

# Special Activities and New Initiatives

# **Monthly Report of September 2023**

# **Doon University, Dehradun**

Mothrowala Road, Kedarpur, P.O. Defense Colony, Dehradun-248001, Uttarakhand (INDIA) Tel : +91-135-2533102 (O), 2533105 (Telefax) Email : vc@doonuniversity.ac.in Website : www.doonuniversity.ac.in

## Dept. of Physics, School of Physical Sciences

#### • Acceptance of Research Paper

Title: Enhanced Photocatalytic Activity and Thermal Conductivity of Boron Nitride Quantum Dots decorated TiO2 nanograss composite (Journal of Materials Science, I.F. **4.5**) Authors: Jyoti Rawat, **Himani Sharma**, Charu Dwivedi

• **Dr Indira** (guest faculty) presented her work as "Invited talk" entitled study of fractal pattern in polymer electrolyte due to electroless deposition in the conference, NCRATES-2023, Govt. PG College, Jeharikhal.

National Conference on Recent Advances in Theoretical & Experimental Sciences (NCRATES-2023) 29-30 September 2023	
Sponsored by:	
Uttarakhand Science Education & Research Centre (USERC)	
Uttarakhand Council For Science & Technology (UCOST)	
Organized by:	
Department of Physics	
Bhakt Darshan Govt. P.G. College Jaiharikhal (Uttarakhand) India	
This is to certify that Prof. / Dr. / Mr. / Mrs	
Department of Physics From Doon University Ochradyn	
Department of	
has Participated/ delivered an Invited Talk /	
Hude Of Ayactua Date of Ayactua	
Chaired a Session / Presented a raper entities	
in the National Conference on Recent Advances in Theoretical & Experimental Sciences (NCRATES-2023).	
in the National Conference on Recent Advances in Theoretical & Experimental Sectors (Sectoring)	
- DEPartur	
Prof. Lovney R. Rajvanshi Dr. Kafnaf Kumar Dr. Shubham Kala Principal Convenor Organizing Secretary	

• **Dr Hemlata** (guest faculty) received the best poster presentation for her work entitled "Fabrication and electrical characterization of  $V_2O_5$  microflowers for robust and portable  $NO_2$  selective gas sensing application" in the conference, NCRATES-2023, Govt PG College, Jeharikhal.

National Conference in Theoretical & Exp		
in Theoretical & Exp		
	perimental Sciences Azadi Ka	
(NCRATI	ES-2023)	
minis han be it agreed do god) 29-30 Septe	ember 2023	
Sponsor	red by:	
Uttarakhand Science Education	1 & Research Centre (USERC)	
8	2	
Uttarakhand Council For Scie	ence & Technology (UCOST)	
Organiz	zed by:	
Department of Physics		
Bhakt Darshan Govt. P.G. College Jaiharikhal (Uttarakhand) India		
This is to certify that Prof. / Dr. / Mr. / Ms. / Mrs HEM		
Department of Physics	From Doon University, Dehradun.	
Chaired a Session / Presented a Paper entitled Fabrication		
missiflowers for rotust and portable Non selective gas sensing application.		
in the National Conference on Recent Advances in Theoretical	0	
( OKIN )	-Deramlung	
Prof. Lovney R. Rajvanshi Dr. Kan	nal Kumar Dr. Shubham Kala	
Principal Con	nvenor Organizing Secretary	

• Ms. Saumya Dimri (MSc student) along with Dr. Indira presented their research work entitled correlation analysis between the concentration of PM2.5 with respect to the atmospheric parameter of (Anand Vihar) Delhi 2020-21 in the conference, NCRATES-2023, Govt PG College, Jeharikhal.

• Ms Himadri Tripathi (MSc student) participated in the workshop on Advanced nanomaterials with fabrication and characterization in diverse areas, organized by centre for nanotechnology, IIT Roorkee.



• Ms Sakshi Pujari (MSc student) participated in the workshop on Advanced nanomaterials with fabrication and characterization in diverse areas, organized by centre for nanotechnology, IIT Roorkee.



- Three MSc students completed the NPTEL course in the following areas and duration Sakshi Pujari - Concepts in Magnetism and Superconductivity (8 weeks) Himadri Tripathi - Structural analysis of Nanomaterials (4 weeks) Anshuman Dhobal - Structural analysis of Nanomaterials (4 weeks)
- Dr. Khushboo Singh joined as Assistant Professor in the Department of Physics in the month of September.

