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Professor (Retd.) Andhra University, Vishakhapatnam
Prof. P. Rajendra Prasad
Professor (Retd.) Andhra University, Vishakhapatnam

Plenary / Invited Speakers

Dr. K. J. Ramesh
Ex-DG, IMD, Pune
T. Srinivasa Kumar
Director, INCOIS, Hyderabad
Prof. S. K. Tandon
IISER, Bhopal
Prof. Talat Ahmad
Vice-Chancellor (Retd.), University of Kashmir, Srinagar
Prof. D.S. Ramesh
Director (Retd.), IIG, Mumbai
Prof. K.S. Krishna
UoH, Hyderabad
Prof. N. V. Chalapathi Rao
BHU, Varanasi
Dr. Ajay Ravindran
Senior Research Scientist, Center for Prototype Climate Modeling, New York University, Abu Dhabi

Dr. Carol Finn
Past AGU President, USGS, USA
Dr. Thamban Meloth
Scientist G, NCPOR, Goa
Prof. Manika Prasad
Colorado School of Mines, USA
Dr. Pradipta Misra
Executive Director (Retd.), ONGC, India
Dr. Mohammad Mokhtari
Director, National Center for Earthquake Prediction, IIEES, Iran
Dr. Yuelong Miao
Manager for Tsunami and Storm Surge, Bureau of Meteorology, Australia
Dr. Lucie Roland
Université Côte d'Azur, Géoazur, France

Dr. Chandra Bhushan Verma
Sr. Manager (Geology), NMDC Ltd., Hyderabad
Dr. Amit Kumar Saw
Asst. General Manager (Geology), NMDC Ltd., Hyderabad
Dr. T.V.S. Uday Bhaskar
Scientist F, INCOIS, Hyderabad
Shri. R. S. Mahendra
Scientist E, INCOIS, Hyderabad
Dr. Deepesh Kumar Jain
Scientist C, IITM Pune and NCMRWF, Delhi
Dr. Prasanth A. Pillai
Scientist E, IITM, Pune
Shri. M. Rahman
Scientific Officer – G, AMD Campus, Hyderabad
Shri. P. Bhattacharjee
Scientific Officer – F, AMD, Hyderabad

Dr. Vikash Tripathy
Sr. Geologist, GSI (Southern Region), Hyderabad
Shri. Harish Mistry
Superintendent Geologist, GSI (Western Region), Jaipur
Dr. M. Ram Mohan
Scientist G, CSIR-NGRI, Hyderabad
Dr. Sandeep Gupta
Senior Principal Scientist, CSIR-NGRI, Hyderabad
Dr. Mala Bagiya
Associate Professor, IIG, Mumbai
Dr. S. P. Anand
Professor, IIG, Mumbai
Shri. Rajiv Kumar
Scientist SG, NRSC, Hyderabad
Dr. Tapas Ranjan Martha
Scientist SG, NRSC, Hyderabad

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International Conference on
**Advances in Science of the
Earth: Relevance to the Society**
(24-26 November 2022)

Organized by
School of Earth Sciences
Swami Ramanand Teerth
Marathwada University
Nanded – 431606
Maharashtra, India

In Collaboration with / Supported by

- Indian Institute of Geomagnetism (IIG), Mumbai
- Atomic Minerals Directorate for Exploration and Research (AMD), Hyderabad
- Indian National Centre for Ocean Information Services (INCOIS), Hyderabad
- CSIR-National Geophysical Research Institute (NGRI), Hyderabad
- National Mineral Development Corporation Limited (NMDC), Hyderabad
- Indian Institute of Tropical Meteorology (IITM), Pune
- Indian Institute of Petroleum and Energy (IIPG), Visakhapatnam
- ISRO-National Remote Sensing Centre (NRSC), Hyderabad
- Department of Science and Technology (DST), New Delhi
- American Institute of Professional Geologists (AIPG), USA

