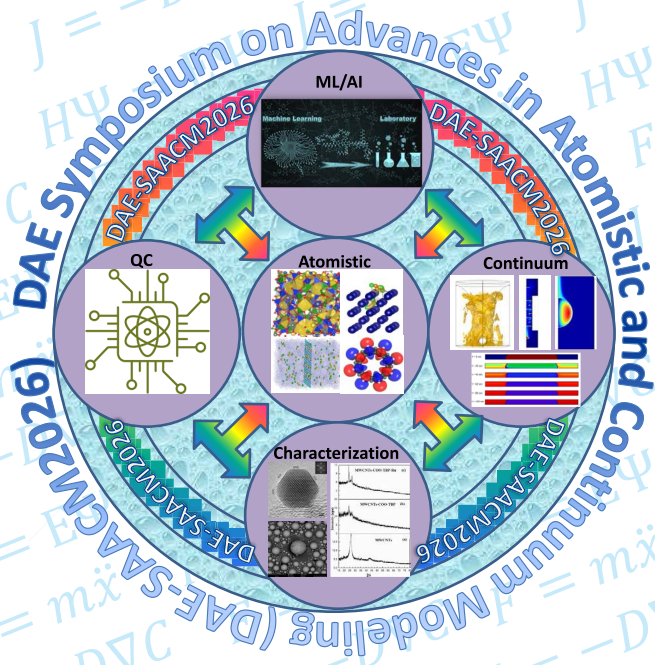




2nd DAE-BRNS Symposium on Advances in Atomistic and Continuum Modeling (2nd DAE-SAACM2026) during 19-21 November, 2026



AIM & OBJECTIVES

A three-day national symposium on “2nd DAE Symposium on Advances in Atomistic and Continuum Modeling (2nd DAE-SAACM2026)” is being organized by Chemical Engineering Group, Bhabha Atomic Research Centre (BARC), Trombay, Mumbai, India, during 19-21 November, 2026 at Multipurpose Hall, TSH, Anushaktinagar. The symposium is being held in association with Society for Atomistic and Continuum Modeling (SACM) and supported by the Board of Research in Nuclear Sciences (BRNS), Department of Atomic Energy (DAE). Today atomistic modeling comprising of electronic structure calculations and molecular dynamics simulations are decisively used to estimate the properties and behavior of molecules and materials even before they have been synthesized. Additionally, ML and AI have accelerated the molecular search space which has boosted the design and development of complex chemical system. Atomistic simulations often require high computational resources due to the large number of atoms involved and the complexity of the interactions between them. Conversely, continuum simulations focus on relatively large spatial domains and long time scales targeted at deciphering the behaviour of a system/component/equipment under consideration by simulating the underlying physics/phenomena. Continuum modeling tools such as mathematical modeling and simulation, Computational Fluid Dynamics modeling, and multiphysics modeling are increasingly being used for knowledge-based efficient design, confident scale-up, and process intensification. Integrating the atomistic and continuum models while maintaining computational efficiency remains a formidable task. The behavior of materials at the atomic scale can significantly influence macroscopic properties, but bridging these scales requires robust methodologies for transferring information between models. Developing effective coupling algorithms that preserve the accuracy and consistency of data across scales is essential for reliable multiscale simulations. Further, Quantum computing which has the potential to revolutionize various industries by offering computational capabilities that surpass classical computers will be of great importance in accelerating the multiscale modeling. The symposium is proposed to bring together the experts in Atomistic Simulations, Continuum Modeling, ML, AI, Parallel and Quantum computing from DAE and other research institutes for exchange of ideas among research scholar, postdoc, scientists and faculties. The symposium will cover the following topics.

SCOPE OF THE SYMPOSIUM

- Computational Thermodynamics of Nuclear Materials
- Density Functional Theory Based Modeling of Lanthanides-Actinides
- Molecular Modeling of Chemical Separation Processes
- Atomistic Modeling of Catalyst and Design of Hydrogen Storage Materials
- Atomistic Modeling of Multi-Component Glass and Rechargeable Battery
- Atomic and Electronic Structure Understanding of Radiation Damage to Materials
- Theory and Computation on Molecular Transport Phenomena and Spectroscopy
- ML-AI and Quantum Computing Accelerated Computational Modeling
- Multiscale Modeling of Reactor Materials
- CFD and Mathematical Modeling for Applications in Nuclear Fuel Cycle
- Applications of CFD and Mathematical Modeling in Thermal Hydraulics
- CFD and Mathematical Modeling for Applications in Nuclear and Chemical Process Safety
- Continuum Modeling in Nuclear Reactor Technology
- Modeling Driven Experiments or Experiments Driven Modeling