### **School of Design**

Odd Semester-Tree plantation Drive (September 2023) 13. Near the Library building at Doon University School of Design has started a tree plantation drive from 2017 to now. Every semester school of design's students plant trees. Tree plantation drive is not only contributing to a greener environment but also providing valuable learning experiences for students in the design department.



#### Earth Art Activity (September 15, 2023)

First year (batch 2023-27) did earth art activity at doon university ground. The Earth art involves creating artwork using natural materials found in the environment. This form of art often emphasizes the connection between humans and the natural world.



# **School of Biological Sciences**

#### Participation in "Krishna Puraan" event on Krishna Janmashtami:

B.Sc. students from the SoBS namely Mr. Devashish Bhatt (5<sup>th</sup> sem), Mr. Yash Kashyap (3<sup>rd</sup> sem), Saurabh K. Batohey (3<sup>rd</sup> sem), and Meenakshi Mamgain (3<sup>rd</sup> sem) participated in the "Krishna Puraan" event on Krishna Janmashtami, 6<sup>th</sup> Sept., 2023 at Auditorium Hall, Nityanand Building, Doon University. Some photos of the event are given below.



#### **Cleanliness Drive:**

Ms. Molly Bhatt, 3<sup>rd</sup> semester student of B.Sc. Biological Science, participated in the Cleanliness drive at Doon University and its vicinity on 21st and 23rd Sept., 2023.

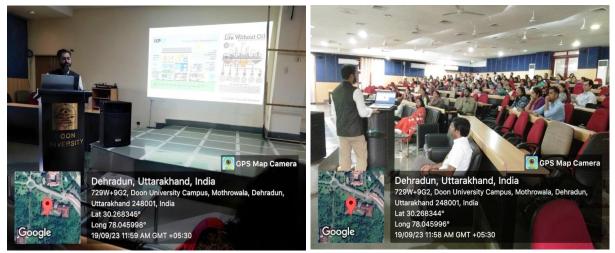
#### Participation in Ozone Day Celebration:

A workshop on "**Air Quality: Pollution and Mitigation Strategies**" was organized by Uttarakhand Pollution Control Board in association with Doon University on World Ozone Day, **16<sup>th</sup> Sept. 2023** at Senate Hall, Doon University, Dehradun. The workshop was attended by the faculties and the students of the School of Biological Sciences (SoBS) and School of Environment and Natural Resources (SENR).



#### Expert talk by Dr. Sanket J. Joshi (Sultanate of Oman, Oman):

School of Biological Sciences (SoBS) and School of Environment and Natural Resources (SENR), Doon University organized an expert talk on "Environment friendly applications in Petroleum industry: From Lab to Field" by Dr. Sanket J. Joshi, Deputy Director, Oil and Gas Research Center, Sultanate of Oman on 19<sup>th</sup> Sept., 2023 at 11.30 am. Dr. Achlesh Daverey, Coordinator, School of Biological Sciences coordinated the talk at Senate Hall, Doon University. Prof. Kusum Arunachalam briefed about the various departments, faculties and infrastructures available in the university. The talk was attended by the faculties and the students of both the schools.



#### **Invited Lectures/Resource Person:**

1. Dr. A. Daverey delivered an invited talk on "Engineered biochar-based Proton Exchange Membrane for Microbial Fuel Cell: Development, Characterization, and Applications" at International Conference on Clean Energy Materials & Technologies (ICCEMT-2023) organized by UPES, Dehradun, **India**. 20-22 Sept **2023**.

2. Dr. A. Daverey delivered an invited talk [*virtual*] on "Valorization of Pine Needles as Biochar for Development of Proton Exchange Membrane for Microbial Fuel Cell" at 3rd International Conference on Pollution Prevention and Clean Technologies" organized by Institute of Technology and Business in České Budějovice, Czech Republic. 13-15 Sept 2023.

#### Student's Achievement:

**Mr. Ayush Negi**, first year student of B.Sc. Biological Sciences has been nominated by **Cycling Association of Uttarakhand** to participate in the trials of the Asian MTB Cycling Championship to be held in Kerala from 4/10/2023 to 5/10/2023.

