A Brief Report on

Faculty Development Program

"Sustainable Blueprint for Environmental Education and Research Opportunities"

organized by the

Department of Environmental Science

Under the aegis of

Human Resource Development Centre,

Integral University, Lucknow

The Faculty Development Program (FDP) on "Sustainable Blueprint for Environmental Education and Research Opportunities" was organized by the Department of Environmental Science under the aegis of Human Resource Development Centre, Integral University, Lucknow in hybrid mode from 5th -10th August, 2024. The program focused on integrating sustainability principles into curricula, fostering research opportunities, and promoting interdisciplinary collaboration. The key components of Program were curriculum attainment, experiential learning, professional development, community engagement, advancement in technologies and research opportunities. The program also aims to provide a powerful tool for inspiring individuals become environmentally aware to and actively engage in sustainable practices.

The objectives of the Program are to increase awareness about ongoing global environmental issues like climate change, pollution, species extinction and resource depletion. To have a wide range of knowledge about principles of ecology, biodiversity conservation, interrelationships between species, ecosystem functioning and its services. A practical learning for sustainable living through conservation and management of resources. A better analyzing skill to address present environmental issues. The establishment and development of ethics towards the protection of Earth in young minds. The empowered community would contribute to the conservation and protection of the environment. Local participation and community engagement can collectively address first local issues.

The specific outcomes of FDP are that participants will gain updated knowledge on emerging global environmental issues, basic principles of ecology and ecosystem, tools and techniques, and modelling prospects. A deeper and better understanding of the multidisciplinary nature and scope of Environmental science. The academicians will learn new ideas and approaches that make environmental education attractive and relevant for participants. Participants will acquire research methodology, tools and techniques for analytical data related to environmental research. The knowledge and skills acquired during the refresher course positively impact participants, influencing their ongoing work, research, and educational practices.

The inaugural session of the FDP was held on 5th August, 2024 from 10:30am to12:30pm at Hall no. 1 of the Auditorium Block. This session marked the official launch of the FDP focused on environmental education. The event aimed to introduce the program's objectives, outline the structure, and engage participants in discussions about the significance of the FDP. The program was started with a floral welcome to the delegates. The welcome address was made by **Dr. Ambrina Sardar Khan** (Head of Department, Environmental Science, IUL). The introduction to the Faculty Development Programme was done by **Prof. Syed Aqeel Ahmad** (Director to Human Resource Development Centre, IUL). A special address was graced by **Prof. Abdul Rahman Khan** (Dean, Faculty of Science, IUL). The program Inaugural Address was honored by Chief Guest, **Dr. Heeralal** (IAS, Special Secretary, Irrigation Department, Uttar Pradesh). He inspired us to protect our nature and mother Earth with sincere responsibility. The vote of thanks was delivered by **Dr. Syed Saema** (Assistant Professor, Department of Environmental Science, IUL). The anchoring of the program was done by Dr. Azram Tahoor (Assistant Professor, Department of Environmental Science, IUL).



Floral welcome and memento presentation to Chief Guest Dr. Heeralal (IAS)



Inaugural Session

The first theme of the Faculty Development Program (FDP) focused on the "Role of Academics in Environmental Conservation and Awareness." This session was delivered by **Prof. Amita Kanaujia**, Department of Zoology, University of Lucknow, and provided an in-depth exploration of how academic institutions and faculty members can contribute to environmental conservation and raise awareness through education and research.



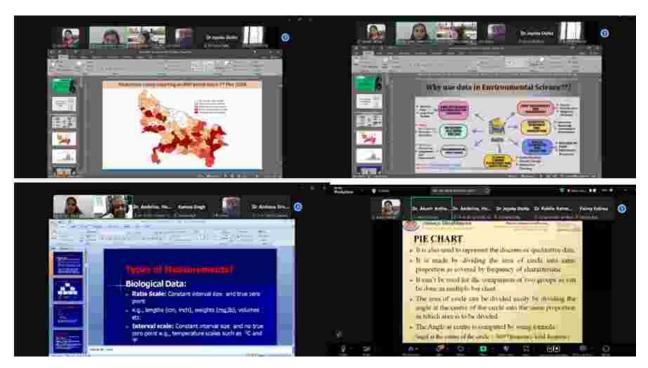
Lecture delivered by Prof. Amita Kanaujia

The second theme of the FDP was "Sustainable Development Goals (SDGs) and Their Implementation in Higher Education" on 6th August, 2024, from 10:00am-6:00pm. This session, presented by a panel of experts, focused on how higher education institutions can integrate the SDGs into their curricula, research, and campus operations to promote sustainable development. This theme aimed to understand the Sustainable Development Goals (SDGs) and their significance for higher education institutions. To explore strategies for integrating SDGs into academic curricula, research, and institutional operations. To highlight examples of successful SDG implementation in higher education settings. The panel of experts graced the theme were **Dr. Sharan Kumar Shetty** (Professor, ASEAN Group of Institutions (AGI) Malaysia), **Dr. Ritu Chandra** (Director, IQAC, Sri Ramswaroop Memorial University, Lucknow) and **Prof. Shikha** (Head, Department of Environmental Science, Babasaheb Bhimrao Ambedkar University, Lucknow). The presentations highlighted effective strategies for integrating SDGs into curricula, research, and campus operations, offering practical examples and best practices. The session was a significant step towards equipping faculty members with the knowledge and tools needed to advance sustainability in higher education.



