



CAMC-2024

AMD-INS INTERNATIONAL SYMPOSIUM ON CHALLENGES AND ADVANCEMENTS IN MATERIAL CHARACTERIZATION

Homi Jehangir Bhabha Auditorium, AMD, Hyderabad, India

20-22, November 2024



About the Symposium

Characterization of materials plays a pivotal role in the advancement of science and technology. From classical to modern techniques, the analysis of materials now benefits from the recent developments of Artificial Intelligence (AI) and Machine Learning (ML) algorithms. Material characterization involves both qualitative and quantitative analysis of samples from molecular to macro levels. The symposium, CAMC-2024, aims to provide a platform for all professionals, research scholars and industry experts involved in material characterization to exchange the research findings with their peers. It is envisaged that the deliberations during the symposium will help the participants to identify research gaps and also facilitate collaborations with various institutes and laboratories.

Scope of the Symposium

- Characterization of geomaterials and critical minerals
- Decomposition of sample, separation and pre-concentration techniques
- Trace element analysis and speciation methods
- Spectrometric and Electroanalytical methods
- Nuclear analytical and Hyphenated techniques
- Environmental analysis and sensors
- Nanomaterials and their applications
- Pollutants and remediation
- Analytical instrumentation, design and development
- Mineral/ Isotope Geo-chemistry
- Application of AI-ML in chemical analysis
- Quality control and quality assurance
- Certified and in-house reference materials.

Paper submission (Oral and Poster) / participation

Extended abstract of paper including references, figures and tables in maximum two pages (Single spacing, A-4 size, Times New Roman, size 12) may be emailed to camc2024.hyd@gmail.com on or before **17th September, 2024**. The abstracts will be peer reviewed and the acceptance will be communicated by **7th October 2024**.

Important Dates

Extended abstract submission	17.09.2024
Review and acceptance	07.10.2024

Link for the registration

<https://forms.gle/mTDu6rk3th9saSux6>

Journal publication



Selected full papers will be peer reviewed and considered for publication in the Journal of Radioanalytical and Nuclear Chemistry (**Springer**)

Souvenir

A souvenir of the proceedings of CAMC-2024 containing accepted papers from the registered authors will be published

For further updates regarding the seminar please visit
AMD Website <https://www.amd.gov.in/app16/index.aspx>

Registration Fee

Delegates: Rs. 4000

Students: Rs. 1500

INS Life Members: Rs. 2500

Overseas delegates: USD 400

Registration fee (online) can be paid to "Indian Nuclear Society, Hyderabad Branch" A/C No. 10184727510, SBI, Nuclear Fuel Complex, Mallapuram Branch, ECIL Post, Hyderabad-500062 (IFSC SBIN0009071)

Awards

Royal Society of Chemistry (RSC) Award

The best three oral and five poster presentations will receive a certificate and a cash prize from RSC .



American Chemical Society (ACS) Award

The best three oral and five poster presentations will receive a certificate and a cash prize from ACS .



Accommodation

Accommodation will be arranged in hotels on payment basis.



Organized by

Atomic Minerals Directorate for Exploration and Research (AMD), Hyderabad

In association with

Indian Nuclear Society (INS), Hyderabad Branch

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AND ADVANCEMENTS IN MATERIAL CHARACTERIZATION****Homi Jehangir Bhabha Auditorium, AMD, Hyderabad, India****20-22, November 2024****Patron**

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Atomic Minerals Directorate for Exploration and Research (AMD)

AMD is a R&D organization under the Department of Atomic Energy (DAE). It is dedicated to the exploration and augmentation of crucial atomic mineral resources essential for supporting and successful implementation of India's nuclear power programme. AMD utilizes diverse range of exploration methodologies, including remote sensing, geological and radiometric surveys, geophysical techniques, ultra-trace level geochemical methods and drilling to investigate, evaluate and augment resources of uranium and thorium besides strategic/critical minerals of Nb, Ta, Be, Li, Ti and REEs.

Headquartered at Hyderabad, AMD has seven Regional Research Centres located at New Delhi, Bengaluru, Jamshedpur, Shillong, Jaipur, Nagpur and Hyderabad and three Sectional Offices at Thiruvananthapuram, Vishakhapatnam and Kolkata. Since its inception in 1949, AMD has amassed extensive expertise in conducting surveys, prospecting activities and mineral processing operations related to atomic minerals. The Directorate's analytical laboratories are equipped with the state-of-the-art equipment and the laboratories at Hyderabad and Bengaluru hold the NABL accreditation as testing laboratories.

Over the course of 75 years, AMD has successfully identified substantial resources of uranium, thorium, lithium, niobium, tantalum, zirconium, beryllium, titanium and rare earth elements in the country.

Indian Nuclear Society (INS)

INS is a professional body of pan India presence consisting of nuclear scientists, engineers, technologists and academicians with headquarters at Mumbai, exceeding 5000 life members. INS organizes frequent seminars and conferences across the country on relevant topics related to Indian Nuclear Power Programme.

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