

# 3<sup>RD</sup> International Conference on Advances in Nanomaterials and Devices for Energy and Environment (CANDEE) 03-05 December, 2024



Call for Abstracts

## About Conference:

**CANDEE--2024** is the 3<sup>rd</sup> International conference of its series being organized by Indian Institute of Information Technology and Management Gwalior with an aim to bring together the scientific and technology community, to share their experience on advancements in the materials synthesis and characterization techniques, its applications in different modern industries, specifically for renewable Energy and clean Environment. Eminent scientists in the respective fields will share their experience and knowledge with the young participants, which in turn are expected to promote research activities on the advanced materials. Owing to the advancements in software and hardware technologies, sophisticated tools have been developed to synthesize, characterize and model smart materials at the length scale with controlled behavior. This ability is transformational for the discovery process and as a result confers a significant competitive advantage. The most spectacular increase in the capability has been demonstrated in high performance computing. This rate of improvement has shown no signs of abating, which has enabled the development of computer simulations and models of unprecedented fidelity.

The overwhelming response of participants in the series of workshops and conferences organized by our group from 2009 to 2023 has motivated us to organize this conference on Nanomaterials and Devices for Energy and Environment. The conference will be of great importance in the sense that it will be attended by young chemists, physicists, biologists and engineers making it truly interdisciplinary in nature so as to not only know about the new methods but also to share their research findings on preparation, analysis of materials and devices at nano scale and their possible application in the medicine, automotive, chemical, electronics, electrical engineering and other industries. It is also aimed to sensitize the young participants in the current areas of materials science so as to make them instrumental in pursuing quality research.

Since 2008, the Advanced Materials and Nano-electronics Research Group of CNT Lab, of Department of engineering Sciences at ABV-IIITM Gwalior, is actively contributing towards fundamental as well as application specific material and device modeling research. This conference is a celebration of 15 successful years of Advanced Materials Research group at CNT Lab and 25 Years of the establishment of ABV-IIITM, Gwalior.

## SCOPE

The participants will get an opportunity to interact with the scientists from India and abroad on recent trends in material synthesis and characterization tools and techniques for Energy and Environment sectors specifically. The research areas are kept open for the scientific community to promote the interdisciplinary research and development in materials science and technology. CANDEE has planned a Poster session specifically for the young scholars/students with a cash award. The original work in the following areas but not restricted to, will be recommended for this session, divided in four tracks.

- Low-dimensional and 2D materials
- Functional Materials
- Spintronics
- Surface engineering and interface nanotechnology
- Nanomaterials for solar cells and Photovoltaics
- Nanomaterials for Hydrogen, Fuel Cells and Thermal Energy
- Nanomaterials for energy conversion and storage
- H<sub>2</sub> production and cleaning
- CO<sub>2</sub> conversion and air pollution control
- NanoNuclear Materials
- Nanomaterials for environment protection and remediation
- Waste Management
- Nano Biomedical Devices
- Molecular and nanoelectronics
- Sensors and actuators
- Nanotechnology in Food and Agriculture
- Soil Pollution and Treatment
- Nanostructured materials for implant applications

## Special Sessions/Workshops

Will be announced soon.

## Submission of Abstracts/papers and Publication:

Those intending to participate and present the work in **CANDEE-2024** should submit the extended abstract as per the prescribed format through conference online submission process at <https://profanurag.in/IC/candee24> latest by 30<sup>th</sup> October, 2023. The abstract submission can also be made via conference email [candee.iitmg@gmail.com](mailto:candee.iitmg@gmail.com). The presented papers, only after a blind peer review, will be recommended for publication in scientific proceeding/Journals (SCI and SCOPUS).

## Important Deadline:

Abstract Submission Open : **01 August 2024**

| Acceptance notification: **20 September 2024**

Abstract Submission Closes: **15 September 2024**

| Early Bird Registration Closes: **30 September 2024**

## Registration and Accommodation

| Category            | Upto 30 September, 2024 |                 | After 30 September, 2024 |                 |
|---------------------|-------------------------|-----------------|--------------------------|-----------------|
|                     | Indian/ SouthAsia       | Other Countries | Indian/ SouthAsia        | Other Countries |
| Industry            | INR 10000               | USD 350         | INR 15000                | USD 450         |
| Faculty/Scientist   | INR 5500                | USD 225         | INR 6500                 | USD 275         |
| Research Scholar    | INR 4000                | USD 175         | INR 5000                 | USD 225         |
| UG/PG students      | INR 3000                | USD 100         | INR 4000                 | USD 125         |
| Accompanying Person | INR 3000                | USD 100         | INR 4000                 | USD 125         |

Registration fee will facilitate you with entry to scientific sessions, conference kit, Breakfast, lunch, Tea/drinks, Dinner and one classical musical evening. Prescribed fee is to be paid online at <https://profanurag.in/IC/candee24>.

