THE GLOBAL GOAL FOR SUSTAINABLE DEVELOPMENT

SDG REPORT 2023-24

Times Higher Education Impact Rankings

UTTARANCHAL UNIVERSITY DEHRADUN

NAAC GRADE A+

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President's Message

Dear All,
I am excited to share the release of our university's Sustainable Development Goals (SDG) Report. This thorough document outlines our joint efforts towards a sustainable future and our response to the global challenges identified by the United Nations. I would like to express my gratitude to each of you for your commitment to advancing the SDGs through our academic programs, research initiatives, and campus operations.

The report highlights our achievements in promoting quality education, encouraging innovation, and supporting responsible consumption and production. We have also made significant strides in fostering strong partnerships and engaging with the community to bring about positive change.

Nonetheless, the report also serves as a reminder of the work that still lies ahead. As we aim for continuous improvement, it is crucial to maintain our dedication to these goals. By embedding sustainability into every aspect of university life, we can create a meaningful impact on our campus, local communities, and society as a whole.

I encourage everyone in our university community to read the SDG Report and reflect on our collective progress. Let's celebrate our success while acknowledging areas for growth. Together, we can build a more sustainable and inclusive future for all.

Thank you for your ongoing support and commitment to our shared vision of a better world.

Shri Jitender Joshi
President,
Uttaranchal University

Vice President's Message

Dear All,
I am excited to share the release of our university's Sustainable Development Goals (SDG) Report. This detailed document highlights our collective efforts in promoting a sustainable future and addressing the global challenges identified by the United Nations. I want to commend each of you for your dedication and commitment to advancing the SDGs through our academic programs, research initiatives, and campus operations.

The report showcases our notable achievements in promoting quality education, fostering innovation, and supporting responsible consumption and production. We have also made significant strides in building strong partnerships and engaging with the community to drive positive change.

However, this report also serves as a reminder of the work that still lies ahead. As we strive for continuous improvement, it is crucial that we remain steadfast in our commitment to these goals. By integrating sustainability into all aspects of university life, we can create a meaningful impact on our campus, local communities, and society at large.

I encourage all members of our university community to review the SDG Report and reflect on our collective progress. Let us celebrate our success while also acknowledging areas where we can improve. Together, we can build a more sustainable and inclusive future for all.

Thank you for your unwavering support and dedication to our shared vision of a better world.

Ms. Ankita Joshi
Vice President,
Uttaranchal University

Vice Chancellor' Message

Dear Members,

I am pleased to present the Sustainable Development Goals (SDG) Report of Uttaranchal University for the Calendar Year 2023. As the Vice Chancellor, I am proud to highlight our ongoing commitment to academic excellence and social responsibility.

In 2023, we have made significant progress in promoting sustainable development, fostering social equity, and empowering youth. Our efforts to align our academic programs with the United Nations Sustainable Development Goals have been steadfast, with faculty members and students actively engaging in research and advocacy on pressing global challenges.

Our Research and Innovation Division has worked diligently to develop sustainable solutions to critical challenges, successfully filing multiple patents in biotechnology, renewable energy, and environmental science. Additionally, our social outreach programs have expanded to include initiatives focused on health and hygiene, disaster relief, and sustainable agriculture.

We remain committed to providing our students with a holistic education, offering opportunities for leadership development and social consciousness through various student-run clubs and societies. Our alumni continue to make significant contributions to society, and we take great pride in their achievements.

The 2023 SDG Report reflects our dedication to excellence, social responsibility, and sustainable development. We are thankful for the continued support of UNAI and look forward to collaborating towards a better world for all.

Prof. Dharam Buddhi
Vice Chancellor,
Uttaranchal University

Message from Team IQAC

Dear University Community,

I am delighted to present the Sustainable Development Goals (SDGs) Report of our esteemed institution. This report embodies our commitment to sustainability across all areas of our operations, from academic initiatives to campus infrastructure and community engagement.

As editor-in-chief, I am proud to witness the culmination of dedicated efforts from our faculty members, staff, and students in aligning our activities with the global agenda for sustainable development. The report not only showcases our achievements but also identifies areas where further progress is necessary. I encourage every member of our university community to explore this report, reflect on its findings, and actively engage in our shared journey towards a more sustainable future.

Thank you for your continued dedication to sustainability.

Best regards,

Er. Rajesh Deorari,
Director- IQAC,
Uttaranchal University

Dear Colleagues,

I am pleased to announce the publication of our university's Sustainable Development Goals (SDGs) Report. This comprehensive document reflects the collaborative efforts of various departments and individuals who have diligently compiled data, analyzed trends, and presented actionable insights.

As managing editor, I would like to extend my heartfelt gratitude to all contributors for their hard work and dedication to this vital initiative. Your commitment to sustainability is clearly evident in the wealth of information contained within this report.

I encourage everyone to utilize this report as a valuable resource for understanding our university's progress towards achieving the SDGs and identifying areas for improvement. Let us continue to work together toward a more sustainable future for generations to come.

Best regards,

Er. Sudhir Jugran
Assistant Manager,
IQAC
Uttaranchal University

Dear University Community,

It is with immense pride that we unveil the Sustainable Development Goals (SDGs) Report of our university. This collaborative effort represents the culmination of extensive research, analysis, and dialogue focused on assessing our institution's impact on sustainable development.

As members of the editorial board, we commend all individuals involved in the development of this report for their dedication and expertise. Through meticulous data collection and thoughtful interpretation, we have created a document that not only informs but also inspires action toward positive change.

We invite each member of our community to engage with this report, critically examine its findings, and join us in our ongoing commitment to sustainability. Together, let us harness the power of knowledge and collaboration to create a more sustainable future for all.

Best regards,

Er. Rishi Nautiyal
Assistant Manager,
IQAC
Uttaranchal University

No Poverty

End poverty in all its forms everywhere.

Sustainable Development into Curriculum

As an integral component of our curriculum, our students are provided with education pertaining to sustainable development. Furthermore, our university has made a dedicated commitment to integrate the United Nations Sustainable Development Goals into our curriculum over the next five years by now. We have already commenced our efforts in this transformative endeavor.

Ek Kapda Daan: A Philanthropic Initiative

Uttaranchal Institute of Management, through its Globe Club, organized "**Ek Kapda Daan**" on **November 9, 2023**, in the UIM Foyer. The event was graced by dignitaries including Chancellor Sh. Jitender Joshi, Vice President Dr. Satbir Singh Sehgal, and others. The Chancellor appreciated for the noble cause, emphasizing collective efforts. Mr. Vinayak Sharma congratulated the organizers, highlighting its potential to inspire kindness. **Clothes were distributed to the underprivileged, reflecting the mission of relief.**

Empowering Communities Through Education: Uttaranchal University's Commitment to Poverty Alleviation and Social Impact

Uttaranchal University is dedicated to using education as a tool to combat poverty. It offers premier undergraduate, postgraduate, and Ph.D. programs while engaging in impactful community outreach. The university adopts villages, involving students in groups to address social issues and aid in societal development. Over the past two years, this initiative has harnessed students' efforts to solve real-world problems. **The university also prioritizes admissions for students from lower-income households, adhering to government equity policies**.

