## Raja Shripatrao Bhagwantrao Mahavidyalaya, Aundh, Satara

#### 59th IIRS Outreach Programme on 'Overview of Planetary Geosciences with special 08/06/2020 to 12/08/2020 emphasis to the Moon'

Sponsored by NNRMS and organized by IIRS/ ISRO, Dept. of Space, Govt. of India, Dehradun

## RAJA SHRIPATRAO BHAGAWANTRAO MAHAVIDYALAYA, AUNDH, SAT

Indian Institute of Remote Sensing, ISRO, Dehradun Department of Space, Government of India SUMMARY REPORT OF PROGRAM

Date: 30/11/2019

To, The Principal, R.S.B. Mahavidyalaya, Aundh Tal. Khatav, Dist. Satara

I am submitting summary report of 59th IIRS ISRO Outreach Programme. Please accept it.

- 1. Name of Programme: Overview of Planetary Geosciences with special emphasis to the **Moon and Mars**
- 2. Duration: 08/06/2020 to 12/06/2020

**Total Days: 05** 

- 3. Number of enrolled students: 04
- 4. Name of Coordinator: Dr. Telore Namdev Vasant
- 5. Name of Resource Persons:
- i) Dr. Prakash Chauhan ii) Mrs Richa U Sharma
- iii) Dr SL Chattoraj iv) Dr. Mamata Chauhan

## 6. Objectives of the Programme:

i. To take overview of Planetary Geosciences with special emphasis to the Moon and Mars

### 7. Outcome of the Programme:

i. Participants taken overview of Planetary Geosciences with special emphasis to the Moon and Mars

Centre Coordinator

Principal

Mahavidyalaya, Aundh (Satara)

(Dr. Namdev V. Telore) Dr. Namdev V. Telore

Co-ordinator IIRS Outreach Programme, Dehradun

Centre: R.S.B.Mahavidyaiaya, Aundh, Dist. Satara

#### **IIRS Outreach Programme**

The IIRS outreach programme, which started in 2007 with 12 universities/ institutions has now grown substantially. The beneficiaries of the programm 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 ove the quality of futu



#### **Awards**

red national awards for excellence in 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) unde Research Organisation (ISRO), Department of S India is a premier Training and Educational Instit developing trained professionals in the field Sensing, Geoinformatics and GNSS Technology for 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

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

#### **Contact Details**

Dr. R.S. Chatterjee Course Direct

Tel: 0135-2524156 Email: rschatterjee@iirs.gov.in

> Dr. Harish Karnatak Programme coordinator Head, GIT& DI Dent Tel: 0135-2524332

Dr. Mamta Chauhan Tel: 0135-2524273

Dr. Poonam S Tiwari Tel: 0135-2524334 Mr. Janardan Vishwakarma Mr. Ashok Ghildiya

Tel: 0135-2524130

Indian Institute of Remote Sensir Indian Space Research Organisation Department of Space, Govt. of India, 4-Kalidas Road, Dehradun Email: dlp@iirs.gov.in

Fifty Nine IIRS Outreach Programme

**Overview of Planetary Geosciences** with special emphasis to the Moon and Mars

June-08-12, 2020



Organised by

**Indian Institute of Remote Sensing** Indian Space Research Organisation

Department of Space, Govt. of India Dehradun

www.iirs.gov.in I/C PRINCIPAL Raja Shripatrao Bhagwantrao Mahavidyalaya, Aundh (Satara)

IIRC Outream Programmie, Destradun

#### **About the Course**

Planetary exploration has revealed several interesting facts related to the surface features on the planets and their satellites. The workshop on Planetary Geosciences is planned to provide an overview of planetary science, introduce students to the geology of the Moon and Mars and applications of various remote sensing techniques in analyzing their surface characteristics. We invite you to attend this training program on "Overview of Planetary Geosciences with special emphasis to Moon and Mars" The course is scheduled from April 13-17, 2020.

#### **Course Contents**

Overview of Planetary Geosciences with special emphasis to

#### the Moon and Mars

- Planetary Geoscience: Issues and Challenges
- · Geology of the Moon
- Remote Sensing of the Moon: Tools and Techniques
- · Geology of the Mars
- · Remote Sensing of Mars: Tools and Techniques

#### Practicals/Demo Exercises

- Planetary data downloading and handling
- Tutorial cum hands on exercises on Hyperspectral data processing and analysis for Moon
- . Tutorial cum hands on exercises on Microwave da Dr. Namdey V. Telore processing and analysis for Moon

#### **Target Participants**

ntinator

fron Cei The course is designed for profes State Govt. / Private Organiza ogund testitud Universities/ NGO/ students & researchers Earth and Planetary sciences.