Session talk by Prof. Sharan Kumar Shetty, Prof. Ritu Chandra and Prof. Shikha

The third theme of the FDP was "Statistical Tools and Monitoring Techniques Used in Environmental Studies" was scheduled on 7th August, 2024 starting from 10:00am-6:00pm. This session provided an in-depth exploration of statistical methodologies and monitoring techniques crucial for conducting environmental research and analysis. The panel of speakers for the current theme were **Dr. Sunanda Mishra** (Senior Regional Manager, Program Management Unit, State Health Government, Lucknow), **Prof. Mohd. Serajuddin** (Department of Zoology, University of Lucknow, Lucknow) and **Dr. Akash Asthana** (Assistant Professor, Department of Statistics, University of Lucknow, Lucknow). The expert panel effectively conveyed the importance of statistical analysis and monitoring techniques, offering practical guidance and real-world examples. The session equipped participants with the knowledge to enhance their environmental studies and research practices.



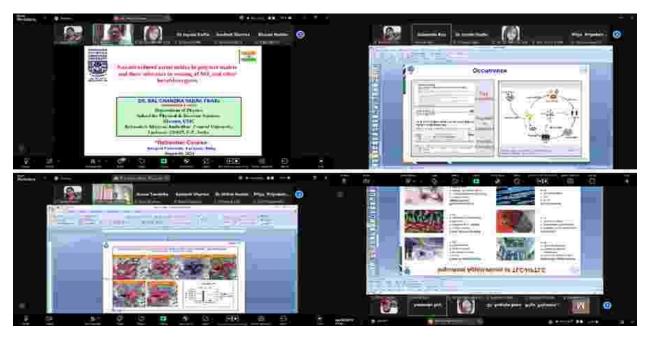
Third session lectures by Dr. Sunanda Mishra, Prof. Serajuddin and Dr. Akash Astahana

The fourth theme of the FDP was "Implementing an Effective Environmental Management System (EMS) and Environmental Auditing" was scheduled on 8th August, 2024 starting from 10:00am-6:00pm. This session, presented by a panel of experts, focused on strategies for establishing robust environmental management systems and conducting effective environmental audits to promote sustainability within organizations. The distinguished panel of speakers were **Dr. Shashank Shekhar Mishra** (Managing Partner, Eco Consultant Services, Lucknow), **Dr. Pankaj Srivastava** (Founder, Paramarsh Servicing Environment and Development, Lucknow) and **Dr. Rajeev Kanaujia** (Executive Director, Earth Protection Group, Environmental Consultant Pvt. Ltd., Lucknow). The whole theme provided comprehensive insights into establishing and maintaining robust environmental management practices. The panel of experts effectively conveyed the importance of EMS and auditing, offering practical guidance and real-world examples.



Fourth theme graced by speakers Dr. Shashank Shekhar Mishra, Dr. Pankaj Srivastava and Dr. Rajeev Kanaujia

The fifth theme of the FDP focused on the "Research Scope and Importance of Instrumentation in Environmental Science in Alliance with Various Disciplines" was scheduled on 9th August, 2024 starting from 10:00am-6:00pm. The session explored how advanced instrumentation plays a crucial role in environmental research and its integration with other scientific disciplines to enhance understanding and address environmental challenges. The team of speakers representing the current theme were **Prof. Bal Chandra Yadav** (Head, Department of Physics and Electronics & Communication Engineering, Babasaheb Bhimrao Ambedkar University, Lucknow), **Dr. Madhupendra Singh Yadav** (Scientist-SE& Head, Soil Resource Division, Remote Sensing Application Centre, Lucknow) and **Dr. Sumendu Roy** (Principal Scientist and Associate Professor, Analytical Chemistry Division, CSIR-Indian Institute of Toxicology Research, Lucknow). The whole theme was enriched and provided valuable insights into the critical role of advanced instrumentation in environmental research. The panel effectively highlighted how integrating instrumentation with various scientific fields enhances research capabilities and contributes to solving pressing environmental issues. All the technical sessions were followed by assessments consisting of open and closed-ended questions.



Fifth theme was represented by Prof. Bal Chandra Yadav, Dr. Madhupendra Singh Yadav and Dr. Sumendu Roy

The Valedictory Program of the FDP was held on 10th August, 2024 at 10:30am to 11:30am at Hall no 1, Auditorium Block. This event marked the conclusion of the FDP, celebrating the successful completion of the program and acknowledging the contributions of the participants, speakers, and organizers. The program started with a Special Address by **Prof. Monowar Alam Khalid** (Dean, Student of Welfare, Former Head, Department of Environmental Science, IUL) highlighting the outcomes and benefits of the program to the participants. The brief presentation of the Report of FDP was done by **Dr. Ambrina Sardar Khan** (Head of Department, Environmental Science, IUL). The feedback and suggestions were also given by eminent speakers and participants. The vote of thanks was delivered by **Dr. Syed Saema** (Assistant Professor, Department of Environmental Science, IUL).



Address and brief report by Dr. Ambrina Sardar Khan (HOD, Environmental Science) on Valedictory Program

The convenors of the Faculty Development Program were **Prof. Syed Aqeel Ahmad** (Director HRDC IUL), **Dr. Ambrina Sardar Khan** (HOD, Environmental Science) and the Program was coordinated by **Dr. Azram Tahoor**.

The program was registered by 52 participants. The program provides a collaborative environment and laid the groundwork for integrating sustainability into educational practices and research initiatives.