University website: www.srtmun.ac.in

Conference website: <https://www.asers22.sesrtmun.in>

SRTM University

Swami Ramanand Teerth Marathwada University, Nanded was established on September 17, 1994 by the Government of Maharashtra. The University caters to the southern part of the Marathwada region of Maharashtra covering four districts including Nanded, Latur, Parbhani and Hingoli. The SRTM University has 16 Schools on campus, 4 schools at sub-campus, Latur and a sub-campus at Parbhani; a constituent New Model Degree College at Hingoli. The University has 300 plus affiliated colleges under its jurisdiction offering 146 programs. The University hosts more than 70 foreign students across five countries. The University received financial assistance from RUSA, DST, UGC, ISRO among others. The SRTMU Faculty members have invented, patented and commercialized many ideas. The University boasts a Centre of Excellence in Seismology, advanced research instrumentation facilities, collaboration with Inter-University Centre for Astronomy and Astrophysics and MoUs with national and international institutions. The SRTM University has signed a MoU with the Virtual Labs project, an initiative of MHRD, NMEICT, IIT Delhi, and IIT Bombay. This will allow a paradigm shift in ICT-based education in the University.

Nanded is well connected by rail and road with the other major cities of India including Mumbai, Delhi, Nagpur, Bangalore and Hyderabad. Nanded has a modern airport with daily flights to Hyderabad, Mumbai and Delhi. Average rainfall in Nanded is about 950 mm and temperature varies from 45°C in summer to about 10°C in winter. The climate in November is pleasant with day temperatures of 15°C to 30°C.

School of Earth Sciences

The School of Earth Sciences is one of the first Schools to be initiated in the newly established SRTM University. Presently there are more than 165 Post-Graduate students studying in 4 different Courses including Geology, Geophysics, Environmental Science and Geography in the School of Earth Sciences. Additionally, the School runs 2 Post-Graduate Diploma Courses in Geoinformatics and Mining and 2 Certificate Courses in Industrial Safety and Occupational Health and Water Literacy. Many of the scholars earned DST-INSPIRE, CSIR, UGC, ICSSR, BARTI, RGNF and other fellowships for conducting their research. The Faculty members of the School are well-qualified with national and international reputation and have earned laurels and recognitions at local to global level.

The School is recognized by the American Institute of Professional Geologists (AIPG) as the First International Student Chapter outside USA. The School has Memorandum of Understanding (MoUs) and academic collaborations with many National and International institutions including NGRI, IIG, NCS, ISR, INCOIS, AMD, IITM, NEERI and GSDA. The School is funded by UGC-SAP, DST-FIST, RUSA, ICSSR and UGC-Innovative programs. The School of Earth Sciences has generated funds to the tune of ₹ 5 crores through research projects. Centre of Excellence in Seismology (a RUSA initiative) is recently been established in the School of Earth Sciences.

About the Conference

“What we observe is not nature in itself but nature exposed to our method of questioning” - German Physicist Werner Heisenberg

We view the planet Earth in different perspectives and question in different methods. The systematic approach to understand the planet Earth is not only gives a holistic picture but also helps us to unravel the intrinsic relationship between different spheres. The present conference on “Advances in the Science of Earth: Relevance to the Society” is an attempt to bring the experts and young scientists under one umbrella to deliberate and develop systems approach for evaluating planet Earth evolution in space and time and to ascertain why it is very relevant to the Society.

Major Themes and sub-themes of the Conference

1. Solid Earth and its Resources

- Petrology and Geochemistry: Magmatism and Crustal Evolution; Sedimentation and Sedimentary basins; Metamorphic terrains and Geochronology.
- Structural Geology and Stratigraphy: Structure and Tectonics; Plate Motion; Palaeomagnetism and Reconstruction of Supercontinents; Stratigraphy.
- Ore geology and Metallogeny.
- Mineral Resources: Geological, Geochemical and Geophysical Exploration; 3D resource modelling; statistical approach in resource calculation; deep crustal exploration.
- Geophysics of Earth's Near Surface and Deep Interior: Geophysical methods of exploring the Earth's surface and interior.

2. Climate Change and Monsoon

- Dynamics of monsoon as seen with modern observations, field experiments, campaigns, etc. New insights into dynamics of monsoon processes using different types of observations.
- Role of Oceanic and atmospheric processes in Monsoon variability: New ideas related to monsoon with different processes such as ENSO, IOD, EQUINO, etc.
- Monsoon predictability at multiple time scales - Dynamical and Statistical Modeling of monsoon related processes.
- Climate change impact on monsoon, hydrology/hydrogeology and agriculture.
- Monsoon information for societal benefits: Different ways of information dissemination about monsoon, Tsunami, pollution hazards, extreme events, etc.