The course participants have to be duly sponsored by their university/ institution and application should be forwarded through coordinators from respective Organisations/ Centres. Users attending programmes under CEC-UGC/ CIET/ other networks can also participate. Institutions on high speed National Knowledge Network (NKN) can also participate.

### **Course Study Material**

Course study materials like lecture slides, video recorded lectures, practical and demonstration handouts, etc. will be made available through IIRS ftp link. Video lectures will also be uploaded on YouTube Channel (http://www.youtube.com/user/edusat2004).

#### Course Fee

There is no course fee for attending this programme.

## **Course Registration**

Course updates and other details will be available on URL- http://www.iirs.gov.in/Edusat-News/. All the participants has to register online through registration page available on above web page.

#### **Award of Certificate**

Working Professionals: Based on 70% attendance and submission of assignments. submission of assignments.

Students: Based on 70% attendance and primary Note: Instead of the committee of

Mahavidyalaya, Aundh (Satara)

#### Course Funding & Technical Support

The programme is sponsored by National Natural Resources Management System - Standing Committee on Training and Education (SC-T), Indian Space Research Organisation, Department of Space, Government of

### **Programme Reception**

Programme can be received through Internet connectivity of 2Mbps or better. Following hardware and software set-up is required at user end:

#### Hardware Requirements:

- High-end Computer/Laptop (Windows OS);
- Good quality web camera;
- · Headphone with Microphone
- Speakers;
- Large Display Screen (Projector or TV)

### Software and Internet Requirements

· Online live lecture through https://eclass.iirs.gov.in/login or https://elearning.iirs.gov.in/

#### Connectivity & Other configurations:

- · NKN or any other high speed internet facility (preferably without firewall, with minimum of 2 Mbps bandwidth)
- Network requirements: Port 80 and RTMP (port 1935) protocol should be unblocked from user's computer and Firewall.

Note: Institutions/ Universities have to bear total expenses for establishment of the classroom facility.





# Department of Space, Government of India Indian Space Research Organisation (ISRO) Indian Institute of Remote Sensing, Dehradun



## 59th IIRS Outreach Programme

on

"Overview of Planetary Geosciences with special emphasis to the Moon and Mars"

June 08, 2020 to June 12, 2020

### **Lecture Schedule**

Sr. No.	Date	Time	Name of the topic	Faculty	Dept.
1	08 June, 2020	10: 30 - 11: 30 Hr	Planetary Geoscience: Issues and Challenges	Dr. Prakash Chauhan	- GSD
2	09 June, 2020	10: 30 - 11: 30 Hr	Geology of the Moon	Dr. S.L. Chattoraj	
3	10 June, 2020	10: 30 - 11: 30 Hr	Remote Sensing of the Moon: Techniques and Findings	Dr. P.K. Champati Ray	
4	11 June, 2020	10: 30 - 11: 30 Hr	Geology of Mars	Dr. Mamta Chauhan	
5	12 June, 2020	10: 30 - 11: 30 Hr	Remote Sensing of Mars	Dr. Mamta Chauhan	
		11: 30 - 12: 30 Hr	Microwave remote sensing with emphasis on Indian Moon Missions	Dr. R.S. Chatterjee	

### **Practicals/Demo Exercises**

Sr. No.	Date	Time	Name of the topic	Faculty	Dept.
1	09 June, 2020	15:00 -16:00 Hr	Planetary data downloading and handling	Dr. S.L. Chattoraj	GSD
2	10 June, 2020	15:00 -16:00 Hr	Tutorial cum hands on exercises on Hyperspectral data processing	Mrs. Richa U. Sharma	
3	11 June, 2020	15:00 -16:00 Hr	Tutorial cum hands on exercises on Lunar data analysis	Dr. Mamta Chauhan	

Dr. Namdev V. Telore

Co-ordinator
HR6 Outreach Programme, Dehradun
Centre:R.S.B.Mahavidyalaya, Aundh, Dist. Satara

Raja Shripatrao Bhagwantrao Mahavidyalaya, Aundh (Satara)



