



International Workshop on Recent Advances in Space Science (RASS)

Organized by
Discipline of Astronomy, Astrophysics and Space Engineering, IIT Indore
and
IEEE Student Branch IIT Indore
November 10-11, 2019

Important Dates

➤ Last date of receipt of application and registration fee is

31 October, 2019

Website:

<http://rass.iiti.ac.in>

Venue :

Room No 105, POD 1D-Chromium Building,
IIT Indore, India.

Registration Fees

Student	Rs. 1180/- (1000 +GST)
Post Doc.	Rs. 1770/- (1500 +GST)
Faculty	Rs. 2360/- (2000 +GST)

(Registration fee includes Kits, learning materials, Snacks and lunch)

Payment Mode for Registration

(NEFT only)

NAME OF THE BANK: CANARA BANK,
A/c NAME: IIT Indore Project & Consultancy A/c,
BRANCH: IIT INDORE CAMPUS, SIMROL.
A/c No: 1476101027440
NEFT/RTGS IFSC CODE: CNRB0006223,

Accommodation:

Accommodation is not provided by the workshop. However, we will provide a list of budget hotels nearby. Guest house accommodation is subject to availability.

SOC:

Dr. Ashish Ghosh (ISI)
Dr. Nilesh M. Desai (ISRO)
Dr. Abhirup Datta (IIT Indore)
Dr. Siddharth S. Malu (IIT Indore)
Dr. Saurabh Das (IIT Indore)

Local Organizing Committee

Dr. Abhirup Datta, IITI
Dr. Siddharth S. Malu, IITI
Dr. Bhargav Vaidya, IITI
Dr. Suman Majumdar, IITI
Dr. Manoneeta Chakraborty, IITI
Dr. Saurabh Das, IITI

For further details contact:

Dr. Saurabh Das,
Discipline of Astronomy, Astrophysics and Space Engineering (DAASE), IIT Indore, Simrol, Indore, 453552.

Email: saurabh.das@iiti.ac.in;

Tel: +91 731 2438 870

Student Co-ordinator:

Ms. Deepthi Ayyagari,
Research Scholar, DAASE
Chair-IEEE Student Branch IIT Indore
Tel: +91 99631-66161

CALL FOR PARTICIPATIONS

Several space-based missions are actively and continuously exploring Earth and space, looking for new scientific applications. Moreover, unmanned aerial vehicle (UAV) and drones are extensively used for gathering data for different purposes. Data is ubiquitous in modern world. Like any other scientific domain, large volume of data is generated by remote sensing instruments. Analysis of these data are challenging issue given the volume and pace at which it gets generated. The variety of instruments and mode of operation make it difficult to assimilate and interpret for common people. On the other hand, computational intelligence revolutionizes the use of data in almost all spectra of life.

With India's thriving space program, it is imperative that future generation scientists and engineers are involved in this domain and harness the skill in fusing data science with space science. One of the major thrusts of this workshop is to create an awareness amongst the young entrepreneurs, about the tremendous business opportunities in space industry that is currently in a nascent stage.

THEME

Contributions are expected in the following topics (not limited to):

- Satellite based Navigation and Communication.
- Insitu and Remote sensing studies of the Ionosphere
- Big data and machine learning techniques
- Image Acquisition and Pre-processing
- Optimization and GPU computation in remote sensing
- Drone and UAV remote sensing
- Change detection, GIS and Climate change studies
- Hyperspectral and SAR remote sensing
- Sensors and Space Electronics
- Microwave and Atmospheric remote sensing
- Remote sensing applications in climate change studies, agriculture, defence, smart city and disaster management

WHY TO ATTEND?

The aim of this workshop is to gather experts in Remote sensing, Data Science and Machine Learning, and facilitate the participants to interact with them on different aspects of this subject. This will provide a forum for exchanging ideas and information on current research studies, challenges, system developments, and practical experiences in the emerging field of space sciences.

WHO SHOULD ATTEND?

Target participants are B.Tech, M.Tech., PhD students, early career researchers and young entrepreneurs. Participation in RASS is open to all individuals interested in or working in the fields of space and data science.

(Limited support to students for travel and accommodation will be provided. Selection of participants will be on first come first serve basis as the number of participants are limited to 50 only.)

INVITED SPEAKERS (Tentative)

- Shri Ankit Bhateja, Xovian Aerospace Pvt. Ltd.
- Dr. Ashish K. Shukla, Space Applications Centre, ISRO
- Prof. Ashish Ghosh, Indian Statistical Institute
- Prof. Ashik Paul, University of Calcutta
- Dr. K. Gopalan, Space Applications Centre, ISRO
- Dr. Keely Roth, The Climate Corp
- Dr. Lisa Haskell, Airbus Defence and Space
- Dr. Nilesh M. Desai, Space Applications Centre, ISRO
- Dr. Sendhil Raja S., RRCAT

How to Apply

Online application form can be accessed from the website from 14 October 2019 onwards. A one-page extended abstract may be submitted in [IEEE Format](#).

Papers received by the deadline will be considered for presentation in a special *young scientist* session. A workshop proceeding will be published based on the presented papers. Applicants are requested to visit the website for regular updates about the workshop.