Scholarships Support in the Academic Session 2023-24 (in Indian National Rupees)	
Scholarships Type	**Total**
Girls Scholarship	₹ 19,702,237.00
Defence Personnel	₹ 4,699,767.00
Hill State Scholarship	₹ 15,488,027.00
Merit Scholarship	₹ 24,976,416.00
Sibling Scholarship	₹ 446,032.00
University Alumni	₹ 686,477.00
Full Fees Payment Rebate	₹ 1,344,449.00
Students Diversity Scholarship	₹ 103,978,400.00
Uttarakhand Domicile Scholarship	₹ 158,239,701.00
Bihar Student Credit Card Scholarship	₹ 6,229,941.00
Fee Scholarship	₹ 9,701,924.00
Fee Scholarship (Hostel)	₹ 2,946,200.00
Total	**₹ 348,439,571.00**

Number of Students in the Academic Session 2023-24

10707

Total number of Students benefited from the scholarship in the Academic Session 2023-24

8790

Number of Female Students benefited from the scholarship in the Academic Session 2023-24

3121

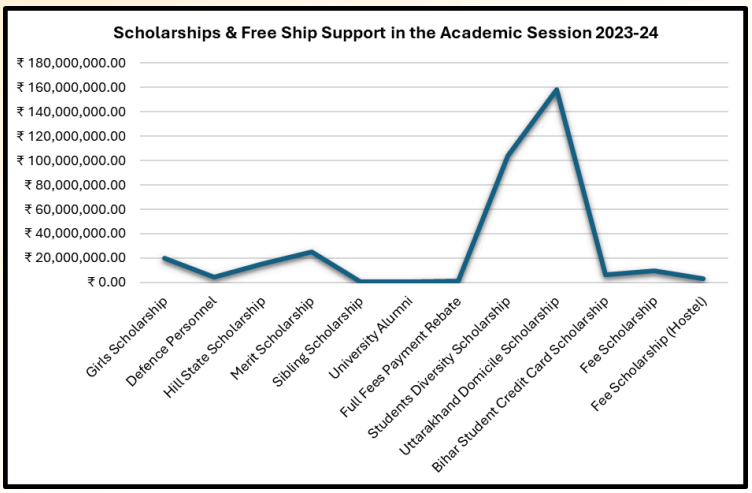
Number of Male Students benefited from the scholarship in the Academic Session 2023-24

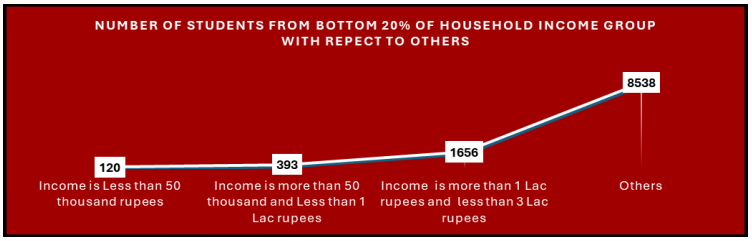
5669

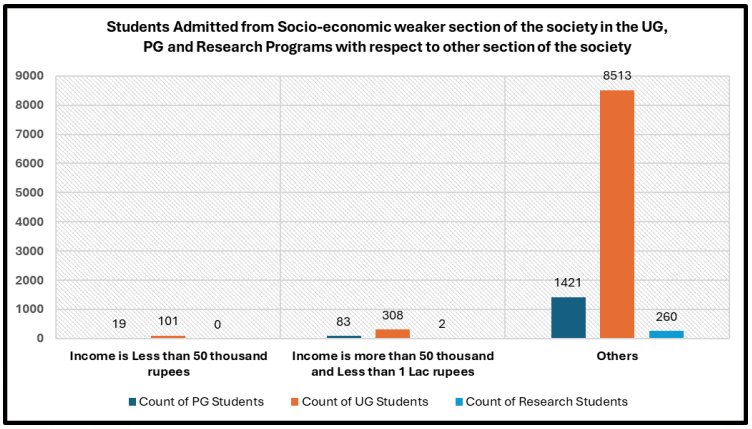
University's Anti-poverty Programme

To eradicate all forms of poverty and protect the rights of the poor and disadvantaged, especially in education, Uttaranchal University has implemented many measures to support domestic low-income students and those meeting specific criteria.

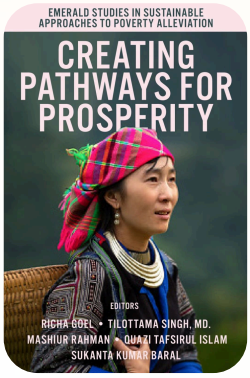
Additionally, we offer a Meal Assistance & Accommodation Program that primarily supports students from low-income families, as well as the relatives of martyrs, veterans, and students with disabilities. Uttaranchal University provides affordable, quality meals, and students eligible for the Meal Assistance Program receive lunch and dinner free of charge.







Culmination of those customised models and plans to eradicate the global issue; Framework and realms of Poverty in the Progressive Society. An amalgamation of solutions from humanistic to economic point of view.

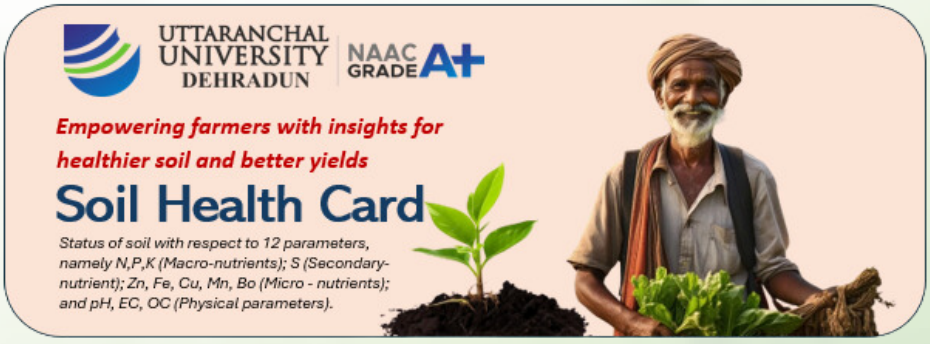


Students from the lowest 20% of household income who are attending university

At our university, we are committed to creating opportunities for students from the bottom 20% of household income groups. We understand the challenges these students face and have put in place a range of initiatives to support their academic journey. This includes financial aid packages, scholarships, and fee waivers aimed at reducing the burden of tuition and other related expenses. We also provide access to resources such as mentorship programs, career counseling, and skill development workshops to ensure they have the tools and guidance needed to succeed. By fostering an inclusive environment, we aim to empower these students to reach their full potential and contribute to society, regardless of their economic background.

University Soil Health Testing Facility

The University's Soil Health Testing Facility enhances community welfare by empowering local farmers through improved agricultural practices. Utilizing expert knowledge in soil science and agronomy, the facility offers advanced soil testing, guidance on nutrient management, and eco-friendly techniques, leading to higher yields, reduced costs, and sustainable farming for long-term resilience.



