

ICAMNOP – 2023

**International Conference on Atomic, Molecular, Material,
Nano and Optical Physics with Applications**

December 20th -22nd, 2023

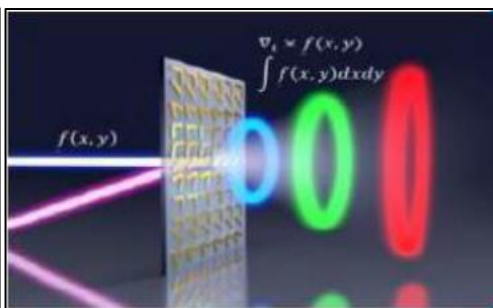
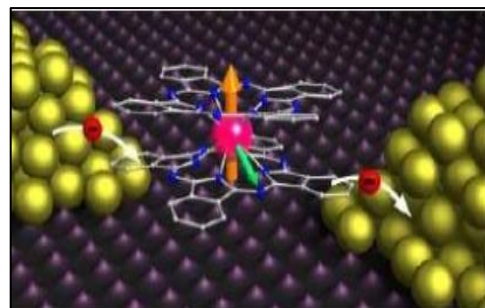
<https://www.icamnop.in/>

**Organized by:
Department of Applied Physics, Delhi Technological University
Delhi-110042, India**



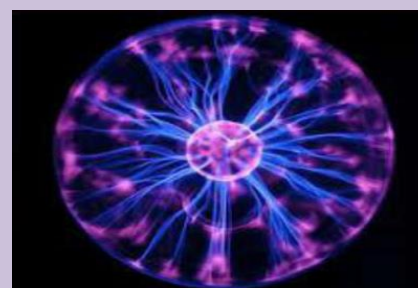


The International Conference on Atomic, Molecular, Material, Nano and Optical Physics with Applications (ICAMNOP 2023) will focus on developments in atomic, molecular, material, nano and optical physics which have proved to be powerful science supporting many other areas of science & technology, including industrial, information, energy, global Change, defense, health, space and transportation technology. The conference will involve experimental and theoretical studies of atoms, ions, molecules and nanostructures both at the fundamental level & on the application side using advanced technology. Using modern tools of high – field and ultra-fast physics, one no longer merely observes nature, but can reshape and redirect atoms, molecules, particles or radiation. This new drive towards harnessing quantum dynamics is enormously important to future developments in fundamentals physics and applied energy science. Third generation synchrotron sources offer new opportunities to study radiation – matter interactions. Optical techniques have also played a very important role in the creation, understanding and manipulation of atomic and molecular Bose-Einstein Condensates. Complete quantum mechanical description of such properties and interactions is required and therefore, the present conference aims at bringing together experimental and theoretical scientists working in various fields of “Atomic, Molecular, Material, Nano and Optical Physics”, to share and exchange new ideas. Topics of interest in the conference include: Atomic & molecular structure, Collision process, Clusters, Surfaces and exotic particles and Applications, Laser cooling, trapping and Bose – Einstein condensation, High precision and Ultracold phenomena, High harmonic generation and applications, Coherent optical phenomena, Ultrafast dynamics at the Femto- or Atto second scale, ion – include radiation damage in particular of biomolecules, atomic spectroscopy and molecular physics of antimatter, free electron laser, particle acceleration generated by high – power laser, Quantum optics and its application to Mesoscopic system, Other topics covered are: Spectroscopy of Solar and Stellar Plasma, The atomic universe: Spectra as Probes of Cool Gas. The rapidly growing field of nanophysics is also introduced as a separate conference topic, which include, nano- structures and photonics. In the last, a session will also be devoted to application of Atomic, Molecular, Material, Nano, and Optical Physics in Petroleum, Renewable energy, Environmental Science, Information Technology, Health and Education in Developing Countries.



Conference scope

- ❖ Atomic & Molecular structure, Collision process, clusters, surfaces and exotic particles and Applications in spectroscopy of solar and stellar plasma & astrophysics.
- ❖ Ultrafast dynamics at the pico to atto second scale, ion – include radiation damage in particular of biomolecules, atomic spectroscopy and molecular physics of antimatter, free electron laser
- ❖ Bose – Einstein condensation
- ❖ Laser technology, quantum optics and applications.
- ❖ Nanoscience Nanomaterials
- ❖ Electron/ion beam and electron microscopy with their use in various interdisciplinary branches of science like material science, life science etc.
- ❖ Application of atomic, molecular, material, nano and optical physics in petroleum, renewable energy, energy storage, environment sciences, information technology, health and education in developing countries.
- ❖ Computational condensed matter physics
- ❖ Nanobiotechnology and nanophotonics
- ❖ Nano and micro Electronics
- ❖ Quantum information and computing





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Dr. Amrish K. Panwar
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International Invited Speakers

