



Special Activities and New Initiatives

Monthly Report of June 2023

Doon University, Dehradun

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Celebration of World Environment Day

On 5th June 2023 Doon University, Dehradun celebrated World Environment Day in its campus. School of Environment and Natural Resources (SENR) in collaboration with Bhomya Foundation led the event. Faculty members, students, scholars and participants from various departments participated in the programme. The chief guest of the program was Dr. Sanat Kumar, Senior Principal Scientist, Indian Institute of Petroleum.

World Environment Day is observed annually on 5th June to raise awareness of environmental issues and encourage action towards prevention and mitigation of the environmental challenges facing us. It was celebrated for the first time in 1973 after the establishment of 'Only One Earth' by the United Nations in 1972 with them at the Stockholm Conference. The theme of this year's day is 'Solution to plastic pollution' and the host city is Côte d'Ivoire. Similarly, the theme for 2018 Environment Day was 'Beat Plastic Pollution' and the host city was New Delhi, India. This highlights the seriousness of the challenges caused by plastic pollution.



The program at Doon University was started by lighting the lamp by the faculty members of Doon University and invited expert speaker Dr. Sanat Kumar. In his inaugural address, Dr. Kusum Arunachalam, HOD, SENR expressed his views on LIFE (Lifestyle for Environment) - India-led global mission to encourage people to make eco-friendly lifestyle choices. Dr. Arunachalam also spoke on the P3 (Pro-Planet People) initiative and encouraged the visiting scholars to get involved in activities starting from the campus itself, such as mapping the biodiversity of the Doon University campus.

The expert speaker on the global theme of the program 'Solution to Plastic Pollution' is Dr. Sanat Kumar, Senior Principal Scientist of the prestigious Indian Institute of Petroleum, Dehradun. They briefly intermingled the waste plastic used in the petroleum industry because plastic itself is a petroleum product. Dr. Kumar elaborated on the current practices of plastic disposal such as landfills and incineration and their drawbacks. He also presented a reality check that we cannot say no to

plastic and the only way to move forward is through proper waste management. The real use of plastic lies in its strength and that comes from being resistant to corrosion, if we try to make it degradable then the usefulness of plastic gets reduced. Dr. Kumar explained about alternative uses of waste plastic such as road construction, tile making, road damping by laying a layer of plastic under the roads, recovery of resources like gasoline diesel, toluene and xylene. Dr. Kumar concluded his lecture with a video covering the entire process of plastic waste recycling and invited young scholars to contribute in solving the challenge posed by plastic pollution.

Dr. Archana Sharma announced the winners of the Earth Day 2023 competitions. In the poster making competition, Ananya Bisht of School of Biological Sciences stood first, Tanya Tyagi of School of Languages stood second and Dolly Rawat of SENR stood third. Ayushi Uniyal from School of Biological Sciences, Himanshi Gairola from SENR got second position and Gauri Gupta from School of Management got third position in slogan writing competition. In the quiz competition, Pranjal and Sukaye from the School of Design were the first runners-up and the winners were Subranshu Kaira and Rohan Binjola from the School of Physical Sciences.

The program concluded with the presentation of mementos to the guests and faculty members and vote of thanks by Dr. Archana Sharma, following which the attendees took up a tree plantation drive in the university campus.

Exhibition on Science Communication

7th June 2023, Under the supervision and guidance of Dr. Rashi Mishra, the students of Science Communication at Doon University organized a captivating exhibition that aimed to showcase the importance of science communication. The exhibition featured a variety of elements to engage and educate the audience, including demonstrations, presentations, and interactive exhibits. It was a remarkable event that showcased the importance of science communication in our lives.



The students put considerable effort into designing demonstrations that would capture the attention of the visitors. These demonstrations were not only visually appealing but also aimed to convey scientific concepts in an easily understandable manner. In addition to demonstrations, the students prepared presentations that explored thought-provoking topics related to science and its impact on society. These presentations were carefully crafted to stimulate discussions and encourage critical thinking among the attendees. The students effectively communicated complex scientific ideas in a

way that was accessible to a wide range of audience members. The exhibition covered a wide range of thought-provoking topics, including the relationship between science and religion, overcoming superstitions and beliefs, the significance of scientific temper, and the social stigma surrounding menstruation. Each exhibit was carefully designed to engage the audience and spark their curiosity about various scientific concepts.

One of the key focuses of the exhibition was to emphasize the importance of scientific temper in our daily lives. The students highlighted the value of adopting a scientific approach to understanding the world, which involves evidence-based reasoning, logical thinking, and empirical observation. They emphasized how these skills are crucial in making informed decisions and addressing societal challenges. The event received praise from the visitors who were impressed by the students' efforts. The exhibition served as a testament to Doon University's commitment to fostering scientific inquiry and effective communication. It demonstrated the students' ability to bridge the gap between scientific knowledge and the general public, inspiring future generations to explore the wonders of science. Dr. Mishra's guidance played a crucial role in ensuring the exhibition's success. With her expertise and mentorship, the students were able to develop their ideas effectively and present them in a captivating manner curating an exhibition that balanced entertainment and education, making it engaging for both science enthusiasts and the general public. The presence of the Head of the Department, Dr. Rajesh Kumar, and faculty members including Ms. Aabshar Abbasi, Ms. Juhee Prasad, and Dr. Mala Shikha further highlighted the importance of the exhibition. Their presence and support encouraged the students in their presentations and added to the overall success of the event.

