



AMITY INSTITUTE OF ENVIRONMENTAL SCIENCES AMITY UNIVERSITY, UTTAR PRADESH

Three days' Workshop cum training Programme "Climate Modelling and Remote Sensing Applications for Environmental Systems'' 6th-8th January 2022 || Virtual Platform

Welcome Address:



Presiding the inaugural of the Three-Day Workshop Cum Training Programme, Dr. Ambrina Sardar Khan, Assistant Professor, Amity Institute of Environmental Sciences, AUUP on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor, welcomed all the respected dignitaries and the participants of the Workshop Cum Training Programme. She gave a brief introduction of all resource persons and about Amity University. The event started with the curtain raiser followed with the invocation of Goddess Saraswati by

rendition of Saraswati Vandana and the lighting of the lamp of knowledge in virtual mode.

Aim of Workshop

The primary objective of the training is to provide opportunity for academicians, researchers, practitioners, policy makers and research scholars to undergo training, share and discuss ideas and practices across a range of empirical, theoretical, and applied approaches in remote sensing and climate modelling for environment sustainability. This workshop aims to provides a premier interdisciplinary platform for researchers, practitioners,



and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Climate Modelling and Applications Conference. The training will discuss the unprecedented challenges of environmental systems that can be resolved with remote sensing.

Dr. Renu Dhupper, Joint Coordinator, AIES:

She welcomed all the guests, eminent speakers, Amity Faculties participants, and Indian Meteorological Department. She explained environmental systems are important to monitor and control with the rising concerns of climate change and weather events. Climate modeling has become intuitive to predict future events. She talked about Environmental Remote Sensing deals with emerging methods and technologies.



Prof. D. K. Bandyopadhyay, Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh

He was delighted with the collaboration with IMS. He said there are many aspects of climate modeling. He said circulation models are popularly known. He talked about scientist use climate model to understand complex earth systems. It has a short range, mid range, Long range forecasting. These models allow them to test hypothesis and draw conclusion on past and future climate system. He further explained that. It can help them to determine whether abnormal weather, events or storms are a result of changes in climate or just a routine climate variation For example, For



predicting hurricane, Climate models can be used. At the end, he hoped for better future by prediction of climate with the help of models.

Prof (Dr.) Balvinder Shukla, Hon'ble Vice Chancellor, Amity University Uttar Pradesh:

She welcomed esteemed distinguished guest of the day, Dr. Patnaik, IMS and colleagues. She said that she is delighted that Amity had taken initiative in collaboration with the IMD to organize three-day workshop. She said that this workshop will help in learning environment systems. She said that advanced research and disaster management and integrated climate observing systems and remote sensing applications are great tools for the environmental systems. She said SDGs has focused on climate change also. She hoped that everyone gets to learn and educate and initiative for sustainable environment can be taken.



Dr. D.R. Pattanaik, Scientist F and Head, Numerical Weather Prediction, IMD



He welcomed Amity members and every panelist. He said climate modeling is a complex system. He said climate is a slow process. He said models are progressed and now we have new challenges to meet the public demand. The objective of IMS is dissemination of knowledge in material science, application of science and meteorology in various sectors for the benefit of society like agriculture, water resource, tourism, disaster management etc.

Dr. Mrutyunjay Mohapatra, President IMS & Director General of Meteorology, IMD, GOI

He congratulated Amity University, Distinguished speaker and all participants. He said first instrumental observation was started in the world. He said in synoptic meteorology, the word synoptic means the simultaneous and hence the concept of simultaneous observations. He said computation improved and the models improved over time. He said to understand the phenomena occurring in atmosphere then scientist could find that 6-7 equations for understanding the processes.



Dr. M. Ravichandran, Secretary, Ministry of Earth Sciences, New Delhi, India



He thanked and welcomed everyone. He said numerical modeling started very early with mapping heat and mass to monitor and for measuring the temperature and the humidity and the variance, so these are the three prime variables to change the atmospheric dynamic physical systems. He said that to monitor the temperature, salinity and currents they are trying the map the mass heat in the ocean. He mentioned that the interaction between ocean and the atmosphere. He talked about two weeks scale, we depend on the ocean, since the energy or the memory is stored in the

ocean. He said at the end of the workshop new capacity will be developed in India to develop the understanding as the future climate researchers.

