Gagan Kumar (IIT Guwahati)	Electromagnetically Induced Transparency in Terahertz Metamaterials
03:55-04:25 Tea Break			
04:25-04:45	Invited	Dr. Akhilesh Kumar Misra (IIT Roorkee)	Triggering and controlling coherence in a room temperature quantum dot semiconductor optical amplifier
04:45-05:05	Invited	Dr. Mukesh Jewariya (CSIR-NPL Delhi)	Real-Time Three-Dimensional Terahertz Imaging using Intense Terahertz Pulse
05:05-05:25	Invited	Dr. Rajesh Kumar (IIT Roorkee)	Hybrid Silicon Active Photonic Devices
05:25-05:30 Photo Session II: ABB II			
Session 8 (Venue: G11, ABB II): Optical Materials/Metamaterials/Photonics			
Session Chair: Prof. R. K. Dwivedi (JIIT Noida)			
02:00-02:20	Invited	Dr. D. K. Dwivedi (MMMUT Gorakhpur)	Synthesis and characterization of Se-based chalcogenide glasses for optoelectronic applications
02:20-02:30	Oral	Dr. Asheel Kumar (Allahabad University)	X-mode coupling to Bernstein wave in a plasma embedded with clusters
02:30-02:40	Oral	Dr. Animesh Sinha Roy, JIIT Noida	On the feasibility of quantum cloning attack on BB84 protocol Of quantum key distribution

02:40-02:50	Oral	Dr. Divya Singh (Rajdhani College, DU)	Terahertz radiation sources based on laser plasma interaction
02:50-03:00	Oral	Dr. Sita Sundar (IITM)	Influence of collisions on wake due to grain in streaming ions
03:10-03:20	Oral	Dr. Niti Agrawal (Shyamlal College, DU)	Power loss mitigation in partially shaded solar PV array through different interconnection topologies
03:20-04:00	OSA Ambass ador	Dr. Amol Chaudhary (Uni. of Sydney, Australia)	Interaction with IIIT OSA students
04:00-04:30 Tea Break			
04:30-04:40	Oral	Dr. Updesh Verma (Gov. College Ghaziabad)	Optical window for efficient amplification and compression of intense laser pulses by Stimulated Brillouin Scattering
04:40-05:00	Oral	Dr. Shivani Gautam (Amity University)	Plasmonic refractive index sensor in UV- visible-NIR region
05:00-05:10	Oral	Dr. Tara Prasad (Barkatullah University Bhopal)	Physical properties of NbB ₂ under pressure using quantum espresso codes
05:10-05:20	Oral	Dr. Kuldeep (GNDU Amritsar)	Ion acoustic shocks in degenerate plasma with trapping in a quantizing magnetic field
05:20-05:30	Oral	Dr. Animesh Sinha Roy, IIIT Noida	On the feasibility of quantum cloning attack on bb84 protocol Of quantum key distribution
Session 9 (Venue: Reception, ABB II)			
04:00-05:30 Poster Presentations: Metamaterials/Photonics			
05:30-06:00 Poster Awards, Valedictory Session and Certificate distribution			