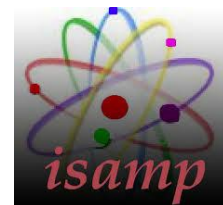




GOLDEN JUBILEE MEETING
of
The Indian Society of Atomic & Molecular Physics
6-7th March, 2026
Indian Institute of Technology Delhi

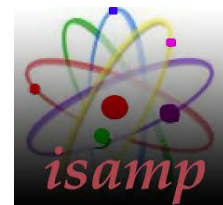


PROGRAMME SCHEDULE

DAY-1 (06-03-2026 Friday)		
08:30-09:30	Registration (Venue: Lecture Hall Complex)	
09:30-10:45	Session-1: Inaugural (Venue: LH-121)	
10:45-11:30	Plenary Talk (Venue: LH-121) Prof. G. Ravindrakumar, TIFR Mumbai Atomic, Molecular and Optical Sciences: Scientific roots <u>MUST FOR</u> Technological fruits	
11:30-12:00	High Tea	
12:00-13:30	Session-2 (Venue: LH-121)	
12:00-12:30	Chairperson: Prof. M. Krishnamurthy Prof. Sadiq Rangwala, RRI Bangalore Structural Phase Transitions and Stochastic Dynamics in Trapped Ion Crystals	
12:30-13:00	Prof. Bhalamurugan Sivaraman, PRL Ahmedabad PRL's Astrochemistry & Astrobiology - From 10 K to 16000 K	
13:00-13:30	Prof. Vandana Sharma, IIT Hyderabad Imaging the Unseen: AMO Instrumentation Shaping Science and Society	
13:30-14:30	Lunch break	
14:30-16:30	Poster Session + Tea break	
16:30-18:00	Session-3: Organics in Space (Venue: LH-121)	Session-3a: Quantum Sensing (Venue: LH-310)
16:30-16:50	Chairperson: Prof. Lokesh C. Tribedi	Chairperson: Prof. Sadiq Rangwala
Introductory Talk	Prof. Umesh R Kadhane, IIST Trivandrum Organics in space: A national capacity building initiative: Opportunities and challenges	Prof. Saikat Ghosh, IIT Kanpur Advancing Precision: The Evolution of Quantum-Enhanced Sensing
16:50-18:00	Dr. Nabanita Deb, IACS Kolkata (Anchor)	Prof. Sanjukta Roy, RRI Bangalore (Anchor)



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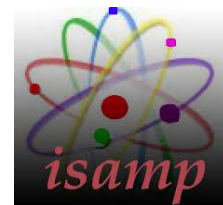
Panel Discussion	Cold Collisions and State-Resolved Chemistry: Enabling Predictive Astrochemistry	Quantum sensing with Rydberg atoms
	Prof. S. Sunil Kumar, IISER Tirupati Photostability of Indole-Derived Anions in Interstellar and Circumstellar Environments	Prof. Sankar De, SINP Kolkata Study of light - atom interactions for quantum technology applications at SINP
	Prof. Upakarasamy Lourderaj, NISER Bhubaneswar Computational and Theoretical Studies of Organic Reactions in Space	Prof. G Rajalakshmi, TIFR Hyderabad Atomic sensors: Leveraging Atom-Light Interactions for Precision Magnetic Field Detection
	Prof. Ramesh Narayanan, IIT Delhi The possible role of plasma-assisted environment for space-relevant organic molecular synthesis in lab	Prof. Ashok Mohapatra, NISER Bhubaneswar Atomic vapor based quantum sensors for electromagnetic fields (DC–THz)
18:00-18:15	Tea break	
18:15-19:45	Honoring senior members of ISAMP (Venue: LH-121)	
19:45-20:45	Dinner	

DAY-2 (07-03-2026 Saturday)

09:30-11:00	Session 4: Quantum Computing using atoms and ions (Venue: LH-310) Chairperson: Prof. E. Krishnakumar	
9:30-9:50 Introductory Talk	Prof. Saptarishi Chaudhuri, RRI Bangalore	
9:50-11:00 Panel Discussion	Prof. Srinivasa Prasanna V, TCG Crest (Anchor) Quantum computing for atomic and molecular physics calculations	
	Prof. Sourav Dutta, TIFR Mumbai	
	Prof. Bodhaditya Santra, IIT Delhi Quantum computing using neutral atoms and high precision lasers	