3. Natural Hazards: Prediction and Mitigation

- Special session on understanding the generation of Tongan Volcanic Eruption, its signatures in terrestrial system and brainstorming on preparedness for future volcanic risks.
- Signatures of EVT (earthquake, volcano and tsunami) in atmosphere-ionosphere system: present understanding and future perspective.
- Plausible early warning/precursors to geohazards of earthquake, volcano, tsunami and landslides.
- Weather extremes: Significance, early warning and assessment of consequences.
- Floods and Droughts: Causes, present scenario and risk assessment.
- Implications of Natural Hazards on ecosystems.

4. Remote Sensing and Geospatial Technologies

- Analysis of remote sensing data (optical, thermal, microwave and hyperspectral) from satellite, airborne and UAV platforms; Use of GNSS data and geospatial techniques.
- Monitoring, assessment and modelling of Earth Resources.
- Terrain and Topographical application in Earth Sciences (LiDAR, InSAR, GNSS etc.)
- Big Data analytics and cloud computing.
- Mobile and Web GIS Applications.

5. Application of AI and ML in Earth Sciences

- Solid Earth and its Resources.
- Climate Change and Monsoon.
- Natural Hazards: Prediction and Mitigation.
- Remote Sensing and Geospatial Technologies.

6. Environmental Pollution

- Air/ Water / Soil Pollution.
- Solid waste / e-waste pollution.
- Application of GIS and RS in environmental pollution.
- Pollution abatement strategies / methods / approaches.
- Pollution prediction / monitoring / modeling.
- Environmental pollution and human health.

Abstract submission

The abstract should be type set in Times New Roman in 12 font. The abstract should include Title, authors, affiliation and text. The text should be within 450 words. Detailed procedure of abstract submission is provided on <https://www.asers22.sesrmtmun.in>

Registration fee

All the delegates must register in advance for participation in this Conference. The registration form can be submitted directly <https://www.asers22.sesrmtmun.in>

Category	Registration (1 Sept. – 31 Oct. 2022)		Late Registration (1 Nov. – 24 Nov. 2022)	
	Indian (Rs.)	Foreign (US \$)	Indian (Rs.)	Foreign (US \$)
PG students	₹ 500	\$ 50	₹ 600	\$ 75
Research Scholars	₹ 1000	\$ 75	₹ 1200	\$ 100
Faculty/Scientist	₹ 2000	\$ 125	₹ 2500	\$ 150
Industry/NGO	₹ 3000	\$ 200	₹ 4000	\$ 250

Important dates

Registration	September 1, 2022 to October 31, 2022
Late Registration	November 1, 2022 to November 24, 2022
Abstract Submission	September 1, 2022 to October 31, 2022
Last date for Full Paper Submission	Relevant dates will be displayed on the website
(Acceptance of the Abstract will be communicated within a week of submission)	

Important notes

- Registration fee includes conference kit and working lunch, .
- All the participants need to produce COVID-19 vaccination certificate.
- Full length manuscripts will be reviewed and published in reputed international journals. However, publication fee will be charged separately.
- After making online payment, authors are requested to mention their bank transaction details clearly to enable us to trace your payment in the bank statement. Registration fee once paid is not refundable in any circumstances. Registration fee is applicable for only one abstract, and no discount for multiple abstracts.
- SRTMU-AIPG Student Chapter Sponsored special session (both oral and poster) will be conducted for Research Scholars and Post-Graduate students.

Conference accommodation & other details

Only limited student accommodation is available in the SRTM University campus. Delegates are advised to book their accommodation in hotels. Please visit: <https://www.asers22.sesrmtmun.in> for other details like Registration Form, Guidelines for Abstract submission, Contact Details, Information of Hotels for accommodation, Field Trip, Places to visit, etc.

Financial assistance

All efforts are being made to provide partial/full financial assistance to students, young scientists and retired faculties **who do not have any sources of funding**. The application requesting financial assistance can be sent to icasers2022@gmail.com with subject of the E mail as “Request for Financial Assistance”. The last date for receiving financial assistance application is 15th October 2022. Please visit: <https://www.asers22.sesrmtmun.in> updates.

Please feel free to contact us at: **E Mail: icasers2022@gmail.com**