

Report One Day Seminar on “Cyclone Dynamics & Nano-Materials Characterization Techniques” in Compliance with SDG-4 & SDG-9 Organised by the Department of Civil Engineering, Integral University, Lucknow on October 12, 2023

The field of civil engineering is constantly evolving, driven by advancements in technology, sustainability concerns, and the need to address the challenges of urbanization and infrastructure development. To shed light on these emerging trends, the Department of Civil Engineering organized one day seminar on “Cyclone Dynamics & Nano-Materials Characterization Techniques” in Compliance with SDG-4 & SDG-9 F on **October 12, 2023**. The keynote speakers of the seminar were **Mr. Vivek Singh**, scientist in Indian Institute of Tropical Meteorology, Delhi Branch, Ministry of Earth Sciences, Govt. of India, New Delhi and **Dr. Chandresh Kumar Rastogi**, assistant professor at the Nanotechnology Program, CAS (AKTU) Lucknow.

The details of seminars are as follows:

The seminar was started with a welcome address by **Prof. (Dr.) Syed Aqeel Ahmad**, Head of Civil Engineering Department. The programme was attended by 21 faculty and staff members and 99 students of the Department of Civil Engineering.

Mr. Vivek Singh delivered lecture on "**Cyclone Dynamics, Physics and Aerosol re-distribution: An Indian Perspective**" and **Dr. Chandresh Kumar Rastogi** delivered lecture on "**An Overview of Nanomaterials Characterization Techniques**". in the Seminar Hall on the second floor Block F on **October 12, 2023**.

1. Mr. Vivek Singh, currently working as a Scientist in **Indian Institute of Tropical Meteorology, Delhi Branch, Ministry of Earth Sciences, Govt. of India, New Delhi**. Mr. Singh did graduation (B.Sc.) from Ewing Christian College, Allahabad University, Allahabad & post-graduation (M.Sc. in Physics) from Banaras Hindu University, Varanasi. Mr. Singh has done very extensive work in Tropical cyclone modelling, Aerosol characteristics over Indo-Gangetic Basin. Mr. Singh has published more than 20 SCI and Scopus indexing papers in various reputed journals.

Mr. Vivek Singh's expert lecture included about cyclones and tornados and the essential conditions for the formation of cyclones. He discussed the case study of extremely severe cyclonic storm Fani (2019) using NCUM global model and case study of extremely severe cyclonic storm Tauktae (2021) over Arabian sea along with their intensification causes. He also demonstrated about Aerosol re-distribution and damage analysis along with Case studies of cyclone Tauktae (2021) and Amphan(2020).

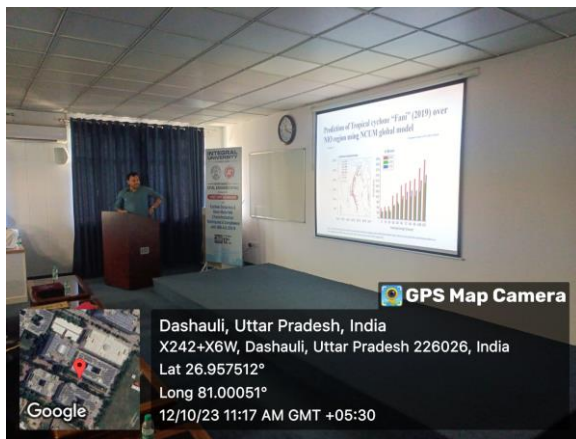
2. Dr. Chandresh Kumar Rastogi is currently working as an assistant professor at the Nanotechnology Program, CAS (AKTU) Lucknow. Dr. Rastogi did his graduation in (B.Sc) from Lucknow University in 2004, post-graduation in (M.Sc. -Physics) from, Lucknow University in 2006, M.Tech in Materials Science from NIT Durgapur in 2009 and Ph.D. in Materials Science from IIT Kanpur in 2016. He has worked in BARC Mumbai as a SERB

National Post-doctoral Fellow. He has done Post-doctoral Fellow from University of Toronto, Canada from April 2018 to March 2020. He has worked as a Senior Project Officer in IIT Bombay from September 2020 to March 2021 and Research Associate III HBNI, Mumbai from March 2021 to July 2021. Dr. Rastogi has published more than 20 SCI and Scopus indexing papers in various reputed journals.

Dr. Chandres Kumar Rastogi's expert lecture included introduction of nonmaterial and their different properties along with their historical background. He also demonstrated about the preparation of different nonmaterial. Nonmaterial has potential to increase the efficiency of energy consumption, help clean the environment, and solve major health problems as well as able to massively increase manufacturing production at significantly reduced costs. At last material characterization property like SEM, XRD and EDS were discussed.

The program was successfully coordinated by Mr. Vikash Singh, Assistant Professor and ended with a vote of thanks delivered by Dr Neha Mumtaz, Associate Professor, Department of Civil Engineering, Integral University.

PHOTOGRAPHS:





Glimpse of Photo sessions during Seminar