

# International e-Workshop on Radiation Transport and Applications

January 21-22, 2022

Organized Virtually by

Indian Institute of Technology Bhubaneswar

Sponsored by

Scheme for Promotion of Academic and Research Collaboration (SPARC), MOE, Govt. of India



## Workshop Coordinators



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## About the Virtual Workshop

The main objective of the workshop is to bring together scientists, engineers, and doctors involved in radiation transport and its interaction with other modes of heat transfer research, and to provide a relaxed atmosphere for in-depth discussion of theory, experiments, and applications. A special session will be organized for sharing the research ideas on importance of radiation in biomedical applications for tumor diagnosis and therapy which serves as guidepost for treatment modalities and clinical trials.

## Workshop Topics

- **Novel numerical, analytical and hybrid techniques for the solution of radiation transfer equation in multidimensional and complex geometries**
- **Conjugate heat transfer**
- **Atmospheric radiation**
- **Radiation in multiphase heat transfer**
- **Radiative transfer in participating media**
- **Fundamentals and applications of radiative transfer in biomedical science**
- **Nano- and micro-scale radiative transfer**
- **Radiative transfer-based diagnostic systems**
- **Far and nearfield radiation**
- **Radiative heat transfer in combustion**
- **Solar radiation**
- **Concluding panel discussions on future directions**

## Who can attend?

- **Graduate Students**
- **Academicians, doctors, 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. Within a short span of incipience, IIT BBS has made rapid strides towards becoming one of the elite technology institutes of India spurred by sustained creation of knowledge and innovation through high-quality R&D activities and commitment to holistic education.

## Deadlines

Extended abstract (max. 3 pages): **December 30, 2021**

Abstract acceptance: **Jan 10, 2022**

## 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 Tribhuvaneshwar, "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, Dhuli 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 100kms 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.



## CONTACT

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