## Department of Space, Government of India Indian Space Research Organisation (ISRO) Indian Institute of Remote Sensing, Dehradun

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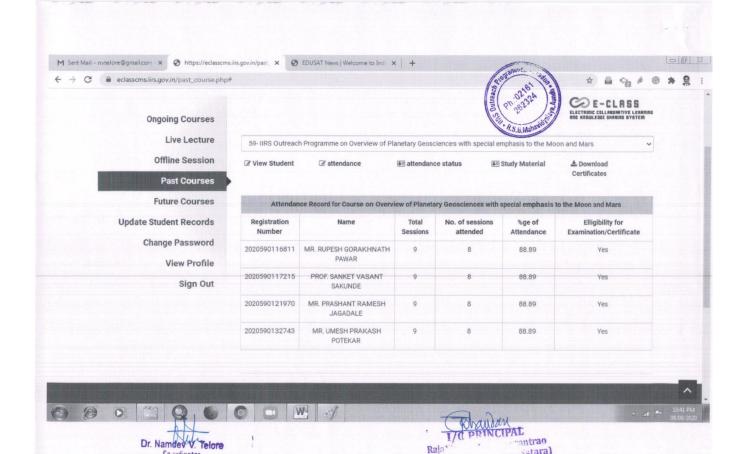
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Dr. Namdev V. Telore Co-ordinator

IIR6 Outreach Programme, Dehradun Centre: R.S.B. Mahavidyalaya, Aundh, Dist. Satara Raja Shripatrao Bhagwantrao Mahavidyalaya, Aundh (Satara)



Co-ordinator
IIRC Outreach Programme Cehradun
CentretR.S.R.Mahavidvalava Aumum tin. Sate

(Satara)

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## भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING भारतीय अंतरिक्ष अनुसंघान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विमाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



बहि : परिसर संपर्क/ विस्तार कार्यक्रम प्रमाण पत्र OFF - CAMPUS OUTREACH CERTIFICATE PROGRAMME

संस्थान की सहभागिता का प्रमाण पत्र CERTIFICATE OF PARTICIPATION OF INSTITUTE



यह प्रमाणित किया जाता है कि राजा श्रीपतराव भगवंतराव महाविद्यालय, औंध, सातारा, महाराष्ट्र ने भारतीय सुदूर संवेदन संस्थान, इसरो देहारादून द्वारा संचालित ऑनलाइन प्रशिक्षण पाठचक्रम ''ग्रहीय भूविज्ञान का अवलोकन : विशेषत : चन्द्रमा और मंगल ग्रह के सन्दर्भ में" मे भाग लिया। इस ऑनलाइन पाठचक्रम का संचालन दिनांक 08 जुन, 2020 से 12 जून, 2020 तक किया गया।

This is to certify that Raja Shripatrao Bhagawantrao Mahavidyalaya, Aundh, Satara, Maharashtra, has participated in online training programme conducted by Indian Institute of Remote Sensing, ISRO Dehardun on "Overview of Planetary Geosciences with special emphasis to the Moon and Mars". This online programme was conducted during June 08, 2020 to June 12, 2020.



दिनाँक/ Date: 10-08-2020 प्रमुख

देहरादून/ Dehradun

प्रमुख, जियोवेब सर्विसेस, सूचना प्रौद्योगिकी एवं दूस्स्य अधिगम विभाग Head, Geoweb Services, IT & Distance Learning Department, IIRS Agrawat

समृह प्रमुख, भू-स्थानिक ग्रौद्योगिकी एवं आउटरीच कार्यक्रम समृह Group Head, Geospatial Technologies & Outrea

th Programme Group, IIRS

Raja Shripau ao Bhagwant rao Mahavidyalaya, Aundh (Satara)

IIRS Outreach Programme, Dehradun





भारतीय सुदूर संवेदन संस्थान/ INDIAN INSTITUTE OF REMOTE SENSING भारतीय अंतरिक्ष अनुसंधान संगठन/ INDIAN SPACE RESEARCH ORGANISATION अंतरिक्ष विमाग, भारत सरकार/ DEPARTMENT OF SPACE, GOVERNMENT OF INDIA



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रान्० अनुष्त्र. भू-स्थानिक प्रौद्योगिकी एवं आउटरीच कार्यक्रम समूह Group Head, Geospatial Technologies & Outreach Programme Group, IIRS