

**3rd International Conference on Energy,
Functional Materials/Molecules and
Nanotechnology
&
National Workshop on Solid Waste
Management
March 20-22, 2025
(ICEFN & NWSWM-2025)**

**Organized by
PRS-Nanoscience and Nanotechnology Centre
Department of Chemistry
Kumaun University,
Nainital-263002, Uttarakhand, India
&
RAMP Convergence Research Centre (NST)
Korea Institute of Science and Technology (KIST)
Jeonbuk-55324, Republic of Korea**

WELCOME TO ICEFN & NWSWM-2025

This science consortium is dedicated to those scientists who motivated generations across the globe. Since the past decades, our devices are becoming smaller and compact in size and at the same time getting better in terms of performance, feature, energy and durability due to advances in the field of smart materials and nanotechnology. The Prof. Rajendra Singh, Nanoscience and Nanotechnology Centre (PRS-NSNT), Department of Chemistry, D.S.B Campus, Kumaun University, Nainital, Uttarakhand, India & RAMP Convergence Research Centre (NST), Korea Institute of science and technology (KIST) are jointly organising 3rd International Conference on Energy, Functional Materials/Molecules and Nanotechnology (ICEFN) from 20th to 22nd March 2025. The Conference intends to provide a platform for discussion among various pillars of science fraternity from across the globe. We believe this conference will unravel the never-ending mysteries of the exciting world of nanotechnology and will provide the opportunity to the large section of the science community to interact with distinguished scholars in these areas. Along with this conference we also conduct a national workshop on solid waste management (NWSWM). This workshop aims to improve the research skill of promising postgraduate and young Ph.D. scholars from the institutes, Universities, and colleges. The plenary, key notes and invited talks by eminent scientists would give insights to the current research scenario around the world that is providing beneficial to the society at large.

This conference will cover the following areas (but not limited to):

- CNT's Graphene and 2D Nanomaterials, Nanoelectronics, and Nano-pharmaceuticals.
- Waste Management
- Energy Storage Battery and Supercapacitor
- Nanomaterials and Nanotechnology for Various Applications
- Solar Cell, Fuel Cell, Biosensors, Wind Energy, Photovoltaics, Biomaterials.
- Composite Materials, Polymer Nanocomposite
- Sustainable and Green Recyclable Materials for Future Mobility
- Drug Discovery and Delivery.
- Advanced Organic and Inorganic Bioactive Organic Molecules, Organic Materials, and Natural Products.
- Medicinal Chemistry, Functional Polymers, and Ceramic Materials
- Smart Sensor Materials and Technology
- Biological Prospects and Environmental Components
- Water Technology

The workshop will cover the following areas:

- ✚ Upcycling of solid waste (plastic and biomass waste) using waste Recycling Machine.
- ✚ Synthesis of carbon nanomaterials including graphene.
- ✚ Synthesis of polymer nanocomposites using the polymer mixer.
- ✚ Characterization including UV-Vis, FTIR, TGA, DSC, DMA, and Thermal evaporator.

- ✚ Electrochemical testing of the nanomaterials.
- ✚ Supercapacitor device fabrication and its characterization using CV, GCD, and EIS techniques.

About Kumaun University (KU):

Kumaun University, established in 1973, is a renowned public university located in Nainital, Uttarakhand, India. It offers a wide array of undergraduate, postgraduate and doctoral programs across various disciplines. Known for its picturesque campus nestled in the Himalayan foothills, the university is dedicated to academic excellence and research innovation.

About Chemistry Department and Prof. Rajendra Singh Nanoscience & Nanotechnology Centre:

Established in 1951 under Agra University, the Department of Chemistry at Kumaun University has evolved into a cornerstone of academic and research excellence in India. Offering a comprehensive range of undergraduate, postgraduate, and doctoral programs, the department is renowned for its rigorous academic standards and modern research facilities. Recognized with financial support at FIST level-1, it is committed to advancing knowledge across diverse fields including natural products, soil chemistry, chemical kinetics, medicinal chemistry, organic synthesis and nano materials.