PATRON

A.K. Mohanty-Chairman, Atomic Energy Commission (AEC)
Vivek Bhasin-Director, Bhabha Atomic Research Centre (BARC)

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ABSTRACT SUBMISSION

Contributory papers are invited on topics listed in the scope in the form of one page manuscript in specified format. The entire text should be typed in MS Word, paper size A4 (210 x 297 mm), page margins: top 25 mm, bottom 25 mm, left 25 mm and right 25 mm. The font should be Times New Roman (font 12) with single line spacing. Manuscript should be categorized as per the titles given under SCOPE of the symposium.

The manuscript should be submitted through online at www.sacm.org.in. E-mail ID of corresponding author should be given in the manuscript and presenting author should be underlined. All the future communications in respect of manuscript will only be made to corresponding author. DAE participants may please note that the contributed papers should be accompanied with scanned copy of the note of approval from the competent authority.

REGISTRATION FEE

CATEGORY	AMOUNT
Research student/Postdocs	Rs. 2000
Faculty/Scientist	Rs. 5000
Participants from industry	Rs. 10000

Registration fees will be accepted through crossed cheque/crossed DD/Net banking system to the following account
Beneficiary name: Society for Atomistic and Continuum Modeling
Name of the Bank: State Bank of India
Branch code: 01268
Account number: 41974598642
IFSC code (INDIA): SBIN001268

- No registration fees for DAE delegates
- 20% discount on the registration fees for the members of SACM



IMPORTANT DATES

Abstract submission opening	30-06-2026
Final abstract submission	30-09-2026
Acceptance notification	15-10-2026
Registration/Accommodation	31-10-2026

ACCOMMODATION

Hostel accommodations on double sharing basis may be provided to students based on availability. Other participants can book single/twin-sharing AC rooms in our guest house. Accommodation requests should be made at website: www.sacm.org.in or through email: daesaacm2026@gmail.com. Please note that accommodation in hostels and guest house is limited and would be provided only after receipt of an advance payment on first come first service basis. Those who want to book accommodation in nearby hotels can directly book the accommodation by

TYPE OF ACCOMMODATION	AMOUNT	PERIOD
Twin sharing non-AC hostel room for students (per person)	Rs. 1000	Full symposium
Twin sharing AC double bedded room in our guest house (per person)	Rs. 1000	Per day
VIP room guest house (per person)	Rs. 3000	Per day

BOARD OF RESEARCH IN NUCLEAR SCIENCES (BRNS)

Board of Research in Nuclear Sciences (BRNS) supports research and development activity in universities, institutes of higher learning and national laboratories in India in the fields relevant to the mandate of Department of Atomic Energy. BRNS also supports symposia, conferences, seminars and workshops in various areas of science and technology.

AWARDS

The best poster awards will be announced on the last day of the symposium. Awards will also be given to two best Ph.D. thesis, one each for atomistic modeling and continuum modeling to the researchers who has received their PhD after 15th August, 2023. The eligible candidate is requested to submit CV, list of publications and an abstract (300 words) of application of their research findings to the convener of DAE-SAACM2026 on or before 15th October, 2026. For details please visit: www.sacm.org.in.

Important note: Applicant must be member of Society for Atomistic and Continuum Modeling.

ABOUT THE VENUE

Mumbai is India's most cosmopolitan city, finance and business capital and home to the entertainment industry. Mumbai is a vibrant, pulsating metropolis, which affords diverse sightseeing opportunities. There are unlimited tourist attractions in and around Mumbai for visitors of all ages and culture. These places can refresh the spirits and provide a perfect retreat to visitors, like the beautiful and fun filled beaches of Juhu, Elephanta caves, Marine drive, Hanging garden, breathtaking scene of hill stations like Matheran and Lonavala, pilgrimage and spiritual centers suiting every faith, star studded Bollywood, Film city, Old pubs and vineyards.....a bit for everyone.

HOW TO REACH BARC

The Bhabha Atomic Research Centre (BARC) is located near Anushakti Nagar Bus Terminus, Mumbai. Anushakti Nagar Bus Terminus is a landmark known to most taxi/auto drivers. More details are available on <http://barc.gov.in/visitor/index.html>

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Venue :
Multipurpose Hall, TSH, Anushaktinagar, Mumbai 4000 94

Organized By:
Chemical Engineering Group, Bhabha Atomic Research Centre, Trombay, Mumbai – 400085