Dr. Manju Rawat, Joint Coordinator, AIES:



She proposed the vote of thanks to every panelist in workshop cum training programme. She thanked for explaining the changing in ocean interaction between the land, ocean and atmosphere for weather prediction, atmosphere modeling. She thanked everyone for conducting the workshop cum training programme on climate modeling and remote sensing applications for environmental systems.

Session – I

Theme: Understanding of Human-Environment Systems, Climate Change Research, Responses, and Thresholds in the Earth System



Welcome Address:

Presiding the 1st session of the Three-Day Workshop Cum Training Programme, Dr. Richa Dave Nagar, Assistant Professor, Amity Institute of Environmental Sciences, AUUP on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor, welcomed all the respected dignitaries and the participants of the Workshop Cum Training Programme. She gave a brief introduction of all resource persons and about Amity University. Environmental systems are important to monitor and control, with the rising concerns of climate change and erroneous

weather events. Climate modelling has become imperative to predict future events. The growing human impact on the environment has led to the development of new observations and analysis tools to tackle and monitor types, magnitudes, and rates of environmental changes. The focus is on environmental issues in light of climate change and human impacts. Education and training is important to impart clear concept building and delivering the weather, climate and remote sensing applications required for the Environment Management.



Dr. D. R. Pattanaik obtained his master's degree in physics from Sambalpur University, Odisha in 1991 and PhD from Pune University in 2001. He joined IMD in 1998. Dr. Pattanaik, is presently working as Head of Numerical Weather Prediction division of IMD and His area of interest are: Monsoon and Climate Variability, Climate Prediction, Extreme Weathers, Extended Range Prediction''. He has published more than 75 scientific research papers in national & international journals. Dr. Pattanaik's persistent scientific contributions brought him much recognition and award,

like (i) Certificate of Merit for outstanding contribution in the field of Atmospheric Science & Technology by the Ministry of Earth Sciences, Government of India in 2011 and (ii) Young Scientist Award for the best research paper published in Tropical Meteorology for the years 2014 by Indian Meteorological Society (IMS). He spoke on topic **Climate Change and Challenges of Extreme Weather Prediction.** The perspectives he gave a new dimension to the understanding of predictions of extreme events.



Dr A.K. Lohani is currently serving as a Scientist G in the Surface Water Hydrology Division of National Institute of Hydrology, Roorkee and as Head & Coordinator, Centre for Flood Management Studies NIH, Guwahati, Coordinator, Central India Hydrology, Regional Centre, Bhopal, Training Coordinator a World Bank Aided National National Hydrology Project, Coordinator Decision Support System (Planning & Management) under National Hydrology Project.

Area of Research: Rainfall-Runoff Modelling, Flood

Forecasting and Flood Management, Dambreak Flood Analysis, Glacial Lake Outbrust Flood Management, Design Flood Estimation. He spoke on "Heterogeneity in Aerosol Characteristics over the Indo-Gangetic Basin". His detailed deliberations gave a new insight into understanding aerosol characteristics.



Dr. Gaurav R. Govardhan Scientist C Ministry of Earth Sciences, National Centre for Medium-Range Weather Forecasting currently at Indian Institute of Tropical Meteorology, his research interests are in aerosol-climate interactions, model simulations of aerosol, model evaluation and improvements, mixing state of aerosol, radiative forcing, cloud radiative forcing, air-quality modelling, and fog modelling. He spoke on Remote sensing application for air quality early warning and decision support for air quality management in Delhi NCR.



Dr. Usha Meena, Associate Professor, School of Environmental Sciences, JNU, her research interests are Agroecology, Air pollution and Environmental Impact Assessment She has a vast experience in her field and has published several research papers. She spoke on Climate change and food security.