Overall, the Science Exhibition at Doon University was an enlightening and inspiring event that aimed to instill scientific temperament in the young minds of the university. It showcased the brilliance of the students and their dedication to effective science communication.

PM Gati Shakti Centre of Excellence in Logistics and Supply Chain Management (CoE-LSCM) at Doon University

16 June, 2023, The Prime Minister Gati Shakti Centre of Excellence in Logistics and Supply Chain Management (CoE-LSCM) at Doon University is an initiative aimed at promoting excellence in the field of logistics and supply chain management. It is envisioned as a state-of-the-art center that will serve as a hub for research, training, and innovation in this critical sector. The CoE-LSCM will play a key role in developing skilled professionals, fostering industry-academia collaboration, and driving technological advancements in logistics and supply chain management. The CoE-LSCM, Doon University is in process of getting into a MoU with National Institute of Industrial Engineering (NITIE), Mumbai. NITIE is designated as the nodal hub for capacity building in Logistics and Supply Chain Management to promote the PM Gati Shakti Master plan by the Ministry of Education (MoE). Doon University is also recognised as a nodal agency for PM Gati Shakti Master plan along with selected IITs, NITs and IIMs.

The primary objectives of the CoE-LSCM are as follows:

- To bridge the skill gap in the logistics and supply chain industry by providing high-quality training and education programs.
- To promote research and development activities focused on enhancing efficiency, sustainability, and resilience in logistics and supply chain operations.
- To foster industry-academia collaboration by facilitating knowledge exchange, partnerships, and joint projects.
- To act as a catalyst for innovation and technological advancements in logistics and supply chain management.

- To support policy development and contribute to the growth of the logistics and supply chain sector at the national level.

The CoE-LSCM will undertake the following key activities to achieve its objectives:

- Design and offer specialized training programs and courses in logistics and supply chain management, catering to the needs of students, working professionals, and industry executives.
- Conduct research studies to address industry challenges, explore new trends, and develop innovative solutions in logistics and supply chain management.
- Organize conferences, seminars, and workshops to facilitate knowledge sharing, discussions, and networking among industry experts, researchers, and academia.
- Establish partnerships and collaborations with leading logistics and supply chain companies, industry associations, research institutions, and government bodies.
- Provide consultancy services to organizations seeking expertise in optimizing their logistics and supply chain processes.
- Develop and showcase best practices in logistics and supply chain management through industry case studies and success stories.
- Collaborate with government agencies and policy-makers to contribute to the formulation of policies and initiatives that promote the growth and development of the logistics and supply chain sector.

With the financial support from Directorate of Industries, Government of Uttarakhand, The CoE-LSCM will be equipped with state-of-the-art facilities, including dedicated research labs, classrooms, a resource center, and a logistics simulation center. It will have a team of experienced faculty members, industry experts, and researchers who will spearhead the center's activities. The center will leverage advanced technology and software tools to support research, training, and innovation in logistics and supply chain management.

The PM Gati Shakti Centre of Excellence in Logistics and Supply Chain Management (CoE-LSCM) at Doon University will serve as a leading institution in the field, catering to the growing demand for skilled professionals, research, and innovation in logistics and supply chain management. The center's collaborative approach, cutting-edge infrastructure, and focus on training, research, and industry engagement will contribute to the overall growth and development of the logistics and supply chain sector, supporting India's aspirations to become a global logistics hub. Dr. Sudhanshu Joshi, Senior researcher and faculty member in the area of Logistics and Supply Chain Management, School of Management is appointed as the coordinator of CoE-LSCM, Doon University.

National Level Meetings of Subject Expert Committee for DST-INSPIRE Fellowship

Research and Development Cell of Doon University hosted and conducted national level meetings of Subject Expert Committee for DST-INSPIRE Fellowship in the area of agricultural & veterinary



Prof. Surekha Dangwal welcoming Dr. Namita Gupta (Scientist G, and Head, INSPIRE Division & Dr. Umesh Kumar (Scientist F) DST, Govt. of India

sciences and chemical science on 21st, 22nd and 23rd June 2023. Government of India (Ministry of Science and Technology, Department of Science and Technology) has also sanctioned the grant for a

total expenditure not exceeding Rs. 12,18,000/- (Rupees Twelve Lakhs and Eighteen Thousand only) vide Sanction Order No. DST/INSPIRE/FELLOWSHIP-SEC/2021 Dated 13th June 2023 for this meeting. In the meeting a total of 14 highly renowned subject experts joined from various academic and research institutions of India. In addition, Dr. Namita Gupta (Scientist G, and Head, INSPIRE Division, DST), Dr. Umesh Kumar (Scientist F, DST, Govt of India), Dr. V. Phani Kumar (Scientist E, DST, Govt. of India) and Dr. S.M. Babu (Scientist C, DST, Govt of India) were also present for all the 03 days.