Zero Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

TRANSFORMING AGRICULTURE: INNOVATIVE SOLUTIONS FOR A HUNGER-FREE FUTURE

Global hunger remains one of the most pressing challenges, affecting millions across the world. To address this, innovations in agriculture are essential. Advancements such as precision farming, genetic crop modification, and sustainable practices are revolutionizing food production. Precision farming leverages technology to optimize crop yields, using data to monitor soil health, water usage, and plant growth, resulting in more efficient resource use. In addition, genetically modified crops offer improved resistance to pests, diseases, and environmental stresses, boosting yields in regions prone to harsh conditions. Sustainable agricultural practices, such as agroforestry and crop rotation, further enhance food security by preserving soil health and biodiversity. By integrating these innovations, the global agricultural sector can increase productivity, reduce waste, and ensure more equitable food distribution. This multifaceted approach is vital to combating hunger and ensuring food security for future generations

Ms. Divya Rawat,
Assistant Professor,
USCS, UU

ACT4SDGs and Ozone Week celebrated by Eco- Club, SALS, Uttaranchal University

As a part of #ACT4SDGs and the ongoing Ozone Week, Eco- Cops- “The Home of Eco- Warriors”, the Environmental Club of Uttaranchal University, organized a Rangoli Making Competition on 19 September 2022. The event was organized by School of Applied and Life Sciences, with the aim to create awareness amongst the students of Uttaranchal Universiy regarding Sustainable Development Goals of the United Nation and the ongoing campaign #ACT4SDGs- Flip The Script.

The theme of the Rangoli making competition was: ‘Sustainable Development Goals’. A Team comprising of 5 students had to choose any one of the United Nations Sustainable Development Goal, for making Rangoli.
Students showcased different goals namely, Gender Equality, Climate Action, Good Health, Quality Education.

Embracing Wellness and Culture: A Quality and skill enhancement Workshop on Satvik Food

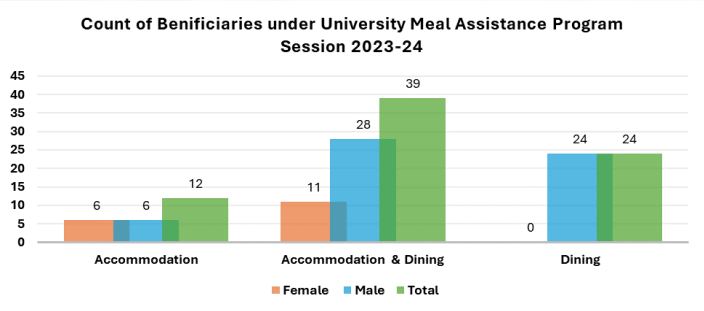
In celebration of Basant Panchami, Uttaranchal School of Hotel & Hospitality Management, Dehradun, organized a skill enhancement workshop on "Satvik Food" on 14 February 2024. This event aimed to foster quality education, enhance skills, promote health consciousness, and encourage cultural appreciation among students.

Focusing on Satvik cuisine, known for its emphasis on natural ingredients, the workshop offered hands-on cooking experiences and nutritional education. Participants learned the art of preparing Satvik meals, with a special focus on bulk cooking techniques, equipping them to prepare wholesome meals efficiently.

Led by Chefs Hitendra Singh Chauhan and Kamal Singh Bisht, the workshop provided students with insights into the cultural and nutritional significance of Satvik food. The event highlighted the interconnectedness of food, culture, and well-being, encouraging students to embrace Satvik principles in their lifestyle. The workshop also celebrated the traditions of Basant Panchami, deepening participants' appreciation for culinary and cultural heritage.

University's Meal Assistance Program

Uttaranchal University is committed to addressing the issue of hunger and ensuring the well-being of its students and staff. As part of our ongoing efforts, we provide various interventions to prevent and alleviate hunger. These interventions include the establishment of food banks and pantries on campus, which are easily accessible to all members of the university community.



International Day of Zero Waste Waste to Wealth Management: An Approach for Sustainable Development

The School of Agriculture at Uttaranchal University organized a guest lecture featuring Dr. Arvind Kumar Upadhayaya, Regional Head for Northeast India, Asia Pacific, at Palladium, India, on the topic "Waste to Wealth Management: An Approach for Sustainable Development."

The event began with Prof. (Dr.) Mahipal Singh, Dean of the School of Agriculture, welcoming and felicitating Dr. Upadhayaya. In his lecture, Dr. Upadhayaya emphasized innovative waste management strategies, especially focusing on food waste from hostels. He discussed the importance of zero-waste principles, environmental awareness, and community involvement in minimizing waste.

Dr. Upadhayaya also covered methods for waste reduction, product reuse, and recycling, acknowledging the challenges in achieving a zero-waste lifestyle. He encouraged collaboration, innovation, and personal responsibility to promote sustainable development.

Dr. Neha Saini, the event coordinator, expressed gratitude to Dr. Upadhayaya for his insightful presentation. The lecture inspired students and faculty to adopt responsible waste management practices and foster a sustainable future.

GOOD HEALTH AND WELL BEING

Ensure healthy lives and promote well-being for all at all ages.

The School of Hotel & Hospitality Management organizes a session on "Women's Health & Hygiene"

Uttaranchal School of Hotel & Hospitality Management recently hosted an enlightening session on "**Women's Health and Hygiene**," organized by the Women Cell, under the aegis of Women Cell, Uttaranchal university, in a significant step towards empowering its female students, faculty, and staff. The event took place on 03 November 2023 featuring Dr. Satwinder Kaur Malhotra, a distinguished expert in women's health.

Dr. Malhotra shared her extensive knowledge and experience, shedding light on essential topics, including menstrual health, reproductive health, personal hygiene, nutrition, and mental well-being. Her insights dispelled myths and taboos surrounding these issues, creating a safe space for discussion and learning.

Ms. Sapna Bisht, Women Cell Coordinator at USHHM, played a crucial role in making the event a success. Special thanks was extended to guest speaker, Mrs. Ruhi Quadri and students from the Mass Communication for their active participation.

The session was a testament to Uttaranchal University's commitment to fostering a supportive environment for the well-being and empowerment of its female community members.

Safe Plates, Healthy Gates: A Community Journey in Food Safety and Hygiene with Hotel Management Leaders

On April 22, 2024, the Hospitality Club of USHHM, Uttaranchal University, hosted the "**Safe Plates, Healthy Gates**" workshop at Government Inter College, Paundha Village, Dehradun. Led by Assistant Professors Mr. Surendra Singh Bhakuni and Mr. Kamal Bisht, the workshop aimed to enhance local knowledge on food safety and hygiene practices.

The interactive sessions provided valuable insights into maintaining high food hygiene standards and preventing foodborne illnesses. Key outcomes included increased community awareness, improved food safety skills, and strengthened community ties, highlighting Uttaranchal University's commitment to community well-being.

The event also allowed Hotel Management students to apply their academic knowledge in a practical setting and fostered collaborative learning among participants. The workshop concluded with Mr. Bhakuni expressing gratitude to the management of Government Inter College for their support.

Healthcare 4.0 is essential to bolstering healthcare delivery and expanding community outreach, especially in hilly and rural areas. The app "**PREGTECH**" is developed to **improve mother and child health care by using AI by enabling real-time data collection, individualized health recommendations, and prompt treatments**. This contributes to the achievement of **SDG 3 (Good Health and Well-Being)** by guaranteeing and enhancing well-being for people of all ages. Additionally, by improving the resilience and sustainability of the healthcare infrastructure through innovation and technology improvements that can spread to other low-resource locations, the integration of AI into healthcare systems contributes to **SDG 9 (Industry, Innovation, and Infrastructure)**.

