

Report on
96- IIRS ISRO Outreach Programme
on
“Hyperspectral and Microwave Remote Sensing Techniques for Geological Studies”
March 07-17, 2022

Human Resource Development Centre (HRDC), Integral University Lucknow is one of the Remote Center of Indian Institute of Remote Sensing (IIRS), Indian Space Research Organization (ISRO), Department of Space, Govt. of India, Dehradun, India. Human Resource Development Centre, Integral University, Lucknow had successfully organized the 96- IIRS ISRO Outreach Programme on **“Hyperspectral and Microwave Remote Sensing Techniques for Geological Studies”** from March 07-17, 2022 for working professionals and students in association with Indian Institute of Remote Sensing, Indian Space Research Organization, Department of Space, Govt. of India, Dehradun.

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organization (ISRO) is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geo Informatics 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.

The technical sessions constituted of a wide variety of topics taken by a team of experts viz.:

S. No.	Date	Topic	Resource Person	Link of material
1.	07 March 22	Overview of Hyperspectral Remote Sensing for Geographical Applications.	Shri Kamal Pandey	https://eclassms.iirs.gov.in/watch_lecture.php?id=NjYmU2F0ZWxsYXNlZCBBdWdtZW50YXRpb24gc3ZldGZVtcyAgR1BTIEFpZGVkIGFuZCBHRU8gOXVnbWVudGVkIE5hdmlnYXRpb24gKEdBR0FOKSYgRHIuIEFzaHV0b3NoIEJoYXJkd2FqImRVSFBSaG5kSThuJlJwMjAtMDktMTc=
2.	08 March 22	Hyperspectral Data Processing Techniques (Air/Spaceborne): Data Reduction, Mapping Methods with Emphasis on Geological Studies.	Dr. Ashutosh	https://eclassms.iirs.gov.in/watch_lecture.php?id=NjYmR1BTRHJlY2VpdmlVcywgHjvY2Vzc2luZyBzZXRob2RzLCBicmVudGVkIE5hdmlnYXRpb24gKEdBR0FOKSYgRHIuIEFzaHV0b3NoIEJoYXJkd2FqImRVSFBSaG5kSThuJlJwMjAtMDktMTc=
3.	09 March 22	Spectroscopy of Major Rocks and Minerals.	Mr. Vinay Kumar	https://eclassms.iirs.gov.in/watch_lecture.php?id=NjYmU2F0ZWxsYXNlZCBBdWdtZW50YXRpb24gc3ZldGZVtcyAgR1BTIEFpZGVkIGFuZCBHRU8gOXVnbWVudGVkIE5hdmlnYXRpb24gKEdBR0FOKSYgRHIuIEFzaHV0b3NoIEJoYXJkd2FqImRVSFBSaG5kSThuJlJwMjAtMDktMTc=

4.	10 March 22	Compositional Analysis of Lunar and Martin Crust using Hyperspectral Sensors.	Dr. Ashutosh Bhardwaj	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmR1BTHNpZ25hbCBjaGFyYWN0ZXJpc3RpY3MsIERhdGEgZm9ybWV0cyAoYnJvYWRjYXN0LmBwcmVjaXNlIGVwaG9tZXJpcykmRHuIEFzaHVOb3NoIEJoYXJkd2FqICYgU2hyaSBBC2hpc2ggSm9zaGkmY3FibWlyb2k4SWsmMjAyMC0wOS0xOA==
5.	11 March 22	Hyperspectral Remote Sensing for Geographical Applications.	Shri Ashish Joshi	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmQWR2YW5jZSBHTINTIHBhb2Nlc3NpbmcmU2hyaSBTdXJlc2ggS2FubmF1amJ5YSZlSV9VQ29fMFp4cyYyMDIwLTA5LTI1
6.	14 March 22	Overview of Microwave Remote Sensing for Geographical Applications.	Dr. Sameer Saran	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmQWR2YW5jZSBHTINTIHBhb2Nlc3NpbmcmU2hyaSBTdXJlc2ggS2FubmF1amJ5YSZlSV9VQ29fMFp4cyYyMDIwLTA5LTI1
7.	15 March 22	Microwave Remote Sensing Techniques with Emphasis on Polarimetric SAR & Interferometric SAR.	Mr. Vinay Kumar	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmQWR2YW5jZSBHTINTIHBhb2Nlc3NpbmcmU2hyaSBTdXJlc2ggS2FubmF1amJ5YSZlSV9VQ29fMFp4cyYyMDIwLTA5LTI1
8.	16 March 22	Microwave Remote Sensing for Glacier Dynamics Studies.	Shri Kamal Pandey	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmMjIjU2VwIjDlWmJlBFRdOUyBkZW1vbW0cmF0aW9uLChQcmUicmVjb3JkZWQgZm9sbG93ZWQgYnkgbGJ2ZSBxdWVyeSBzZXNzaW9uKScZECi4gQXNodXRvc2ggQmhhcmR3YWomclpzSV44WFFJzbzQmMjAyMC0wOS0yMg==
9.	17 March 22	Differentiation Interferometric AR, Advandc Differential Interfermetric SAR and Geological Applications.	Shri Kamal Pandey	https://eclasscms.iirs.gov.in/watch_lecture.php?id=NjYmMjEgU2VwIDlWmJlBFRdOUyBkZW1vbW0cmF0aW9uLChQcmUicmVjb3JkZWQgZm9sbG93ZWQgYnkgbGJ2ZSBxdWVyeSBzZXNzaW9uKScZECi4gQXNodXRvc2ggQmhhcmR3YWomclpzSV44WFFJzbzQmMjAyMC0wOS0yMg==

Overall, **Ten Participants** from Integral University attended the program and got benefitted from the much needed and timely insights on Hyperspectral Data Processing and Remote Sensing.