Dr. Madhuri Kumari, Professor, Department of Civil Engineering Deputy Director, Placement and Industry Relations, Amity School of Engineering and Technology, she has vast industry experience of 11 years and academic experience of around 11 years. Her research works in area of rainfall modeling have been published in reputed journals. Her research interests include data analytics, application of Geographic Information System & Remote Sensing (GIS&RS) for solving engineering problems, Water Resources

Engineering & Management, Hydrology, Hydroinformatics, Irrigation Engineering. Topic Spatial Decision Support System-An Effective Tool for Understanding Human Environment Response



Dr. Pallavi Saxena, Assistant Professor, Department of Environmental Sciences, Hindu College, University of Delhi, Scientific Steering Committee Member (SSC), iLEAPS, Advisory Board Member, APSI, USA. Her area of interest is air pollution, trace gases and aerosol chemistry and impacts on plant and human health and working in this area from last 14 years. She had also successfully completed her tenure as Chair of South Asia and Middle East Region of Early Career Scientist Network of iLEAPS community, UK from

2017 to 2021. She has also been awarded Jawaharlal Nehru Doctoral Scholarship, CSIR SRF, Young Scientist Award-ISPP, DBT BioCare Award during her research career. She has published more than 30 research papers in high impact factor journals. She is also an active participant and co-author of TOAR community, USA since 2015. Topic Health Benefits due to Reduction in Fine Particulate Matter by Using Air Quality Health Models during COVID-19 Lockdown in India



Dr. Vinnarasi, R. Assistant Professor, Multivariate Hydrological Analysis Hydrological Hazard, & Department of Civil Engineering, Indian Institute of Technology Roorkee. Her Specialization is in Hydraulics Hydro-climatological Engineering. Extremes. Hydrological **Multivariate** Hazard. Hydrological Analysis, Detection and Attribution of Extreme Events. She spoke on Understanding and modelling of time varying hydrological extremes



Vote of thanks was given by Dr. Ambrina Sardar Khan, Assistant Professor, AIES, AUUP along with Online Assessment for PANEL SESSION – I

Session - II

Theme: Climate Modelling and Remote Sensing Applications for Environmental Systems



The second day of the workshop cum training programme began by Dr. Richa Dave Nagar welcoming all the esteem panelists and participants.



After a brief introduction about Dr. Pai, Head, Office of Climate Research, IMD by Dr, Nagar, Dr. Manju Rawat Ranjan presented a virtual Tulsi sapling to Dr. Pai. Dr. Pai spoke about 'Climate services for the society'. After introducing about the changing climate patterns, he talked about mitigation and adaptation measures for climate change. He then talked about climate services and stakeholders of climate services in the country. He also informed about different application of climate services such as in water sector

for irrigation. After his presentation was over, he answered few questions put forward by the listeners. Thereafter Dr. Nagar thanked sir for his enlightening presentation.



Dr. Atul Km.Srivastava, Scientist E, IITM, MOES was the next speaker and he was felicitated by Dr. Renu Dhupper with a virtual Tulsi sapling. He spoke about 'Heterogeneity in aerosol characteristics and their climatic implications over IGB'. He started off by giving a brief about IITM, Pune and some basic classification of aerosols. He then talked about major sources of aerosols and its direct and indirect impacts. He also talked about complex nature of aerosols and their heterogeneity in aerosol loading. In the end he

talked about the impact of covid lockdown on aerosol pollution. After ending his presentation, Dr. Srivastava answered to a few queries put forward by the listeners and later was thanked by Dr. Nagar for his wonderful presentation.



Shri Arul Malar Kannan was the next speaker of the session and was felicitated with a virtual Tulsi sapling by Dr. Ambrina Sardar Khan. Mr. Kannan presented on the topic 'Doppler weather radar aid towards heavy rainfall vulnerability alerts and adaptability'. He started off by introducing various common terminologies related to rainfall. Moving forth he talked about how a radar is equated using different mathematical formulas. Then he talked about storm structure analysis using different models. In the end after completing his presentation he

answered some of the queries put forth by the listeners and was given a vote of thanks by Dr. Nagar.



Prof.(Dr.) Anil K. Gupta, Professor and head, ECDRM division, National Institute of Disaster management, Ministry of home affairs, Govt. of India was the next speaker of the session and was felicitate by Dr. Richa Dave Nagar with a virtual Tulsi sapling. Due to sore throat and bad health condition, he couldn't present in the session but attended the session throughout.



Dr. Sudhir Kumar Chaturvedi, Associate professor, UPES, Dehradun, Uttarakhand, India, Visiting scientist-KORDI, South Korea. was the next speaker of the session. He was welcomed by Dr. Nagar and was felicitated with a virtual Tulsi sapling. He started off by presenting about unmined aerial vehicles (UAV), their application and classification. He also talked about various sensors and their limitations. He also discussed about their scope in the future. He ended his presentation by giving answers to a few queries asked by the listeners

and was later thanked by Dr. Nagar for his enlightening presentation.