In this meeting, Padma Shri Awardee Prof. V.K. Singh (who is an internationally renowned researcher, founding Director of IISER Bhopal, member of Scientific Advisory Council of Hon'ble Prime Minister and Prof. of IIT Kanpur) was also present as the chairman, of the subject expert committee for the field of Chemical Sciences. He was welcomed by Prof. Durgesh Pant (DG, UCOST) on 22nd June 2023.



Research Methods and Applications of Advanced Quantitative and Qualitative Techniques in Economics

26 June to 05 July 2023, While inaugurating the ten days “Workshop on Research Methods and Applications of Advanced Quantitative and Qualitative Techniques in Economics”, Prof. Rajendra P. Mangain, Dean, School of Social Sciences and Professor and Head, Department of Economics, Doon University argued that the field of economics relies heavily on empirical analysis to understand and explain complex economic phenomena. He said that with the rapidly changing economic and geopolitical situations amidst the technological breakthroughs, particularly with the ever-increasing penetration of IT-enabled technologies, the contours of development are changing fast across the globe. The automation is not only threatening the well-established principles of economic theory but also offering opportunities for higher learning amidst technology-enabled competitions in labour and product markets. This necessitates continuous learning in most advanced tools and techniques of deeper economic analyses.

Keeping this in view, the Department of Economics, Doon University is continuously making rigorous efforts in training its students and research scholars. The workshop is exclusively designed for the research scholars and faculty of economics. It aims to provide participants with a comprehensive understanding of key research methodologies and application of various econometric/statistical tools for economic analysis. The workshop will cover the theoretical foundations, estimation techniques, interpretation of results, and model evaluation for each topic.

After attending the intensive yet engaging sessions of this workshop, PhD scholars and Master's degree students will be well-equipped with the necessary skills to conduct empirical research and sharpened economic analytics with precision. Participants will gain practical experience through hands-on exercises using economic datasets to apply econometric techniques effectively.



The eminent academicians who delivered lectures with intensive practical sessions in the workshop include academics from Indian Institute of Technology, Roorkee, namely Prof. Subir Sen, Dr. D. Bharat and Dr Shruti Sengupta. The other speakers include Ms. Gargi Dangwal from Stockholm School of Economics; Prof. V A Bourai and Prof. Vijay Rawat of SGRR PG College, Dehradun along with faculty of Doon University, namely, Prof. Rajendra P. Mangan, HoD, Department of Economics, Prof. N K Garg, Prof. Ashish Kumar, Dr. Sudhanshu Joshi, Dr. Angsuman Sarma and Dr. Madhu Bisht.

Activities of Departments

The Department of Physics organized a workshop on “Raising Awareness About the Optics Industry in India: Current Landscape and Future Prospects on June 23, 2023. The speaker of the program was Mr. Prasant Sharma, Director of Operations, Doon Optical System along with Dr Rajiv Mathur. The objective of the seminar was to understand the optics technology in India.

DEPARTMENT OF PHYSICS
School Of Physical Sciences
Doon University - Dehradun, Uttarakhand

ORGANIZES AN ONLINE WORKSHOP ON

**RAISING AWARENESS ABOUT THE OPTICS INDUSTRY IN INDIA:
CURRENT LANDSCAPE AND FUTURE PROSPECTS**

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| Mr. Shyamal Chaudhury <small>CEO Doon Optical Systems</small> | Mr. Prashant Sharma <small>Director of Operations Doon Optical Systems</small> | Patron: Prof. Surekha Dangwal <small>Vice-Chancellor Doon University Dehradun</small> |
| Dr Rajiv Mathur <small>Carnegie Mellon University</small> | Convener: Dr Himani Sharma | |

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| PLATFORM Google Meet | Time: 11:00 AM Date: 23rd June 2023 |
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Acceptance of research paper in **Chemistry Select** entitled “Enhanced photocatalytic activity in 2D-1D WS₂/TiO₂ and 2D-2D MoS₂/WS₂ heterosystems”

Authors: Deepali Aswal, Priyanka Bamola, Chanchal Rani, Saurabh Rawat, Abhinav Bhatt, Mohit Sharma, Charu Dwivedi, Rajesh Kumar, Himani Sharma (IF-2.307)

This work is published by a MSc student as a first author.

- Mr. Saurabh Rawat (Ph D student) presented his research work entitled “Light assisted Ag decorated MoS₂ nanoflowers for Room temperature gas sensing” at 6th International Conference on Advanced Materials and Radiation Physics, Sant Longowal Institute of Engineering and Technology, Punjab. (May 18-19, 2023).

- Ms. Suniti (Ph D student) presented her research work entitled “: Analysis of solar EUV and X-ray flux during the peak of solar cycle 24 on ionospheric change at low latitude GPS station” at 6th International Conference on Advanced Materials and Radiation Physics, Sant Longowal Institute of Engineering and Technology, Punjab. (May 18-19, 2023).
- Pankaj Singh Pokhriyal (MSc student) qualified GATE with a score of 566. His All India ranking is 383.