Workshop on Digital Analysis of Flow Processes in Porous Materials for Geo-energy Applications

Feb 06 - 07, 2026

Organized by

Indian Institute of Technology Bhubaneswar

Sponsored by

SPARC, MoE, Govt. of India & UKIERI, British Council, UK

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About the Workshop

The main objective of the workshop is to bring together scientists, engineers, and academicians working on porous medium transport and its applications in geo-energy storage, such as underground hydrogen and CO_2. The workshop also aims to provide a relaxed and engaging environment for in-depth discussions on theory, experiments, and real-world applications. A special panel discussion will focus on the importance of subsurface energy storage, with an emphasis on fostering collaborations between industry, academia, and research institutions to shape future directions and joint research initiatives

Workshop Topics

- **Multiphase flow and heat transfer in porous media**
- **X-ray micro-tomography**
- **Digital analysis and digital rock physics (DRP)**
- **Underground hydrogen storage (UHS)**
- **Carbon capture and storage (CCS)**
- **Geothermal systems**
- **Experimental and modelling approaches**
- **Applications of digital analysis to other fields, including soils, batteries, electrolysers and fuel cells**
- **Panel discussions on fostering collaborations between industry and academia**

Who can attend?

- **Graduate Students**
- **Academicians, researchers, engineers and Scientists from Industries and R&D organizations**

Venue

School of Mechanical Sciences
Indian Institute of Technology Bhubaneswar
Jatni, Khordha, Odisha-752050, India
https://www.iitbbs.ac.in/

IIT Bhubaneswar at a Glance

The campus of IIT Bhubaneswar is spreading over 936 acres of land. It is situated at the foot of Barunei Hill, which is famous for its rich history. The campus provides a uniquely serene and pollution-free academic environment. The Institute strives to offer the best engineering education with unmatched novelties in its curriculum.

Contact

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Payment Link

https://payments.billdesk.com/bdcollect/bd/iitbhubaneswarresearchinternshipforfaculty/17195
(Note: copy & paste the link in web browser)

Registration

Link: https://forms.gle/p9qtThwLTRqS8AXX9
Note: Registration fee is ₹1000/-. Note: Registration fee is reimbursable for Students. Limited seats are available and will be done first-cum-first-served basis.

Deadlines

Registration for participation: Feb . 02, 2026
Abstract (200 words): Jan. 25, 2026
Abstract acceptance: Feb. 01, 2026

→ For those who wish to contribute a paper

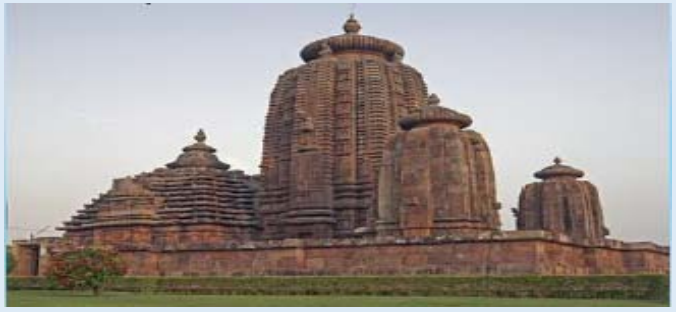
About IIT Bhubaneswar

IIT Bhubaneswar is one of the eight new Indian Institutes of Technology established by the Ministry of Human Resource Development, Government of India under The Institutes of Technology (Amendment) Act, 2011. Indian Institute of Technology Bhubaneswar (IIT BBS) was established on 22nd July, 2008. The Institute strives to offer the best engineering education with unmatched novelties in curriculum. Within a short span of incipience, IIT BBS has made rapid strides towards becoming one of the elite technology institute of India spurred by sustained creation of knowledge and innovation, through high quality R&D activities and commitment to holistic education. The Institute aims to develop and pursue dynamic and flexible curricula designed to facilitate creativity and cognitive thinking among students through productive partnership with industries. Students get exposed to a wide variety of activities through societies and clubs, involving liberal arts, design, dramatics, robotics, music, dance and sports, instilling them with social awareness, a spirit of innovation, entrepreneurship and a thirst of discovery. All academic activities of the Institute are being carried out from the picturesque permanent campus at Argul, spreading over 936 acres of land with unique serene and pollution-free academic environment, in the state of Odisha, India. It is located on the foothills of the magnificent Barunei, having link with Indian freedom movements. At present, the Institute has seven schools and within a short period of time, IIT BBS has been able to build up world class infrastructure for carrying out advanced research and is equipped with state-of-the-art scientific and engineering laboratories. The Institute has a pleasant and friendly environment which facilitates a multidimensional growth of the individual in the campus.

About Bhubaneswar

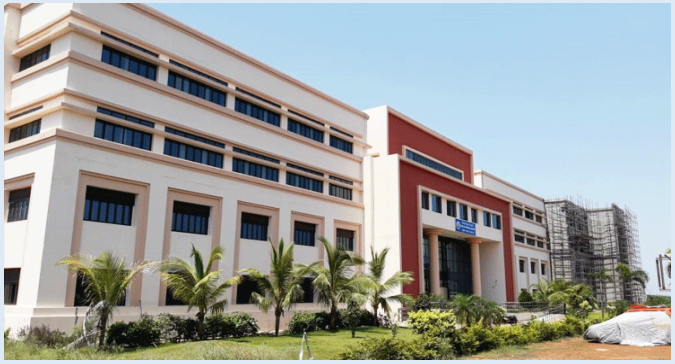
Bhubaneswar, the capital of Odisha, is also popularly known as the "Temple City of India", named after Tribhuvaneswar, “Lord of Three Worlds” or 'Lord Lingaraj'. It is an important Hindu pilgrimage centre. The History of the city stretches back over 2000 years. The area first appears as ancient capital of Kalinga. The smart city Bhubaneswar with its modern buildings and extensive infrastructure perfectly complements its historic surroundings. With facilities to cater to every type of visitor, Bhubaneswar makes an ideal tourist destination. It is the largest city in Odisha and is a centre of economic and religious importance in Eastern India. The city is also known for its rich and varied heritage arts, crafts and dance.

Khandagiri-Udayagiri caves, Nandankanan Zoological park, Odisha state Museum, Dhauli Shanti Stupa, Regional Museum of Natural History, Sun Temple- Konark and Jagannath Temple-Puri along with the Chandaka Wildlife Sanctuary are major attractions in and around Bhubaneswar. Chilka lake, an important habitat and breeding ground for both resident and migratory and aquatic birds, most notably flamingos, is 100 km away from Bhubaneswar.



About School of Mechanical Sciences

School of Mechanical Sciences currently offer a B.Tech and three dual degree programs apart from three M.Tech Programs in Manufacturing Engineering, Mechanical System Design and Thermal Science & Engineering and offers the opportunity for research in all current and futuristic mechanical engineering fields leading to Ph.D.



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