#### **Journal Publications:**

- S. Bangia, R. Bangia, <u>A. Daverey</u>\* (2023). Pharmaceutically active compounds in aqueous environment: Recent developments in their fate, occurrence, and elimination for efficient water purification. Environmental Monitoring and Assessment. (Accepted on Sept 8, 2023). (IF: 3.0).
- G. Jena, K. Dutta, <u>A. Daverey\*</u> (2023). Surfactants in water and wastewater (greywater): Environmental toxicity and treatment options. Chemosphere. (IF: 8.8). Accepted on 4<sup>th</sup> September 2023.
- <u>V. Shah</u>, P. Dani, <u>A. Daverey\*</u> (2023). Phytoremediation of heavy metal contaminated soil using Bidens pilosa: Effect of varying concentrations of sophorolipids. *Applied Biochemistry* & *Biotechnology* (In Press) (IF: 3.0). Published online on: 21 September 2023

#### <u>Workshop on "Effective Utilization of Library Resources"</u> <u>Central Library, Doon Universisty</u>

The Central Library organized an informative workshop on September 22, 2023, with a primary focus on the Effective Utilization of Library Resources for its first-year students. This workshop emerged in response to persistent requests from students for unimpeded access to the university library's resources, available around the clock and from any location. Dr. Ashish Kumar, the University Librarian, along with his team, provided a comprehensive demonstration of the diverse services and resources offered by the library, with a notable emphasis on the e-Library. This initiative resonated deeply with the students, who exhibited a keen interest in harnessing the wealth of digital knowledge.

During the workshop, the librarian explained the inner workings of the library, encompassing both its physical collection and electronic archives. His presentation also illuminated the innovative methods and procedures implemented by the library to offer steadfast support to the student community. The session, characterized by its interactivity, afforded students the opportunity to satisfy their curiosity and resolve any lingering doubts concerning the university library's facilities and services.

The workshop left students thoroughly satisfied and appreciative of the efforts invested in their academic growth. In gratitude, Shiva Sood, representing the student body, extended heartfelt thanks to Dr. Ashish Kumar and the diligent library staff for their unwavering dedication and the time they

devoted to making the event a resounding success. During the session, the Library team comprised of Dr. Udita Negi, Dr. Rama Bora and Dr. Rajneesh Kumar were actively involved in facilitating hands-on practice.



#### <u>Department of Chemistry,</u> <u>School of Physical Sciences (SoPS), Doon University</u>

[1] Dr. Arun Kumar (Fellow, Royal Society of Chemistry, Cambridge, United Kingdom) joined Department of Chemistry, Doon University as an Associate Professor on September 01, 2023.

[2] Dr. Shivani Verma joined Department of Chemistry, Doon University as an Assistant Professor on September 04, 2023.

[3] Dr. Arun Kumar visited United Kingdom (U.K.) during 09<sup>th</sup> September 2023 to 18<sup>th</sup> September 2023 and attended the following scientific meetings:



[3.1] September 12: UK-India Symposium on Chemical Sciences, University of York.

Dr. Arun Kumar (2<sup>nd</sup> at left-hand side) and other Indian and UK delegates in University of York

[3.2] September 14 : UK India Symposium on Chemical Sciences, University of Bristol

[3.3] Attended iRISE Discussion Forum Meeting in the capacity of observer on the topic "How to tackle the issue of Anti-Microbial Resistance"

[3.4] Attended meeting with CEO Ms. Helen Pain at Head Office of Royal Society of Chemistry (RSC) in Cambridge, United Kingdom (UK)



Dr. Arun Kumar (2<sup>nd</sup> from right-hand side) in RSC Head Office in Cambridge, United Kingdom

[4] Article entitled "Organoselenium ligands for heterogeneous and nanocatalytic systems: development and applications" published by the Department of Chemistry in Dalton Transactions (an international journal of high repute) in the year 2021, has been placed in September 2023 among top 10% of highly cited articles from the Royal Society of Chemistry (RSC), Cambridge, UK.

Link: Your Royal Society of Chemistry publication is among the most cited in 2022 (rsc.org)



Dear Colleague

#### Your article is one of our most cited publications

The number of citations you received places your work in our top 10% of highly cited articles from the Royal Society of Chemistry. Thank you for choosing us as the home for your research.

To say congratulations, we would like to award you a digital certificate, which you are welcome to share with your co-authors. Here are the details:

#### Article

Journal

Organoselenium ligands for heterogeneous and nanocatalytic systems: development and applications Dalton Transactions