Dr. Anita Gehlot,
Head,
Research & Innovation, UU

H-Index: 36
Research Papers: 408
Patent Grants: 107
Patents Published: 610
Copyrights: 70
Books: 42

The Role of Augmented Reality and Virtual Reality in Shaping the Future of Health Psychology

The present research work studies different aspects of health and well-being that can be maintained, managed, balanced, and promoted by using augmented reality and virtual reality. These emerging technologies have already played an important role in every area of functioning and are now being used in health care. Health psychology studies the impact of behaviour on health and vice versa. Health is the complete state of well-being, not merely the absence of disease, according to the World Health Organization. To achieve this state, technology must influence and speed up the whole process. This article reviews different articles on augmented reality and virtual reality and concludes that these techniques have a greater impact on overall health. Numerous possibilities and suggestions for achieving good health and well-being are discussed. There are many psychological, physical, and cognitive aspects of health that can be treated using augmented reality and virtual reality.

Read more: https://www.computer.org/csdl/proceedings-article/icpcsn/2023/228400b604/1QYaYe0dO9O

Mr. Jageshwar Ray,
Assistant Professor,
SLA, UU

Mind Alchemy: Exploring Vedic Wisdom for Mental Clarity and Emotional Well-being at School of Engineering

The seminar titled "**Mind Alchemy: Vedic Wisdom Unveiled**" was organized by the Vedic Club of Uttaranchal Institute of Technology (UIT) on 14 February 2024. The seminar aimed to delve into the profound insights contained within ancient Vedic scriptures and their relevance in understanding and unlocking the capabilities of the human mind. Mr. Vinay Joshi, a distinguished Vedic scholar, spiritual teacher, and counsellor, shared his expertise with attendees.

The event was graced by the presence of esteemed dignitaries, including the Chief Guest, Shri Jitender Joshi, Chancellor, Prof. Satbir Sehgal, Vice President, Prof. Dharam Buddhi, Vice Chancellor, Prof. Rajesh Bahuguna, Pro Vice-Chancellor, and Prof. S. D. Pandey, Dean UIT.

The seminar left a profound impact on participants as they delved into ancient Vedic scriptures, gaining valuable insights into the human mind's capabilities. Engaging discussions led by Mr. Vinay Joshi and esteemed dignitaries provided practical techniques for mental clarity and emotional well-being. Attendees explored the concept of "**Mind Alchemy**" as per Vedic wisdom, discovering strategies for personal and professional growth. The event was coordinated by Mr. Gaurav Thakur.

Expert Talk on "Nourish & Flourish: Empowering Life with Yoga & Diet"

The Women Cell of UCHS and UCN celebrated International Women's Day on 6 March 2024. An expert talk on "**Nourish & Flourish: Empowering Life with Yoga & Diet**" was attended by over 300 girls. Bushra Khan and Nitika Rana addressed the theme "**Inspire Inclusion.**" Dr. Mehak Katyal and Dr. Rajesh Kumar shared insights on nutrition and yoga, highlighting balanced diets and stress relief through yoga asanas, engaging the enthusiastic participants.

A Seminar on Gender Sensitization and Mental Health

On World Mental Health Day, the Women Cell of Uttaranchal Institute of Management, Uttaranchal University, hosted an insightful session on **Gender Sensitization and Mental Health**. Dr. Ankita Priyadarshini, MBBS, MD Psychiatry, Founder & Clinical Head of Thriving Minds, was the guest speaker. Prof. (Dr.) Pradeep Suri, Director of UIM, emphasized equal treatment and opportunities at home to nurture talent. He also stressed the importance of exercise and mental health care, especially for youth. Dr. Priyadarshini discussed the connection between gender sensitization and mental health, particularly the challenges that women face. Dr. Tilottama Singh, Head of Department, concluded the event with a vote of thanks, acknowledging the significance of addressing **gender disparities in mental health**.

At **Uttaranchal Institute of Pharmaceutical Sciences**, Uttaranchal University, we are dedicated to contributing to **SDG 3: Good Health and Well-Being**. Along with faculty members and students, we have organized numerous health camps in rural areas, providing free check-ups, disease screenings, and distributing essential medicines to those in need. These camps significantly improve healthcare access in underserved communities.

Our awareness campaigns address communicable diseases such as HIV/AIDS, tuberculosis, malaria, and dengue, as well as non-communicable diseases like diabetes, hypertension, and cancer. We also focus on maternal and child health, offering counselling on safe childbirth practices.

Additionally, we run programs targeting drug addiction among youth, educating them on the risks of substance abuse. Our mental health initiatives include visits to the **State Mental Health Institute in Selaqui, promoting mental well-being and organizing stress management awareness programs**. Through these efforts, we strive to positively impact our community's health and well-being.

Dr. Vikash Jakhmola,
Dean,
UIPS, UU

Preparation and Evaluation of Polymer Fused Metformin Hydrochloride Sustained Release Tablet

Diabetes Mellitus (DM) is one of the most prevalent and chronic illnesses associated with an abnormally high level of glucose in the body which is hazardous to the body organs. Metformin Hydrochloride (HCl), a biguanide derivative is used for Type 2 DM. It has a relatively short plasma half-life and its regular administration is required to maintain a normal blood glucose level in diabetic patients. Therefore, sustained-release medications are a suitable approach to increase patient compliance and extend the duration of the effect of metformin for 8-12 hrs. The main goal of this investigation was to prepare an oral sustained-release tablet of metformin HCl using natural polymers as release rate-controlling agents. **Results**: The drug release study showed that sodium alginate and pectin alone and in combination were able to sustain the drug release. It is also suggested that if the amount of polymer is increased, the drug release is decreased. Formulation (MA3) containing the highest amount of sodium alginate (250 mg) gave 93.06% drug release after 12 hrs. and was therefore, chosen as the best formulation. Diffusion and erosion may be the mechanism of drug release, according to the kinetic modelling of the in-vitro drug release.

Read more: doi:10.5530/ijper.57.3.86

Ms. Mansi Butola,
Assistant Professor,
UIPS, UU

Cardiopulmonary Resuscitation (CPR) Awareness Program

Uttaranchal Institute of Pharmaceutical Sciences, Uttaranchal University, in collaboration with the **National Board of Examination in Medical Sciences (NBEMS), organized a Cardiopulmonary Resuscitation (CPR) Awareness Program**. The event aimed to educate and train youths and medical personnel in CPR techniques. Led by Prof. Dr. Vikash Jakhmola and coordinated by Ms. Pallavi Ghildiyal, over 200 participants got benefited from the program, learning vital life-saving skills through video demonstrations and hands-on training.

Raising Awareness on "No Smoking Day": A Collaborative Rally by Globe Club and Jai Youth Wing

The Globe Club of Uttaranchal Institute of Management, in collaboration with the Jai Youth Wing Shri Nityanand Swami Jan Sewa Samiti, organized a successful rally on March 13, 2024, to mark "**No Smoking Day**". The event aimed to promote a smoke-free community and raise awareness about the harmful effects of smoking on health and the environment. The rally began at Uttaranchal University with Chancellor Shri Jitender Joshi Ji flagging off the participants. Enthusiastic attendees carried banners and educational materials to highlight the issue. Prof. (Dr.) Abhishek Joshi emphasized global health initiatives, and the rally concluded with appreciation for all involved, including Mr. R.K. Bakshi and Ms. Jyotsana Sharma.