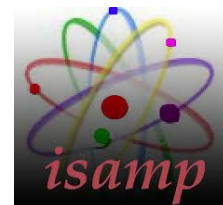
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	Dr. Sugam Kumar, IUAC Delhi	
11:00-11:30	High Tea	
11:30-13:00	Session-5: Precision Measurement and Quantum Metrology (Venue: LH-308) Chairperson: Prof. Saikat Ghosh	Session-5a: Collisions and Scattering (Venue: LH-310) Chairperson: Prof. K. P. Subramanian
11:30-11:50 Introductory Talk	Prof. Bijaya K. Sahoo, PRL Ahmedabad The Role of Atomic Many-Body Methods for Precision Spectroscopy: Future Perspectives	Prof. Vaibhav S Prabhudesai, TIFR Mumbai Collisions and Scattering: Opportunities and Challenges
11:50-13:00 Panel Discussion	Prof. Subhadeep De, IUCAA Pune (Anchor) Supercoherent Laser-based Distributed Sensing with Unprecedented Accuracy	Prof. Aditya H. Kelkar, IIT Kanpur (Anchor) Atomic and molecular physics experiments at the 1.7 MV tandemron accelerator, IIT Kanpur
	Dr. Subhasis Panja, NPL Delhi Ytterbium ($^{171}\text{Yb}^+$) Ion Based Atomic Clock; One of the Most Accurate Quantum Standard and a Possible Candidate for Redefining SI Second.	Prof. Deepankar Mishra, TIFR Mumbai State-Selective Electron Capture and Matter-Wave Diffraction in Slow Highly Charged Ion Impacts
	Dr. Poonam Arora, NPL Delhi From Atomic Transitions to Global Timekeeping: Precision through Quantum Metrology	Prof. Arnab Khan, IISER Bhopal Charged-Particle Beam-Based Momentum Spectroscopy and Ion Implantation for NV-Center Engineering
	Dr. Sapam Ranjita Chanu, IIT Kanpur Multi-ion quantum metrology in a Linear Paul-Trap	Prof. Punita Verma, Delhi University
	Ms. Palki Gakkhar, IIT Delhi Precision structure calculations for probing atomic clock candidates	Prof. Krishnendu Gope, IISER Trivandrum Ultrafast Competition of H_2^+ and H_3^+ formation via Roaming H_2 mechanism
13:00-14:00	Lunch break	
14:00-15:30	Session-6: Ultrafast Laser Spectroscopy (Venue: LH-308) Chairperson: Prof. R. P. Singh	Session-6a: Theory of Collisions and Scattering (Venue: LH-310) Chairperson: Prof. Rajesh Srivastava



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14:00-14:20 Introductory Talk	Prof. Sivarama Krishnan, IIT Madras Time-resolving interatomic Coulombic decay in atomic quantum aggregates	Prof. Jobin Jose, IIT Patna Advancing Electron Diffraction: From Real-Momentum Mapping to Imaging Atomic Scattering Potentials
14:20-15:30 Panel Discussion	Prof. Kanaka Raju Pandiri, DIAT Pune (Anchor)	Prof. Bobby Antony, IIT-ISM Dhanbad (Anchor) Progress, challenges, and prospects in lepton collisions
	Prof. Rajesh Kumar Kushawaha, PRL Ahmedabad Quantum control and attosecond delay in atoms and molecules driven by a two-color laser field	Prof. Chetan Limbachiya, MS University of Baroda Charged particle induced molecular processes
	Prof. Vinay Pramod Majety, IIT Tirupati First-Principles Attosecond Quantum Dynamics Using tRecX-haCC	Prof. Hari Varma, IIT Mandi Resonance Dynamics in Electron Scattering from Nested Fullerenes
	Prof. Koushik Saha, IIT Dharwad Femtosecond laser pulse induced ionization and fragmentation of cis- and trans-1,2-dichloroethylene	Prof. Alok Kumar Jha, JNU Delhi K-Shell Atomic Processes in Dense Plasma
	Prof. Ramgopal, TIFR Hyderabad Few body dynamics under a new light: Strong Field Physics at relativistic frontiers	Prof. Rakesh Choubisa, BITS Pilani Laser assisted single ionization processes on atoms and molecules by twisted electrons collisions
15:30-16:30	Session 7: Space Exploration (Instrumentation) (Venue: LH-310) Chairperson: Prof. Bhas Bapat	
15:30-16:00	Dr. Sankarasubramanian. K, U R Rao Satellite Centre, Bangalore Space Science Experiments: Recent Indian Experiments	
16:00-16:30	Dr. Shibu Mathew, LPSC Trivandrum	
16:30-17:00	Valedictory (Venue: LH-310)	
17:00-17:30	Tea and disperse	