**Registration Fee Discount: 10% for a group participation of 4-6 candidates from same institution (Indian Institutions).**

**Registration Fee Discount: 10% for a group participation of 2-4 candidates from same institution (Overseas Institutions).**

## Accommodation

Sharing accommodation may be provided on request to the participants on a payment of subsidized rate for Indian students. Guest house and Hotel accommodation can also be arranged on request on discounted price (only for the early bird registration) to foreign nationals. For details visit <https://profanurag.in/IC/candee24>

## ABV-IIITM

Atal Bihari Vajpayee - Indian Institute of Information Technology & Management (ABV-IIITM), a Deemed University, is an apex IT and Management Institute, established by the ministry of HRD, Government of India in 1998 situated at Gwalior - Agra Road. ABV-IIITM Gwalior is the foremost institution providing Technical and Managerial Education in the areas of Information Technology and Management, in India. Besides the IT and Management, the institute has given full freedom to other disciplines like Applied sciences and humanities and progressing on the concept of interdisciplinary R & D and developing the internationally competent and skilled manpower for the society.

## Department of Engineering Science

The Department of Engineering Sciences has recently been established in August 2022. The department faculties are teaching UG and PG courses and doing research in the institute since 2006 with a clear motive to equip the engineering students with the fundamental and applied concepts of Physics and Mathematics, useful for the various disciplines of CS, IT and Electronics. The department offers PhD programs in area of Condensed Matter Physics, Computational Nanoscience and Technology, Nanoelectronics, Quantum Computing, Applied Physics, Solid state physics and Industrial Mathematics: Mathematical Modelling and Simulation in Environmental, EMS, Management systems: Financial Mathematics, Fuzzy logic applications, Nonlinear Dynamical Systems, Computational Biology, Control Theory, Fuzzy Mathematics, Soft Computing, Fuzzy Decision Making etc. since 2007 to produce high quality researchers. The department also run BTech in Mathematics and Scientific Computing 4Yrs course.

## GWALIOR



Gwalior City is a District in Madhya Pradesh State near Agra. Gwalior City was the Capital of the princely State of Gwalior until 1948 and the summer Capital of Madhya Bharat State from 1948 to 1956. When Madhya Bharat became part of Madhya Pradesh, it became separate District. Gwalior's history is traced back to legend in 8th century AD when a chief captain known as Suraj Sen was struck by a deadly disease and cured by a hermit-saint Gwalipa. As a gratitude for that incidence, he founded this city by his name. The new city of Gwalior became existence over the centuries. The cradle of great dynasties ruled the city Gwalior. With different Dynasty, the city gained a new dimension from the warrior kings,

poets, musicians, and saints who contributed to making it renowned throughout the country. The city is also the setting for the memorials of freedom fighters such as Taty Tope and the indomitable Rani of Jhansi. Today the old settings stand side by side with the trappings of modernity.

## Expected Sponsors

SERB, DRDO, CSIR, MOEFCC, DST, SPARC, MPCST etc.

## Accommodation and Local Travel

In Campus Guest Houses and Hotels (Details will be Announced Soon)

## Climate

Generally weather found pleasant during this time, where temperature ranges from 14°C to 21°C.

## Contact Person:

**Prof. Anurag Srivastava (Convener, CANDEE-2024)**

Advanced Materials Research Group, Department of engineering Sciences, ABV-IIITM, Morena Link Road, Gwalior, 474015( M.P.) INDIA

Fax : 0751-2449826 Tel: 0751-2449 826/823, Cell: 09826189049

Emails: [candee.iitmg@gmail.com](mailto:candee.iitmg@gmail.com) | Web: <https://profanurag.in/IC/candee24>