Dr. Kamna Sachdeva, Associate professor, Department of natural and applied sciences, TERI school of advanced studies enriched the audience with her next talk. She talked about Mainstreaming differential vulnerability of Himalayan agriculture Communities to climate change. She discussed the case study from Uttarakhand using various Models. Based on the conclusion various suggestions were also provided to the policy makers. She was very open to queries.



Followed by Dr. Kamna Sachdeva, it was turn of **Dr. Suraj Kumar Singh**, Associate Professor from Suresh Gyan Vihar University, Jaipur. He was welcomed by Dr Manoj C. Garg using a virtual sapling. His talk was focused around floods and water logging hazards in part of North Bihar using Geoinformatics and Remote Sensing. He talked about methods for flood mapping hazard methods and creation of ranks for socio economic vulnerability ranks. He concluded his talk with mitigation measures to deal with flood hazards. He was

thanked for his presentation by Joint Coordinators of AIES, AUUP Noida.



The 2nd session of workshop ended with vote of thanks by **Dr Ashutosh Tripathi**, Assistant Professor, AIES, AUUP Noida. He thanked all the speakers, organizing committee, Management of AUUP, Honorable Founder President Sir, Honorable Chancellor Sir, Respected VC Madam and Respected Mentor Sir as well as Joint coordinators of AIES and all members of Organizing committee. IT support and administration was also thanked for their tireless support throughout the event.

SESSION -III

Theme: Remote sensing and GIS as effective tools for Decision-Support Systems, Advance Research and Disaster management

Welcome Address:



Presiding the Session -III of the Three Dav Workshop Cum Training Programme, Dr. Ambrina Sardar Khan, Assistant Professor, Amity Institute of Environmental Sciences, AUUP on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir Hon'ble Vice Chancellor. and welcomed all the respected dignitaries and the participants of the Workshop Cum Training Programme. She gave a brief introduction of all resource persons and about Amity University.



Dr. Archana Sarkar, Scientist 'E', National Institute of Hydrology, (Ministry of Jal Shakti, Dept of Water Resources, RD & GR, Govt of India)

She thanked amity university and meteorological society for providing opportunity to present her ideas and work. She discussed on modeling of climate change impact on water resource with special emphasis to Indian river systems. She explained the climate change causes and

impact. She also presented the case study of climate change on water resources and climate future IPCC AR6 2021 report.



Ms. Sulagna Mishra, Scientific officer, Water and Cryosphere division, World Meteorological Organization, Geneva

In her lecture, she talked about the WMO's role in hydrological and water quality modelling for improving the climate change resilience. She gives the small introduction of world meteorological organization. She emphasized the action plan for hydrology and its water ambition.



<u>Mr. Manish Kumar, Senior Water Resources</u> <u>Manager, DHI (India) Water & Environment Pvt.</u> <u>Ltd.</u>

Firstly, he introduced the DHI. He discussed about the stream flow forecasting and reservoirs operations using real time decision support system (RTDSS). He explained the flood modeling tools and standard project component.



Dr. Sheikh Adil Edrisi, Assistant Professor, TSLAS, Thapar Institute of Engineering & Technology

He focused on the geospatial technology. He discussed about the exploring & degraded lands through geospatial technology for forestry/ bioenergy plantations. He also addressed sustainable development goals 5,8,13,15 and others. He said that land use and land cover is two different terminologies. LULC change is widespread and accelerating process, chiefly driven by natural phenomena and anthropogenic activities, influencing the natural ecosystem.



explained the hazard vulnerability risk.

<u>Dr. Amit Kumar,</u> <u>Assistant Professor & Co-Ordinator, Department</u> <u>of Geoinformatics, Central University of</u> <u>Jharkhand</u>

He thanked Amity University members Distinguished speaker and all participants. He presents the informational lecture on remote sensing for meteorological hazard risk assessment. He said that when we deal with disaster risk it is directly coming with the areas which is highly populated. He



Vote of Thanks by Dr. Kartikeya Shukla, Assistant Professor, AIES, AUUP.