A Systematic Review on Prevalence of Overweight and Obesity among School Children and Adolescents in Indian Population

Obesity has erupted as an epidemic around the world. It has set itself as a fast wave among other prevailing specific clusters of non-communicable diseases. The current study reviews and presents an updated meaningful review of the vast research work performed at schools located in different cities of India. A systematic search was conducted in **PubMed, Scopus, Google Scholar and PEDro**. Studies representing data on obesity and overweight among children in Indian cities were included in the review. A total of 21 articles with 71,466 participants were included in the review for analysis. Obesity developed in childhood and adolescence is greatly associated with heart disease, stroke and cancer (breast and ovarian in women and prostate in men) in the late stage of life. In India, despite being a country with a faster rate of population becoming overweight and obese in urban areas, in contrast, rural areas are still struggling with malnutrition.

Read more:
https://www.computer.org/csdl/proceedings-article/icpcsn/2023/228400b604/1QYaYe0dO9O

Ms. Nidhi Sharma,
Assistant Professor,
UCHS, UU

Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Workshop on 'AI Presenter Videos: A Journey from Script to Screen' Held at Uttaranchal University, Featuring Industry Experts from Personate AI

A workshop on "**AI Presenter Videos: A Journey from Script to Screen**" was organized by the Department of Computer Science & Engineering, Uttaranchal Institute of Technology at Uttaranchal University on 05 March 2024 for B. Tech. (CSE) students. The speaker of the workshop, Mr. Madhur Arora is a dynamic Data Scientist at Personate AI, where he serves as one of the founding members and driving the company's AI research initiatives and another speaker, Mr. Akshat Kapil is an exciting individual whose various career paths has led him to his present position as a founding team member and Business Operations Manager at Personate AI. Esteemed University officials, including Vice Chancellor, Prof. Dharam Buddhi, Dean, Prof. S.D. Pandey and HoD, CSE, Dr. Sumit Chaudhary, highlighted the importance of AI. The event was guided by Dr. Sumit Chaudhary, HoD CSE, and was coordinated by Mr. Arpit Goel, Assistant Professor CSE.

At Uttaranchal School of Computing Sciences (USCS), we are committed to providing a quality education that aligns with industry standards and equip students with practical skills. To enhance employability and foster continuous learning, we offer access to SWAYAM and Massive Open Online Courses (MOOCs), enabling students to expand their knowledge beyond the traditional curriculum. Through these platforms, students gain exposure to cutting-edge technologies and industry-relevant content, making them job-ready and skilled for the evolving tech landscape. Our focus on holistic development ensures that graduates are well-prepared for successful careers, bridging academic learning with real-world applications.

Prof Sonal Sharma,
Dean, USCS,
UU

Outcome Based Education (OBE) at Uttaranchal University

The **Outcome-Based Education (OBE) event, organized by the Internal Quality Assurance Cell (IQAC) in collaboration with the ERP team at Uttaranchal University, was held on July 21, 2023**. The event aimed to explore advanced OBE practices from foreign universities to enhance the university's educational framework. Professor Mohammad Khalid, Head of Research at Sunway University, Malaysia, was the keynote speaker, providing valuable insights into OBE methodologies. The event was inaugurated by Vice Chancellor, Professor Dharam Buddhi, and attended by School-level Coordinators responsible for implementing the OBE Module in their respective departments.

The event facilitated knowledge sharing and collaboration among faculty members. Professor Khalid's suggestions are expected to significantly improve the university's OBE framework. The active involvement of the coordinators, the dedication of the ERP team, and IQAC's efforts contributed to the success of this inspiring and promising event for future OBE initiatives.

One Week FDP in collaboration with Antara Senior Living, Dehradun

Uttaranchal School of Hotel & Hospitality Management (USHHM), in collaboration with Antara Senior Living, hosted a one-week Faculty Development Programme (FDP) from July 8 to 14, 2024, at Antara Senior Living, Dehradun. This programme, involving all USHHM faculty members, provided insights into the latest industry trends and technological advancements through interactions with experts.

The FDP featured practical sessions in Food Production, F&B Service, Housekeeping, and Front Office Operations, merging theoretical knowledge with hands-on experience.

A key highlight was a concluding discussion on enhancing academia-industry collaboration through patenting, research methodologies, and training strategies.

The event successfully enriched faculty knowledge and strengthened ties between USHHM and Antara Senior Living, promoting education and professional development in hospitality.

Visit to National Dairy Research Institute (NDRI) Karnal, Haryana

On 8 April 2024, the School of Agriculture (SOA), Uttaranchal University, Dehradun, organized an educational-cum-industrial tour to the National Dairy Research Institute (NDRI), Karnal, for B.Sc. (Hons.) Agriculture, Semester 4 students. The visit aimed to familiarize students with dairy farming, milk processing, quality control, and modern dairy research. Students toured the Exhibition Unit and Milk Processing Unit, learning about advancements in dairy technologies, animal husbandry, and sustainable agriculture. They also explored the National Bureau of Animal Genetic Resources (NBAGR), observing indigenous cattle breeds. The tour offered invaluable insights into dairy production and management.

Assessing Inter-yarn Frictional Behavior of Jute Fabrics Impregnated with Corn Flour Particles-Based Shear Thickening Fluids

