

*e-Faculty Development Programme
(FDP)*

on

**Sustainable Environment and
Climate Change (SECC-2022)**

With

OSI-Delhi-NCR Chapter

(Technical partner)

Duration: 14th June-19th June, 2022



Coordinators

**Dr. Prashant Kumar
Dr. Kapil Kumar**



Organized by

Department of Applied Sciences,
National Institute of Technology Delhi
(An Institute of National Importance)
Plot No. FA7, Zone P1, GT Karnal Road,
Delhi-110036, INDIA
www.nitdelhi.ac.in

Registration

Duly filled applications form need to be submitted on or **before 30thMay 2022**. The selection is on a first come first served basis depending upon the availability of seats. As seats are limited, so pre-registration is required by applying online through Google link form below.

Registration

Google form Link:

<https://forms.gle/Wh8swjx7DQfK3kWSp6>

Important dates

Last date of Registration: May 30, 2022

Notification of Selection: June 10, 2022

Organizing Committee

Chief Patron

Prof. (Dr.) Ajay K. Sharma	Director, NIT Delhi
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Coordinators

Dr. Prashant Kumar	Applied Sciences
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Dr. Kapil Kumar	Applied Sciences
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Organizing members

Dr. Gyanendra Sheoran	Applied Sciences
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Dr. V. S. Pandey	Applied Sciences
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Dr. Harish Kumar	ME Department
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Dr. Anshul Aggrawal	EEE Department
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Dr. Amit Kumar	EEE Department
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About NIT Delhi

National Institute of Technology, Delhi (NITD) was established in 2010 by Ministry of Human Resource Development, Government of India during the 11th Five Year Plan. It has been declared as an Institute of National Importance by an act of Parliament of India. It aims to provide instructions and research avenues in the areas of Engineering, Technology, Management, Education, Sciences and Humanities and for advancement of learning and dissemination of knowledge in such areas.

The institute offers three undergraduate programmers, five PG programmers and Ph.D. programme in all disciplines not only to keep pace with the expanding frontiers of knowledge but also to provide research training relevant to the present social and economic objectives of the country and the world.

NIT Delhi has successfully shifted to its Permanent campus at Delhi-Chandigarh Highway near Bakoli, in North Delhi. We are planning to establish the high computational laboratory for environmental and climate Scientists. We believe that NIT Delhi will provide a better opportunity for all the graduate students in climate science.

About Department

The Department of Applied Sciences have 10 faculty members, who are working on different discipline such computational fluid dynamics, Photonics and Nanophotonic, Optical and microwave imaging, Plasma Physics, Waste water treatment, Chemical sensing and Catalysis, Wastewater Treatment, Renewable wave energy, Climate change modelling etc., The department of Applied Sciences have five PG research laboratories name as Computational Methods Laboratory, Laboratory of Environmental Sustainability & Renewable Energy (LESER), AROMA, SEERI, and Organic synthesis and two UG laboratory (Physics and Chemistry).

The department of Applied Sciences have several number of Sponsored Research projects under support by the SERB-DST and Ministry of Earth Sciences (MoES), DRDO etc In Department of Applied Sciences, the faculties are working on Key projects based on Projection of wave power under climate change scenario under the SERB-DST, Government of India. Further, we have also successfully completed the project on Influence of Natural Climate variability over extreme wave climate in Indian Ocean under the Ministry of Earth Sciences. The Department of Applied Sciences have projects based on Digital Holography technique.

Programme Objective

The FDP aims at providing an interactive platform to the academia, researchers and students who are working in the latest developments of sustainable environmental problems and issues related to climate change. Further, we focus on covering various aspects of wastewater treatment, multicomponent of biological wastewater treatment. Extreme events related to global warming is challenging issue faced by the climate scientists, we would like to discuss the Future perspective of sustainable development of as per the guideline of Intergovernmental Panel for Climate Change (IPCC) under the different emission scenario.

Topic Covered

- Environmental Challenges & Goals of Sustainable Development
- Synchronized water treatment for energy generation (waste to energy)
- Application of Constructive wetlands in wastewater Treatment
- Muticomponent biological wastewater treatment
- Extreme events under global warming
- Sustainable development under climate change
- Impact of global warming
- Natural forcing vs Human induced warming
- Ocean wind wave climate under climate change
- Wave energy and SST warming in Indo-Pacific Ocean

Programme

On the completion of this course, the participants are expected to be capable of understanding the basics of Sustainable environmental challenges and influence of climate change. Participant also get the idea to working in the direction to generate the renewable energy sources. Further, how the climate under extreme scenario can affects our environmental.

Who should attend?

Faculties / Scientists/ Ph.D. Scholars / PG, UG and B.Tech. Students / Industry employees working / interested in the above mentioned area.

For query contact (Coordinators)

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Name: **Dr. Prashant Kumar**

Assistant Professor,
Department of Applied Sciences, NIT Delhi, Delhi-110036

Email: prashantkumar@nitdelhi.ac.in

Link for Registration:

<https://forms.gle/Wh8wvx7DOfK3kWSp6>