

IIRS Outreach Programme

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Disaster Management Centers
- State Remote Sensing Departments
- Research Institutes
- Earthquake engineering/ geotechnical Industries
- NGOs

Feedback Mechanism

IIRS has conducted workshops and sessions during IIRS User Interaction Meet to take feedback from participating institutions to improve the quality of future courses.



Feedback session during IIRS User Interaction Meet (IUM)-2020

Awards

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1st National Symposium on Excellence in Training conducted during April 11-12, 2015 in New Delhi by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).



About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS also conducts e-learning programme on Remote Sensing and Geoinformation Science (<http://elearning.iirs.gov.in>).

Contact Details

Dr. R.S. Chatterjee
Course Director

Dr. Harish Karnatak
Programme coordinator
Head, GIT & DL Dept.

Dr. Mamta Chauhan
Course Coordinator

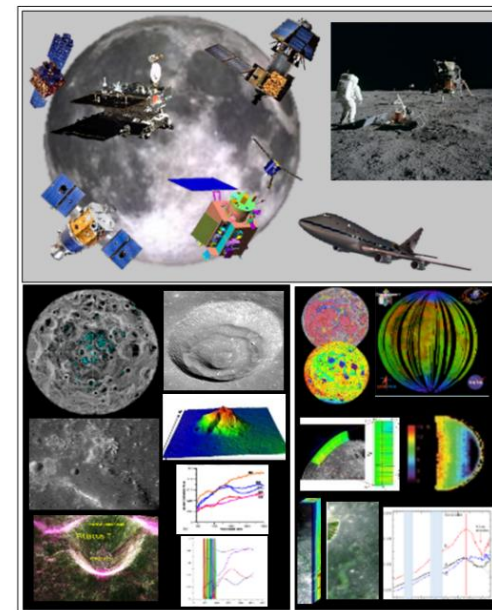
IIRS DLP Team
Dr. Poonam S Tiwari
Programme Coordinator
IIRS Outreach Programme

Mr. Janardan Vishwakarma
&
Mr. Ashok Ghildiyal
Tel: 0135-2524130

Indian Institute of Remote Sensing,
Indian Space Research Organisation
Department of Space, Govt. of India,
4-Kalidas Road, Dehradun

Email: edusat@iirs.gov.in / edusat2004@gmail.com

1013th IIRS Outreach Programme



**One day Workshop on
“Lunar remote Sensing and its
Applications”**

May 12, 2021



Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
Dehradun
www.iirs.gov.in

About the Workshop

The Moon provides an excellent opportunity to study the uninterrupted solar-terrestrial processes and serves as a unique laboratory for understanding the evolution of terrestrial planets. Its airless surface has recorded the 4.6 billion years of history of the solar system in its purest form. It has constantly been observed utilizing various remote sensors from Earth-based telescopes to highly sophisticated spacecrafts and advanced sensors. The past few decades of remote sensing aided by in-situ exploration of the lunar surface revealed by Apollo and Luna era provided critical inputs to characterize lunar surface and understand its evolution. These missions dramatically enhanced our understanding about the character and evolution of the solar system. Recently, high-resolution spaceborne imaging spectrometry in the visible and the near infrared has also contributed significantly to our current understanding of the geological, physical and chemical processes occurring over the planetary surfaces. Wealth of data acquired by the various lunar missions including Clementine, SMART-1, LRO, SELENE, Chandrayaan-1 & 2 and Chang'E 1-5 has resulted in some new findings and discoveries, provided opportunities to study the Moon by the examination of new ideas and testing data analysis algorithms. The proposed workshop is planned to provide an overview of theory and techniques of remote sensing of the Moon and their applications in analyzing lunar surface characteristics and its geology with special emphasis to Indian lunar missions.

Curriculum

- Overview of Lunar Remote Sensing
- Reflectance spectroscopy and detection of endogenic water on the Moon: Examples from recent lunar Missions.
- Mg-Spinel Mineralogy on the Moon

- Recent advances in radar exploration of the Moon.
- Lunar South Pole Aitken basin - understanding mantle geochemistry remotely.
- Chandrayaan-2 Imaging Infrared spectrometer (IIRS): Some initial results for mineral analysis.
- Panel Discussion and Q/A session

Target Participants

The candidates who want to participate in the workshop should be a student of final year undergraduate course or postgraduate course (any year). Technical/Scientific Staff of Central/State Government/Faculty/researchers at university/institutions are also eligible to apply for this course. Applications of participants have to be duly sponsored by university/institute and forwarded through coordinators from respective centres. Users receiving programmes under CEC-UGC/ CIET networks can also participate. Institutions on high speed National Knowledge Network (NKN).

Workshop Study Material

Workshop study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through e-class. Video lectures will also be uploaded on e-class (<https://www.eclass.iirs.gov.in/login>).

Workshop Fee

There is no course fee for attending this programme.

Workshop Registration

- Workshop updates and other details will be available on URL- <http://www.iirs.gov.in/Edusat-News/>
- To participate in this programme the interested organizations/ universities/ departments/ Institutes has to identify a coordinator at their end. The identified coordinator will register online his/her Institute as nodal center in IIRS website.
- All the participants have to register online through registration page by selecting his/her organization as nodal center.

Workshop Funding & Technical Support

The workshop is sponsored by Indian Space Research Organisation, Department of Space, Government of India.

Workshop Reception

Workshop can be received through e-class platform of IIRS-ISRO using internet connectivity. No specific hardware/software required. However, it is recommended good internet connectivity at user end. To run the programme in class room, following hardware will be required:

- Desktop computer with web camera microphone and output speakers or laptop with microphone camera and output speaker.
- Large display screen/projector/TV.

Important links

Workshop updates and other details will be available on URL – <https://www.iirs.gov.in/EDUSAT-News>

To participate in this programme the interested organisations/universities/departments/institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal centre in IIRS website (<https://elearning.iirs.gov.in/edusatregistration/coordinator>)

All the participants have to register online through registration page by selecting his/her organization as nodal centre. <https://elearning.iirs.gov.in/edusatregistration/student>

Award of Participation Certificate

Working Professionals and Students: Based on 70% attendance.

**There are limited number of seats.
Registration will be done on first come first serve basis**