## International/National Advisory Board

|                            |  |
|----------------------------|--|
| Prof. C Jagdish            | ANU, Australia                             |
| Prof. Rajeev Ahuja         | IIT Ropar and Uppsala Univ., Sweden        |
| Prof. Ravi Pandey          | MTU, USA                                   |
| Prof. Apprao M Rao         | Clemson Uni., USA                          |
| Prof. Yasuhiro Hayakawa    | Shizouka University, Japan                 |
| Prof. Liming Dai           | UNSW, Australia                            |
| Prof. C. N. Rao            | JNCSAR, Bangalore                          |
| Prof. Xe Ziang Shen        | NTU, Singapore                             |
| Prof. B. K. Godwal         | Berkley, USA                               |
| Prof. Ramgopal Rao         | BITS Pilani                                |
| Prof. Gonzalo Gutierrez,   | University of Chile, Chile                 |
| Prof. G P Srivastava       | Univ of Exeter, UK                         |
| Ing. Giorgio Graditi       | ENEA, Italy                                |
| Prof. Rebah Khenata        | Muscara, Algeria                           |
| Ing. Giulia Monteleone     | ENEA, Italy                                |
| Prof. Narayan Adhikari     | Tribhuwan Univ., Nepal                     |
| Prof. Saraju P Mohanty     | University of North Texas, USA             |
| Prof. Sanjay Mathur        | University of Colgne, Germany              |
| Prof. Vikram Kumar         | IIT Delhi                                  |
| Prof. Surendra Saxena      | FIU, USA                                   |
| Prof. A. K. Sood           | IISc, Bangalore                            |
| Dr. Andrey Chebisov        | Russian Academy of Sciences                |
| Prof. Ratnakar Palai       | University of Puerto Rico, USA             |
| Prof. Alexander R Roche    | Instituto de Física Teórica, UNESP, Brazil |
| Prfo. D. K. Aswal          | BARC, Mumbai                               |
| Prof. A C Pandey           | IUAC, Delhi                                |
| Prof. Zhao QIAN            | Shandong University, China                 |
| Prof. G. P. Srivastava     | University of Exeter (UK)                  |
| Prof. Gonzalo Gotierrez    | Universidad de Chile, Chile                |
| Prof. Nandgopal Sahoo      | KU, Nainital                               |
| Dr. Rodrigo M Amorium      | Univ. of Federa Fluminense, Brazil         |
| Dr. Souraya Goumri Said    | Alfaisal University (Riyadh, KSA)          |
| Dr. Yoshishige Tsuchiya    | Univ. of Souch Hampton, UK                 |
| Dr. Vinod Kumar Sharma,    | ENEA, Italy                                |
| Prof. Max Milgiorato       | UoManchester, UK                           |
| Prof. Abhay Karandikar     | IIT Mumbai, Mumbai                         |
| Prof. Y. K. Mishra         | SDU, Denmark                               |
| Dr. Sandeep Rekhi          | PANalytical, USA                           |
| Dr. Manmohan Parida        | DRDE, Gwalior                              |
| Dr. Raghunath Bhattacharya | IEST, Shivpur                              |
| Dr. Sandip Patil           | E-Spin Nanotech Pvt. Ltd.                  |

## Local Organizing Committee

|                                   |                     |
|-----------------------------------|---------------------|
| Prof. S. N. Singh (Director)      | ABV-IIITM, Gwalior  |
| Prof. Anurag Srivastava(Convener) | ABV-IIITM, Gwalior  |
| Prof. Joydip Dhar                 | ABV-IIITM, Gwalior  |
| Dr. Ajay Kumar                    | ABV-IIITM, Gwalior  |
| Prof. Manisha Pattanaik           | ABV-IIITM, Gwalior  |
| Dr. Manoj Dash                    | ABV-IIITM, Gwalior  |
| Dr. Rahul Kala                    | ABV-IIITM, Gwalior  |
| Dr. Kapil Kant                    | ABV-IIITM, Gwalior  |
| Dr. Pargya Shukla                 | ABV-IIITM, Gwalior  |
| Dr. Purnendu Mishra               | ABV-IIITM Gwalior   |
| Dr. Jeevraj                       | ABV-IIITM Gwalior   |
| Dr. Anuvedita Singh               | ABV-IIITM Gwalior   |
| Dr. Mahendra Shukla               | ABV-IIITM Gwalior   |
| Dr. Praveen Singhya               | ABV-IIITM, Gwalior  |
| Dr. Gaurav Sharma                 | ABV-IIITM, Gwalior  |
| Dr. Pinku Ranjan                  | ABV-IIITM, Gwalior  |
| Dr. Debanjan Sadhya               | ABV-IIITM Gwlior    |
| Dr. Awadh Kishore                 | ABV-IIITM Gwalior   |
| Dr. Pragya Swami                  | ABV-IIITM, Gwalior  |
| Dr. Veena Anand                   | ABV-IIITM, Gwalior  |
| Dr. Anjali                        | ABV-IIITM, Gwalior  |
| Dr. Reshmi Behra                  | ABV-IIITM Gwalior   |
| Dr. B. Shantibhushan              | IIITA Pryagraj      |
| Dr. Monika Srivastava             | BannettUniv., Noida |
| Dr. Kumar Gaurav                  | NIT, Patna          |
| Dr. Pankaj Mishra                 | Amity Univ. Gwalior |
| Dr. Sushmita Dandetia             | IIIT Nagpur         |
| Mr. Prakash Yadav                 | ABV-IIITM, Gwalior  |
| Ms. Vandana Tyagi                 | ABV-IIITM, Gwalior  |
| Ms. Swati Sharma                  | ABV-IIITM, Gwalior  |
| Ms. Pooja Sharma                  | ABV-IIITM, Gwalior  |
| Mr. Rahul Jha                     | ABV-IIITM, Gwalior  |
| Mr. Yatendra Singh Dhakad         | ABV-IIITM, Gwalior  |
| Mr. Rajeev Singh                  | MITTS, Gwalior      |
| Mr. Kaushlendra Singh Rathod      | ABV-IIITM, Gwalior  |
| Ms. Artika Gupta                  | ABV-IIITM, Gwalior  |

## Expected Associates/Partners