In February 2015, the Prof. Rajendra Singh Nanoscience and Nanotechnology Centre (PRS-NSNT) was established through the generous funding provided by Shree Tarun Vijay, a distinguished Member of Parliament (Rajya Sabha). This centre has since become a hallmark of excellence in Uttarakhand, leading the charge in cutting-edge nano research across a spectrum of disciplines. Its endeavours are particularly notable for their innovative approach to solid waste management, focusing on the upcycling of diverse solid wastes such as waste plastics, agricultural residues, and paper waste. Through these efforts, the centre pioneers the development of a wide range of nanomaterials tailored for applications including supercapacitors, batteries, biomaterials, water treatment, polymer nanocomposites and other advanced nanotechnology applications. By leveraging interdisciplinary collaboration and state-of-the-art facilities, the centre continues to expand the frontiers of scientific knowledge and technological innovation in the region and beyond. Its holistic approach not only addresses environmental challenges through sustainable waste management practices but also drives advancements in materials science and nanotechnology, contributing significantly to both academic research and practical applications in industry.

About Korea Institute of Science and Technology (KIST):

Established in 1996, the Korea Institute of Science and Technology (KIST) has been pivotal in South Korea's technological ascent. Initially focusing on industrial development, KIST diversified its research to encompass biotechnology, nanotechnology, information technology, and renewable energy. By fostering collaborations between industry, academia, and government, KIST translated research into practical applications, driving economic growth and innovation. Through its commitment to excellence in research and education, KIST has cultivated a skilled workforce and made significant contributions to both South Korea's developments and global scientific advancement.

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HOW TO REACH NAINITAL

By Air: Pantnagar, the nearest air- port is situated 72 Kms from Nainital. This Airport is well connected to the Indira Gandhi International Airport, New Delhi in 300 Km.

By Train: Kathgodam, the nearest railway station is situated at a distance 40 Km (1 hour journey). Kathgodam railway station is well connected to the major destination of India. It is easy to get conveyance from Kathgodam to Nainital round the clock.

By Bus: Most of the North Indian cities and states are well connected with Nainital via state public transportation system.

WEATHER OF NAINITAL

Nainital is a breathtaking destination nestled in the Kumaon region of the Himalayas, renowned for its stunning landscapes, tranquil lakes, and ever-changing weather. The town enjoys a cooler climate compared to other nearby hilly areas, making it a refreshing retreat throughout the year. In March, temperatures range from approximately 8.8°C to 21.4°C, offering an ideal climate to explore the captivating beauty of this hill station. As summer arrives from April to June, the weather remains pleasantly warm, with temperatures reaching up to 30°C, perfect for outdoor activities and sightseeing. During the monsoon season, from July to September, Nainital receives abundant rainfall, transforming the region into a lush paradise. Winters, spanning from late October to mid-February, bring chilly temperatures that can drop as low as 10°C, and occasionally even lower, creating a picturesque snowy landscape. Nainital's strategic location provides easy access to the enchanting lakes and valleys of Uttarakhand. Travelers can conveniently visit nearby hotspots like Bhimtal, Sattal, Kausani, Ranikhet, and Almora, all reachable within hours via well-maintained mountain roads.

The journey is a visual delight, with stunning views of snow-capped peaks and the majestic Himalayas, making every drive unforgettable. Surrounded by dense oak and rhododendron forests, Nainital offers breathtaking vistas of the Kumaon and Nepal snow

ranges, showcasing iconic peaks such as Bandar Poonch, Chaukhamba, and Nanda Devi Panchachuli. This peaceful town is a haven away from pollution and city noise, providing a tranquil escape where travelers can relax and immerse themselves in nature's beauty. Nainital offers a plethora of activities for all interests, from adventure parks and mountain expeditions to picnics and boating on its serene lakes. The town is also a culinary delight, with delicious Tibetan and international cuisines waiting to be savoured. For adventure enthusiasts, trekking to Snow View, Kilburry, Tiffin Top, and China Peak presents a rewarding challenge with panoramic views. Nainital truly has something for everyone, offering a perfect blend of scenic beauty and exciting activities that cater to all types of travellers.

CALL FOR PAPERS

The three-day conference will have presidential address, keynote address, special invited and invited lectures, presentation of research papers and posters on the theme. It is intended to publish separate proceedings of the contributors on the theme of the conference. This would include plenary lectures and selected sessional presentations of research papers by young scholars. Please send your abstracts on energy, functional molecules/materials, and nano technology for publication in the peer review journals. The conference will deal with the topics solar cells, fuel cells, biosensors, batteries, supercapacitors, wind energy, photovoltaics, functional biomaterials, drug delivery, advanced inorganic, organic and ionic materials, natural products, medicinal chemistry, functional polymers, ceramic materials, composite materials, smart sensor materials and technology, CNT's, graphene, and 2Dnanomaterials, nano electronics, nano pharmaceuticals, polymer nanocomposite, nanomaterials and nanotechnology for various applications, biological prospects and environmental components, environmental management and waste management. Participants should submit the abstracts not exceeding 250 words (Min. 150 words) on a separate sheet with 5 keywords and mentioning the scientific section in which they want to present the paper to the Convener, ICEFN & NWSWM-2025 by 5th February 2025. Not more than one paper is allowed to be presented by each delegate. The papers received after the 5th February 2025 will not be considered. The abstract should be typed in Times New Roman, 12pt, line spacing 1.0. The title of the paper should be bold, in capital letters and with a font size of 14 followed by Name of author(s) (font size 12) along with their affiliation(s) (italic, font size 12) and the presenting author should be underlined.