- Frank B. Rosmej; Sorbonne University, France
- Carla Figueira de Morisson Faria; Department of Physics and Astronomy University, London, UK
- Nobuhiro Ohta; National Yang Ming Chiao Tung University, Hsinchu, Taiwan
- Ravindra Pandey; Department of Physics, Michigan Technological University, Houghton, USA
- Manuel Bautista; NASA Headquarters, Washington, DC, USA
- Fabien Bretenaker; ENS Paris-Saclay, Université Paris-Saclay, FRANCE
- Nicholas Bigelow; University of Rochester, New York, USA
- Gautam Vemuri; Indiana University, Indiana, USA
- Bindhan C Saha, Physics Florida A & M University
- Sultana N. Nahar; Ohio State University, USA
- Tetsutarou Oishi, Department of Quantum Science and Energy Engineering, Tohoku University Aobayama, Japan
- Ranjit Pati; Michigan Technological University, Houghton, USA
- Nila Krishnakumar, Physikalisch-Technische Bundesanstalt QUEST institute, Germany
- Pramod Kumar; Abu Dhabi, UAE
- Vanderlei S. Bagnato; University of Sao Paulo, Brazil
- Andrey Surzhykov; Braunschweig University of Technology, Germany
- Ovidiu Cretu; Tokyo, Japan
- Hardik Mendpara; Institut für Quantenoptik Leibniz Universität Hannover, Welfengarten, Hannover, Germany
- Celeste Carruth Torkzaban; Leibniz Universität Hannover, Germany
- Yugo Nagata; Department of Physics, Tokyo University of Science, Tokyo, Japan
- Subhasish Mandal; Department of Physics and Astronomy, West Virginia University, Morgantown, USA
- Kamlesh Awasthi, National Yang Ming Chiao Tung University, Hsinchu, Taiwan

National Invited Speakers

- Anil Bhardwaj (Director), Physical Research Laboratory (PRL), Navrangpura, Ahmedabad
- Reji Philip, Raman Research Institute, Bangalore
- Chetan Limbachiya, Department of Applied Physics, The Maharaja Sayajirao University of Baroda, Gujrat
- Alike Khare, Department of Physics, IIT Guwahati
- Kamal P. Singh, IISER, Mohali
- C P Safvan, IUAC, New Delhi
- Rajesh Srivastava, Department of Physics, IIT Roorkee
- Dhananjay Nandi, Department of Physical Sciences, Indian Institute of Science Education and Research, Kolkata
- Purushottam Chakraborty, Saha Institute of Nuclear Physics, Kolkata, West Bengal
- R. K. Shukla, IIT, Delhi
- Lokesh Tribedi, Tata Institute of Fundamental Research, Mumbai
- Manik Pradhan, S.N. Bose National Centre for Basic Science, Kolkata.
- Nilratan Das, IRDE, Dehradun, Uttarakhand
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- A.P. Mishra, Bhabha Atomic Research Centre, Mumbai
- Asawari D Rath, Bhabha Atomic Research Centre, Mumbai
- Vinod Rawat, Bhabha Atomic Research Centre, Mumbai
- Mukesh Shah, Bhabha Atomic Research Centre, Mumbai
- R.P. Singh, Physical Research Laboratory, Ahmedabad
- Kedar Singh, SPS, JNU, Delhi
- B. R. Mehta, IIT Delhi
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- Hirdyesh Mishra, Banaras Hindu University, Uttar Pradesh
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- R.S. Dhaka, Department of Physics, IIT Delhi
- Yashashchandra Dwivedi, NIT, Kurukshetra
- Yogesh Sharma, IIT Roorkee
- Gunjan Purohit, DAV Dehradun, Uttarakhand
- P.C. Minaxi V K, VP Science College, Gujrat

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CALL FOR ABSTRACT

Abstracts of all paper's plenary/invited lectures and poster/oral presentations will be published in the book of abstracts. Deadline of the abstract submission is 30th November, 2023. The abstract should be typed using MS Word. The details updates regarding abstract submission are given on the conference website <https://www.icamnop.in/>

IMPORTANT DATES

Abstract Submission Ends	November 30, 2023
Early Bird Registration Deadline	November 30, 2023
Conference Commences	December 20, 2023
Manuscript Submission Ends	March 15, 2024

Conference Registration	By November 30, 2023	After November 30, 2023
International Delegate	US\$600	US\$700
International Student	US\$500	US\$600
International Corporate Participant	US\$800	US\$900
Indian Delegate	Rs. 6000/-	Rs. 8000/-
Indian Student	Rs. 4000/-	Rs. 6000/-
Indian Corporate Participant	Rs. 15000/-	Rs. 20000/-
Accompanying Person (International)	US\$300	US\$400
Accompanying Person (Indian)	Rs. 3000/-	Rs. 4000/-

For students: Scanned Copy of current student ID is required.

*** All foreign delegates/students must fill International Travel Information Form in order to send the Passport and Personal details for government clearances. One/Two-page brief resume should also be sent along with this form.**

Registration fee / Accommodation fee is non - refundable.

Registration fee can be made online using NEFT/Credit/Debit Card, DD is not acceptable.

PAPER PUBLICATION

The papers will be published in the Scopus indexed
Springer's Proceedings in Physics (<https://www.springer.com/series/361>)
after peer review

ADDRESS FOR CORRESPONDANCE

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