He proposed the vote of thanks to everypanelist in workshop cum training programme. He thanked to Indian meteorological society to collaborate with us for three days workshop cum training programme on climate modeling and remote sensing application for environment system. He thanked everyone for conducting the workshop cum training programme on climate modeling and remote sensing applications for

environmental systems. He thanked on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor, all the respected dignitaries and the participants of the Workshop Cum Training Programme.

Session – IV

Theme: Integrated Climate Observing Systems and Remote Sensing Applications for Environmental Systems

Welcome Address:



Presiding the IVth session of the Three Day Workshop Cum Training Programme, Dr. Richa Dave Nagar, Assistant Professor, Amity Institute of Environmental Sciences, AUUP on behalf of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor, welcomed all the respected dignitaries and the participants of the Workshop Cum Training Programme. She gave a brief introduction of all resource persons and about Amity University.



Dr. Alok B Mukherjee, Chief Remote Sensing - GIS Analyst, R & D Head - NE India. **Dr. Alok B Mukherjee**, Chief Remote Sensing - GIS Analyst, R & D Head - NE India Operations at Leads Connect Services Pvt. Ltd., New Delhi. He has worked as Guest lecturer and Remote Sensing Specialist respectively. He has been involved in developing Geo-statistical & Geo-spatial models for investigating various aspects of earth system. He has interest in applying machine learning frameworks for deciphering the complexities of earth system events. published research products in the form of authored book, edited book, research articles, conference

articles, and book chapters He spoke on topic **AgriTech Analytics using Space Technology & Process Modeling.** The perspectives he gave a new dimension to the understanding of predictions of extreme events.



Dr. Maya Kumari, Assistant Professor, Amity School of Natural Resources & Sustainable Development, AUUP from Guru Gobind Singh Indraprastha University, New Delhi; M. Tech degree in Remote Sensing and GIS technology from Birla Institute of Technology, Mesra, Ranchi and Master of Science in Environmental Science from Banaras Hindu University, Varanasi. She has over 10 years of teaching and research experience in the field of application of Geospatial technology in sustainable management of natural resources. She has been part of several research projects related to use of geospatial technology in resource management. She also has

a number of national and international publications to her credit. She described the drought vulnerability assessment.



Dr. A R Siddiqui, Professor, Department of Geography, Earth observation specialized in Geo-hazard, University of Allahabad. Secretary general-Indian Institute of Geomorphologist, India. **He described various aspects of remote sensing include drought management.**



Mr. Sushant Kumar, Scientist, National Centre for Medium Range Weather Forecasting (NCMRWF), Ministry of Earth Sciences (MoES) He is working as a Scientist at National Centre for Medium range Weather Forecasting (NCMRWF) and responsible for delivering good quality "Renewable Energy Forecast Products" using NWP models. He has 10 years of research experience. He has done M.Tech in Climate Science from Indian Institute of Science, Bangalore and pursuing PhD from Allahabad University on Wind Power Forecasting. He is a member of Indian Meteorological Society. His research areas include Renewable Energy

Meteorology with emphasis on Utility Forecasting, Wind/Solar Resource Assessment, Tropical Cyclone, NWP models and verification. He is author of more than 15 National/International peer reviewed research papers, a book chapter, research reports and conference proceedings. He elaborated on Renewable Energy Forecasting over India: A weather & Climate perspective



Dr. A. K. Mitra, Scientist E, Satellite Meteorology Division, IMD New Delhi Dr. Ashim Kumar Mitra is currently working as a Scientist-'E' and Associate Project Director of Multi-mission Data Processing System of INSAT3D/3DR at Satellite Meteorology division of IMD, New Delhi. He joined India Meteorological Department (IMD) as a Meteorologist through UPSC in 2002 and later obtained his Ph.D in quantitative application of remote sensing in weather forecast from Jadavpur University, West Bengal (2014).He has 19 years of experience in satellite meteorology and looking after the operations and

utilization of INSAT/Kalpana-1/Polar satellite data for weather forecast and climate studies. He was instrumental in utilization of INSAT3D/3DR satellite data in the RGB preparation, disseminations, and NWP model assimilation. He is the recipient of Ministry of Earth Science award 2015 of 'Certificate of Merit' for his outstanding contribution in the field of Atmospheric science and climate change. He is also associated with INSAT-3D/3DR Calibration/Validation (CAL/VAL) program and recalibration of past INSAT data for climate studies. Dr. Mitra has been engaged in research in operational meteorology/atmospheric science for last decade. Since last year he is also heading the Geospatial group of IMD and made available the various products to the forecasters and users/stockholders. **He discussed on monitoring Weather and Climate using Remote Sensing and Geospatial technology**