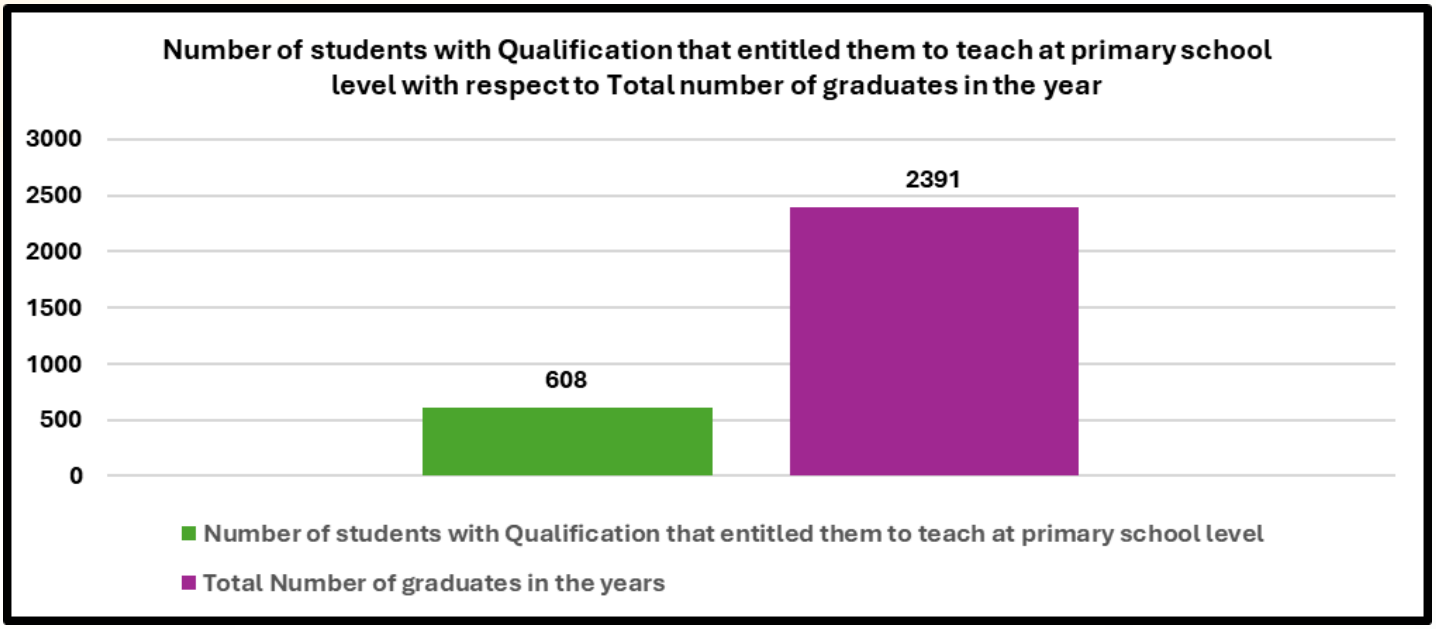
Recently, naturally driven fabrics are gaining more attention to develop impact-resistive fabrics due to their cost-effectiveness and environment-friendly nature. The effectiveness of jute fabrics become more prominent when used with shear thickening fluids (STFs). The present study is focused on the assessment of inter-yarn frictional behavior of jute fabrics impregnated with natural corn flour particles-based STFs. The varying amount of corn flour particles of 10 and 13 μm were blended with deionized water, glycerol, and polyethylene glycol (PEG-400) to synthesize STFs. To the best of our knowledge, first time the stability and rheological performance of corn flour particles-based STFs under varying shear rates in different dispersion mediums have been investigated. The peak viscosity of STF consisting 50% particles (10 μm) in glycerol was found significantly higher compared to the STF consisting same size and concentration of particles with deionized water. The yarn pull-out test was conducted to evaluate the materials' inter-yarn frictional resistance behavior. The maximum pulling force was observed for jute fabric impregnated with glycerol-based STF. Thus, the developed STFs can be vital for developing better impact-resistive fabrics.

DOI: https://doi.org/10.1007/s12221-024-00673-7

Er. Rishi Dev Nautiyal,
Assistant Manager
Internal Quality Assurance Cell, UU

Proportion of graduates with teaching qualification

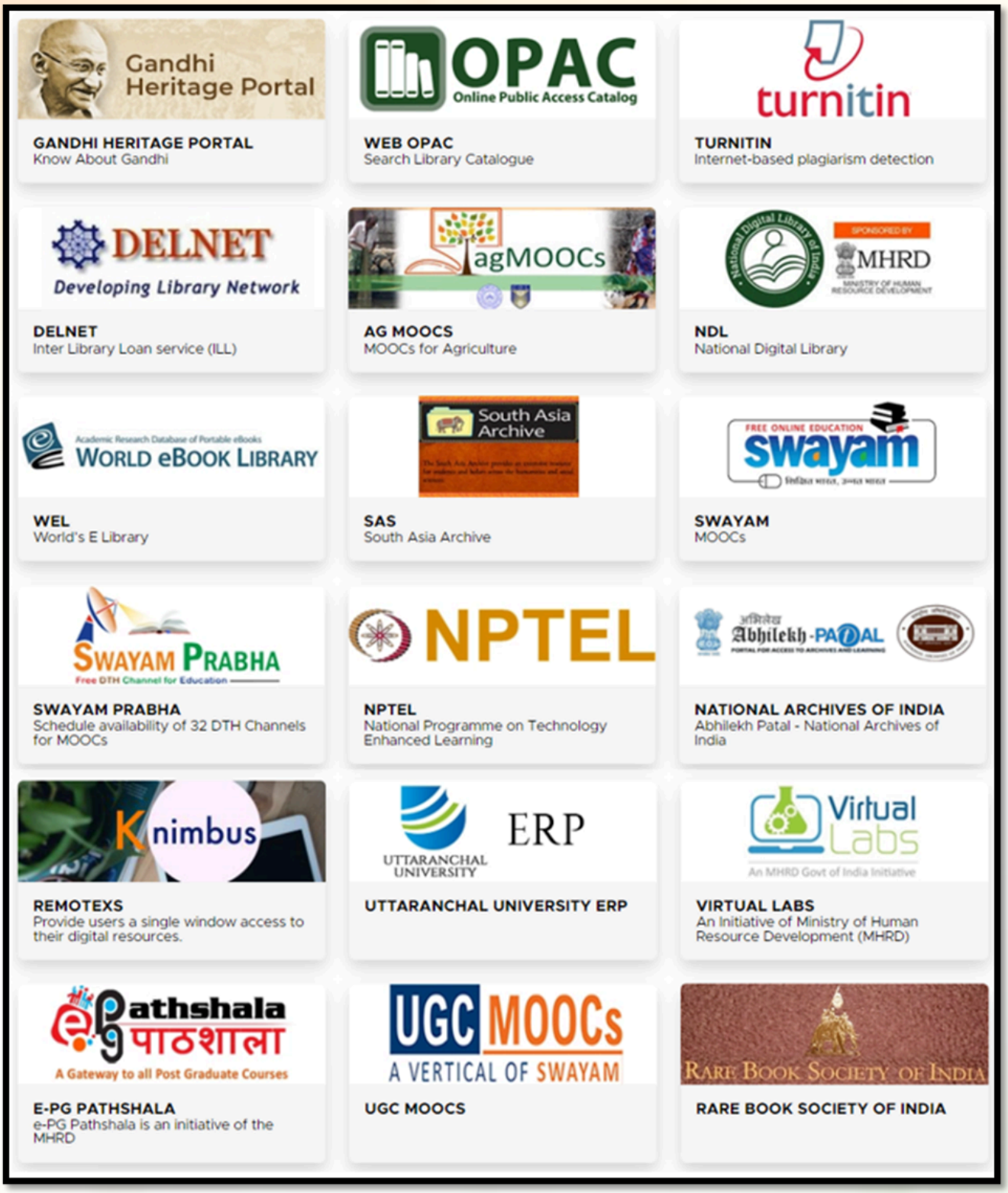
Our university offers variety of programs designed to prepare students for teaching at the primary school level. Students engage in both theoretical coursework and practical teaching experiences, such as internships in local primary schools, which allow them to apply their knowledge in real-world settings. Additionally, the university provides training in inclusive education, classroom management, and the use of technology in teaching, ensuring that future educators can address diverse student needs and adapt to modern educational environments. Graduates of these programs earn qualifications that entitle them to teach in primary schools, contributing to the development of future generations



Initiative towards Education: Infrastructure facilities for communities

Uttaranchal University is deeply committed to supporting the local community in Dehradun, particularly the schools in the region. As part of this dedication, the university undertakes various innovative and creative initiatives to share its "Learning Resources" with underprivileged communities, especially students from rural schools. These efforts reflect the university's broader mission to foster education and development within its surrounding environment.

E-Services of the Library



Experiential Learning Program

At Uttaranchal University, the Experiential Learning Program (ELP) is a transformative initiative that offers proactive, hands-on training in agriculture and its allied enterprises, benefiting both students and members of nearby village communities. By focusing on real-world challenges and opportunities in agriculture, the program seeks to bridge the gap between academic learning and practical application.

