"World Earth Day"

webinar on

"Global Warming and Climate Change: Sustainable Adaptation and Mitigation Strategies"

April 22, 2023



Prof. Tanu Jindal, Group Additional Pro Vice Chancellor (R&D), Director, Amity Institute of Environmental Toxicology, Safety and Management

Prof. Tanu Jindal welcomed all the esteemed speakers.

Further she discussed about sustainable adaption and mitigation strategies.

She talked about the policies and strategies to integrate biodiversity conservation and restoration into the many uses of terrestrial, freshwater, and marine ecosystems, as well as expanding and improving protected areas which aims to halt the degradation of ecosystems and restore them as well as conserve the ecosystems for peaceful environment. Only with healthy ecosystems can we enhance people's livelihoods, counteract climate change, and stop the collapse of biodiversity

Address by Prof DK Bandyopadhyay, Chief Advisor FPO, Chairman, Amity Law School

He discussed about climate change adaptation and mitigation.

He stressed upon the topic like replacement of GHGs and Conventional Energy resources into Renewable Energy sources and also Energy Efficiency and forest reforestation.

Adaptation is local but mitigation is global. So far, many countries are unfortunately unable to adopt mitigation measures.

He discussed global warming. Different policies should be implemented for the reduction of the greenhouse gases. The greenhouse gases emission should be mitigated as quickly as possible. India has started the programme Namami Gange for the conservation of water. The major problem of our nation and planet is climate change and global warming.

1st Speaker: Dr. Rupa Kumar Kolli, President, Indian Meteorological Society

He talked about Climate Smart Societies and Role of Climate Services

He told that achieving a climate-smart society requires ambitious goals, comprehensive plans, and collective action from individuals, communities, and governments from local to global scales.

Greater focus required on enhancing national capacities to effectively incorporate global and regional inputs into their operational provision of tailored climate information products for local communities.

Despite the advances in climate sciences, there is a sub-optimal use of climate information in a real-world context. It is important to find ways to cope with climate variability and change through improved access to climate information and prediction/projection products. Climate adaptation climate-related management and risk require multidisciplinary/international collaboration and cross-disciplinary/international exchange of information. GFCS is a major step forward in systematically providing climate information for decision-making at various levels of climate-sensitive sectors. Greater focus is required on enhancing national capacities to efficiently incorporate global and regional inputs into their operational provision of tailored climate information products for local communities.

2nd Speaker: Dr. R Krishan, Director, Indian Institute of Tropical Meteorology

He discussed key questions pertaining to the science of Climate Change. He discussed possibilities for making reliable assessments of the impacts of climate change on the (a) Global and regional monsoon hydroclimate, (b) Regional weather and climate extremes, (c) Global and Indian Ocean Sea level, (d) Marine primary productivity and mechanisms controlling the ocean carbon cycle, and Future plans for the development of highresolution climate change projections.

The climate of a planet depends on energy from the sun, planetary Albedo, speed of the planet's rotation, the mass of the planet, the radius of the planet, atmospheric composition, and ocean land topography. Long-term climate variations are known to arise due to orbital forcing.

Most of the incoming solar radiation is visible eg; UV radiation while outgoing radiation is infrared radiation. The thermal IR band is where the action is in view of both the magnitude of the energy exchanges and the enormous complexity of the atmospheric absorption spectra in this band.



3rd Speaker: Dr. Jagvir Singh, Scientist G, Ministry of Earth Sciences

He talked about several projects and schemes going on under Ministry of Earth Sciences (MoES)

He also urged the students, academicians, and user communities about the various fields of Earth system science and climate change to come together and work. The webinar was attended by Directors, Eminent scientist from Ministries, Faculty, Researchers and PhD scholars and Students.

The organizer thanked for the vision of Honourable Founder President, Dr. Ashok K Chauhan, and visionary dynamic leadership of Dr. Atul Chauhan.