Vote of thanks was given by Dr. Manoj C Garg, Assistant Professor, AIES, AUUP alongwith Online Assessment for PANEL SESSION – I

Valedictory Session

Valedictory Session:



Valedictory session was started with the welcome address given by Dr. Ambrina Sardar Khan, Assistant Professor, Amity Institute of Environmental Sciences, AUUP with the blessings of Hon'ble Founder President Sir, Hon'ble Chancellor Sir and Hon'ble Vice Chancellor. The journey began 3 days ago of the Workshop Cum Training Programme. The event started with the invocation of Goddess Saraswatiby rendition of Saraswati Vandana and the lighting of the lamp of knowledge in virtual mode.





Dr. Manju Rawat, Joint Coordinator, AIES:

She welcomed the gathering for the valedictory session of Three days workshop cum training programme. She welcomed guest of honors, participants, and viewers. She talked about the discussion deliberated to understanding related to human environment system, climate change research and effective response to climate change and climate resilience.

Dr. Renu Dhupper, Joint Coordinator, AIES:

She welcomed every panelist present in the session. She presented a consolidated report on three days workshop cum training programme. She said there were more than 452 participants from national and international in this programme. This objective of the program was to be focused on dissipating knowledge and awareness regarding technologies for climatology and meteorology applications and its policies and management and give insights to different tools required for weather forecasting.



Prof. D. K. Bandyopadhyay, Chief Advisor FPO / Chairman, Amity Law School, Mentor, Amity Institute of Environmental Sciences, Amity University Uttar Pradesh

He welcomed the guests and talked about impacts of climate change. He talked about different types of data which we can get through remote sensing application. He mentioned about the different faucet which was spoken by eminent speakers on extreme weather predictions,

modeling of climate change impact, water resources with special emphasis on river system, WMO role in hydrological and water quality modeling for improving the climate change resilience.



always change and nothing is same and change is a constant. He talked about that there are some presumptions of global warming, change in hydrology, water resources. He said economic cost of climate change is significant-0-3% of global GDP annually till earth temperature has risen 2-3 degreee Celsius.

Dr. Prithvish Nag. National Atlas and Thematic Mapping Org; Survevor General of India. Scientist ISRO. EX-VC MGKVP (Varanasi)

He welcomed and thanked everyone. He talked about the positive side of climate change which can be considered as option for the potential business out of climate change. He talked about the book- The Unstable Earth- things are







Dr. Prakash Chauhan. Director. Indian Institute of Remote Sensing (IIRS). Dehradun. Uttrakhand. India

He thanked Amity University for inviting him in this wonderful session. He talked about recent history of last 100 years, change in climate variability and CO2 concentration in the atmosphere which has crossed 420 ppm. He said that the overexploitation of hydrocarbon which has been sequestered over billions of years has caused radiative imbalance in the atmosphere because of the large

amount of greenhouse gases. Recent studies suggest that the energy imbalance has increased. He further explained about the total heat surplus in our atmosphere which is of the order of 350 zeta zules.

The programme convener **Dr. Ambrina** shared the glimpse of all the three days workshop cum training through a video prepared with the three days speakers, guest of honors and chief guests' moments of knowledge sharing.













Dr. Richa Dave Nagar, Assistant Professor, Amity University, Noida



At the end of session, the customary duty of presenting a vote of thanks was done by Dr. Richa Dave Nagar. She thanked everyone for successful completion of three days workshop cum training programme on climate modeling and remote sensing applications for environmental systems. Jointly organized by Amity University and IMS. She thanked Honorable Founder President sir, Honorable Chancellor, Honorable Vice-chancellor, mentor, the Administration of Amity University, esteemed delegates, the scientific community, colleagues, participants and research scholars.



Mr. Satish had been the constant support throughout the conduction of the conference cum training program.

He was responsible for timely coordinating with the speakers and maintaining logistics.



Mr. Naresh played a key role in overall editing, presenting and sharing the videos and the presentations throughout the conference cum training. The report has been prepared with his sincere efforts.