The involvement of nearby village community members add a vital dimension to the program. It fosters a collaborative learning environment where both students and villagers exchange knowledge and ideas.

- **Experiential Learning Program (ELP) on Sericulture**
- **Experiential Learning Program (ELP) on Beekeeping**
- **Experiential Learning Program (ELP) on Mushroom Cultivation**

All India IQAC Workshop-2024 Organized at Uttaranchal University

Uttaranchal University hosted the "**All India Internal Quality Assurance Cell (IQAC)-2024" workshop, with Prof. Anil Dattatraya Sahasrabudhe, Chairman of NAAC, as the Chief Guest. Special guests included Mr. Shailesh Bagauli, Sr. IAS, Prof. Rangan Banerjee (Director IIT Delhi), Mr. Shantanu Rooj (CEO, TeamLease EdTech), and Prof. Prashant R. Nair (Amrita Vishwa Vidyapeetham)**.

In his address, Prof. Sahasrabudhe praised the event and highlighted key aspects of the new education policy, calling the Academic Bank of Credits a revolutionary step. While recognizing AI's contributions, he affirmed that human intelligence is superior to AI. He emphasized improved transparency and educational standards through NAAC accreditation and expressed concern that only a small percentage of institutions have undergone evaluation.

Mr. Shailesh Bagauli spoke on NAAC's role in enhancing education and research, while Prof. Banerjee stressed the need for curricula aligned with global industry standards. Vice-Chancellor Prof. Dharam Buddhi outlined the university's achievements and future goals, and Mr. Shantanu Rooj and Prof. Nair also shared insights. The event concluded with a vote of thanks by Director IQAC, Er. Rajesh Deorari. The workshop attracted leaders from across the academia.

Gender Equality

Achieve gender equality and empower all women and girls.

Seminar on 'Empowering Women: Understanding PCOD and Promoting Women's Health and Hygiene'

Rudali explores the journey of Sanichari, a woman from a marginalized community, as she navigates through poverty, loss, and oppression, ultimately finding empowerment and solidarity through sisterhood. Born into unfortunate circumstances, Sanichari faces a series of tragedies, losing loved ones without even having the chance to mourn. As a female of a marginalized community, she experiences various forms of domination, hindering her from realizing even modest dreams.

Sanichari's encounter with her childhood friend, Bikhni, who shares similar struggles, leads to a bond of solidarity. Together, they realize the equality of their suffering and support each other through hardships. They embark on a profession as rudalis, turning grief into a commodity to earn a living. With the guidance of Dulan, they form a union of rudalis and randis, empowering themselves to negotiate with the upper caste and challenge societal norms.

The story highlights the transformative power of sisterhood, as Sanichari and Bikhni reject the patriarchal order and unite women from different backgrounds in their cause. Through their collective effort, they challenge the hegemonic dominance of the upper caste and redefine their roles in society. As they navigate survival and hunger, they find strength in each other, ultimately rewriting their own history and fostering feelings of security and loyalty within their group.

At Uttaranchal University, we prioritize creating a safe, inclusive, and empowering environment for our students and staff. The Women's Cell and Internal Complaints Committee (ICC) are committed to fostering gender equality, addressing concerns, and providing a supportive space for dialogue and growth. Through workshops, seminars, and counseling sessions, we focus on building awareness about gender sensitivity, preventing harassment, and promoting a culture of respect. Our initiatives aim to empower women and ensure their voices are heard, nurturing a campus where everyone feels valued, safe, and encouraged to pursue their academic and personal aspirations.

Prof. Poonam Rawat
Chairperson Women Cell & ICC,
Principal, LCD,
UU

Navigating Paths of Liberation: The Legacy of Pandita Ramabai

This chapter examines the remarkable life of Pandita Ramabai Sarasvati, emphasizing her courageous defiance of patriarchal norms and religious orthodoxy in late nineteenth and early twentieth-century India. Ramabai's autobiography serves as a poignant testament to her spiritual journey and her strategic embrace of Christianity as a means of challenging societal oppression, particularly the subjugation of women. Despite facing resistance from colonial authorities and nationalist figures, Ramabai's unwavering commitment to social reform, evidenced by her establishment of the Mukti Mission and advocacy for widow remarriage, underscores her enduring legacy as a pioneering feminist and social activist.

Dr. Anubhuti Dhyani
Assistant Professor
School of Liberal Arts

Sisterhood in Rudali

Rudali explores the journey of Sanichari, a woman from a marginalized community, as she navigates through poverty, loss, and oppression, ultimately finding empowerment and solidarity through sisterhood. Born into unfortunate circumstances, Sanichari faces a series of tragedies, losing loved ones without even having the chance to mourn. As a female of a marginalized community, she experiences various forms of domination, hindering her from realizing even modest dreams.

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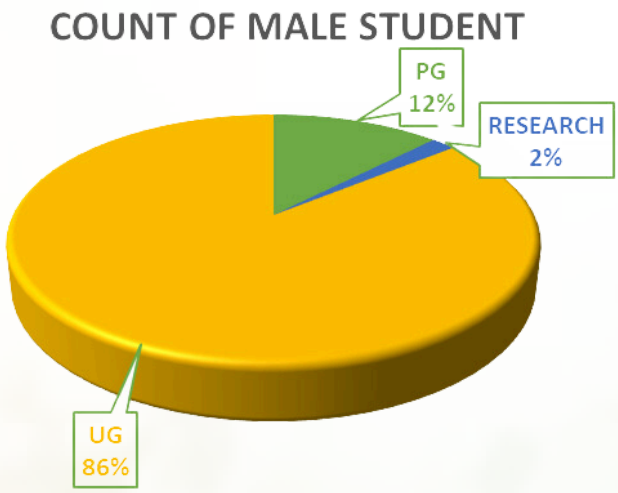
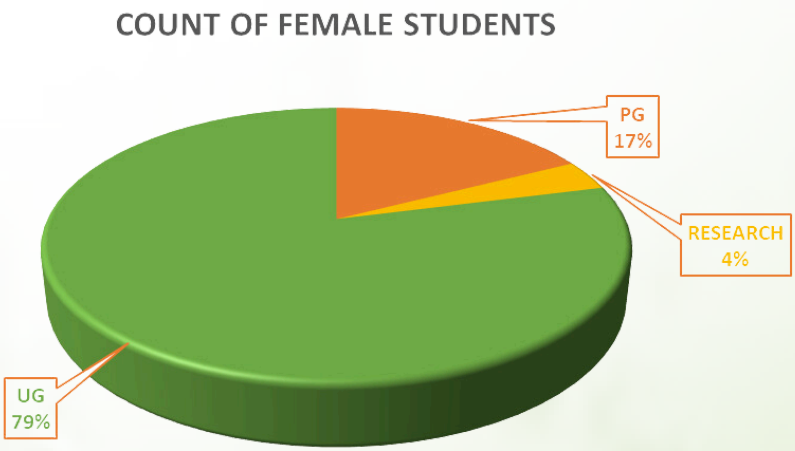
Ms. Pragya Malla,
Assistant Professor ,
SLA, UU