Prof. Nanda Gopal Sahoo

Convener ICEFN & NWSWM-2025

PRS-Nanoscience and Nanotechnology Centre

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“The conference will provide a platform for budding scientists and young researchers. 'Young Scientist Awards' will be given in both the categories viz. oral and poster presentation in order to motivate and encourage young researchers”.

***All accepted papers submitted for presentation at ICEFN & NWSWM-2025 will be peer reviewed and then published in reputed journals such as *Energy Storage (Wiley), Discover Nano, and Discover Molecules (Springer Nature)*.**

IMPORTANT DATES

Abstract Submission opens	15th September 2024	Notification of acceptance	11th January 2025
Abstract Submission Closed	5th February 2025	Early bird registration	14th February 2025

REGISTRATION

The registration fee includes attendance at all conference sessions, registration materials, conference proceedings, morning and afternoon teas, all lunches and dinners, the special conference dinner and free entry to the traditional cultural programs of Nainital.

	Early Bird (Paid before or on 14th February 2025)	Regular (Paid after 14th February 2025)
Indian Delegate (Faculty & Scientist)	Rs. 5000	Rs. 6000
Indian Delegate (Student)	Rs. 2500	Rs. 3000
Indian Delegate (Accompanying Person)	Rs. 2500	Rs. 3000
Indian Delegate (Industry)	Rs. 8000	Rs. 10000
Foreign Delegate	\$ 400	\$ 500
Foreign Delegate (Student)	\$ 250	\$ 300

All outstation delegates should make a payment by Demand Draft drawn in favour of ICEFN NTL NTL. The payment can also be made by online bank transfer by RTG/NEFT in favour of ICEFN NTL NTL, Bank of Baroda, D.S.B. Campus, Nainital 263002.

A/C: 98420100006272, IFSC Code: BARB0EXTNAI

Send copy of registration form along with money transfer receipt of Bank/ DD/ Cheque (for local only) with abstract to email address.

Please send the online/offline filled Registration form to the ICEFN & NWSWM-2025 Convener address along with the Demand Draft.

Kumaun University Online Registration Portal:

<https://forms.gle/kZxnPr5vFs1N7M8A9>

Note: Registration without DD/NEFT/RTGS/ Google Pay/ Paytm will not be considered as a valid Registration.

ACCOMMODATION:

Accommodation will be provided on demand, which should be mentioned in the registration form. Tariffs for the accommodation are given below (day occupancy charge &

are inclusive for taxes). Accommodation will be booked only on complete payment of charges for the days of stay. The payment for the accommodation can be remitted either electronically or by demand draft.

Sr. No.	Category	Amount/ Day
1.	Category A Hotels	Rs. 6000
2.	Category B Hotels	Rs. 4000
3.	Category C Hotels	Rs. 3000
4.	Guest House Dormitory, only for Students	Rs. 1000 (Limited)

CONTACT FOR SPONSORSHIP: Various private sectors involved have the opportunity to take part in organising this huge event. Sponsorship to the conference would be facilitated as per the different segments given below:

Title	Amount
Diamond	Rs. 75000
Gold	Rs. 50000
Silver	Rs. 30000
Bronze	Rs. 20000

Disclaimer: Any possible change in the schedule and dates is possible, which will be uploaded in the website. Please keep on visiting our website <https://icefn.in>

Correspondence: All correspondence could be done at the following addresses

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Registration Form

Name: _____

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Title of Paper: _____

Discipline: _____

Keywords: _____

Mode of Presentation: Oral Poster:

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I am enclosing herewith Demand Draft of Rs-_____ to cover my registration and accommodation charges of Bank _____ D.D. No. _____ Date _____

Send detail to email: icefn2025@gmail.com
(local delegates can pay their fee through cheque).
(Xerox copy of registration form also acceptable).