55.53%
Faculty are Men

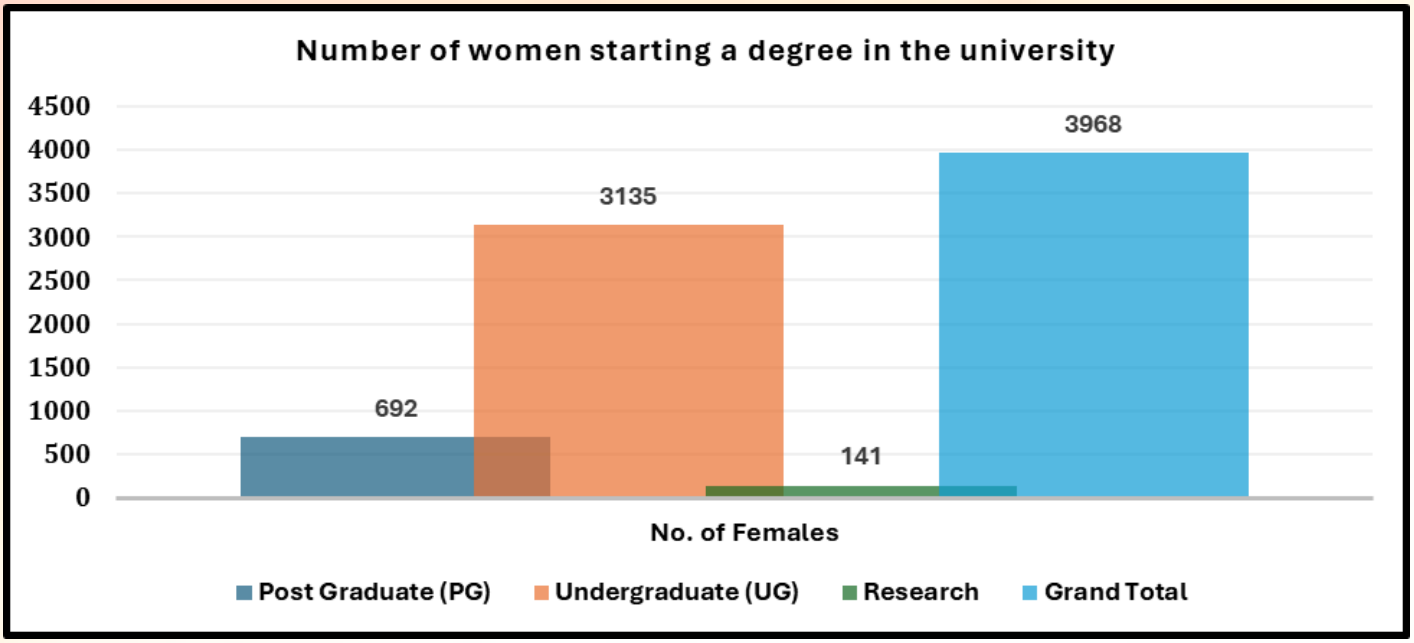
44.46%
Faculty are Women





62.94%
MALE
STUDENTS

37.06%
FEMALE
STUDENTS



Women's access schemes

3121 female students are provided with Financial Support under university Scholarship program, which is 29.15% of total student population. A sum of

19.702 million INR.

is invested in female student education support.

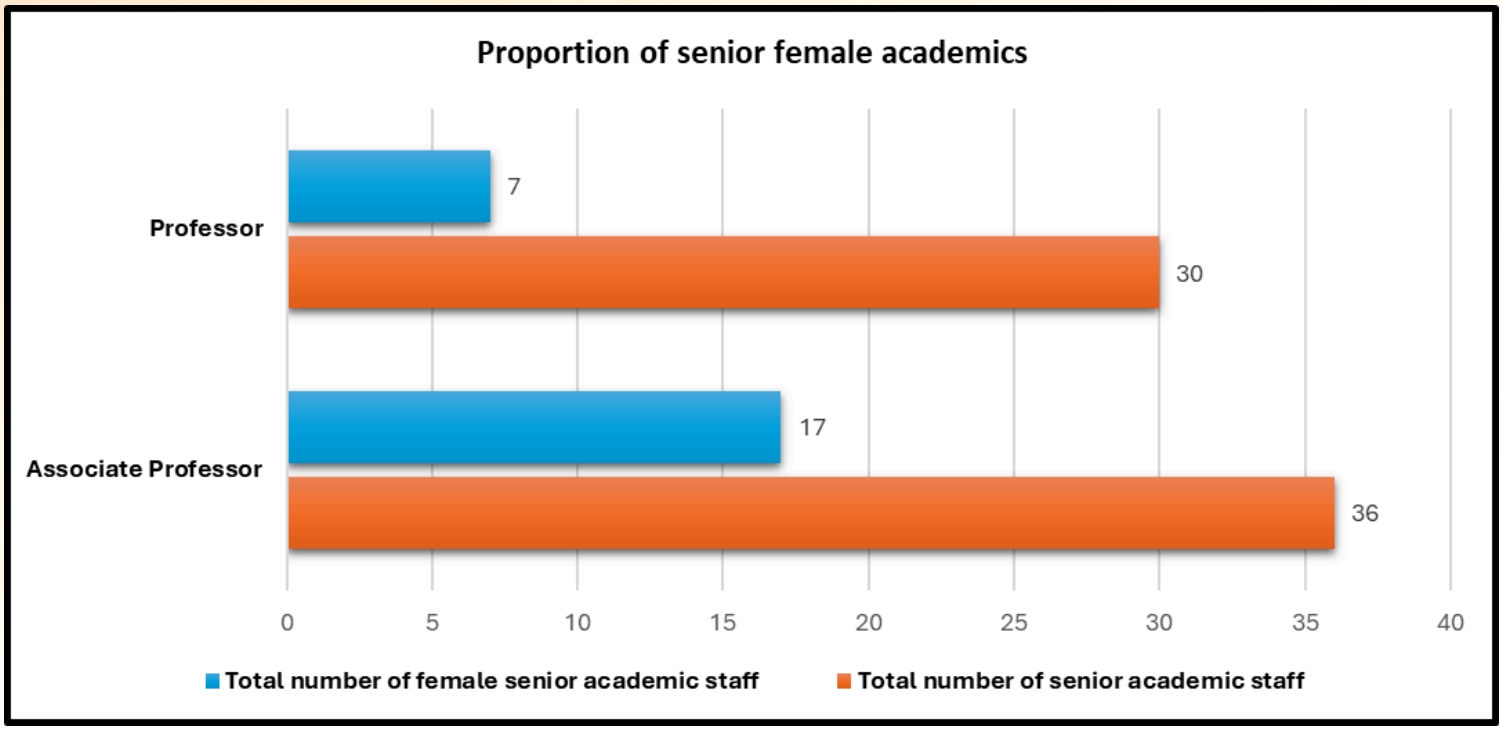
Student Mentorship Program

209 female faculty members have been appointed as mentors for female students at the university to provide mentorship support with a mentor to mentee ratio of 1:19.

Our regional and national campaign partners for the promotion of women's education in STEM fields

shiksha
ZOLLEGE
Sarvgyan
edInbox
Reliable Inspiring Empowering Education
COLLEGE INFO
collegedunia
collegesearch.in
CollegeDekho
CAREER MANTRA
CareerGuide.com

Proportion of senior female academicians



Childcare facilities for staff and faculty members

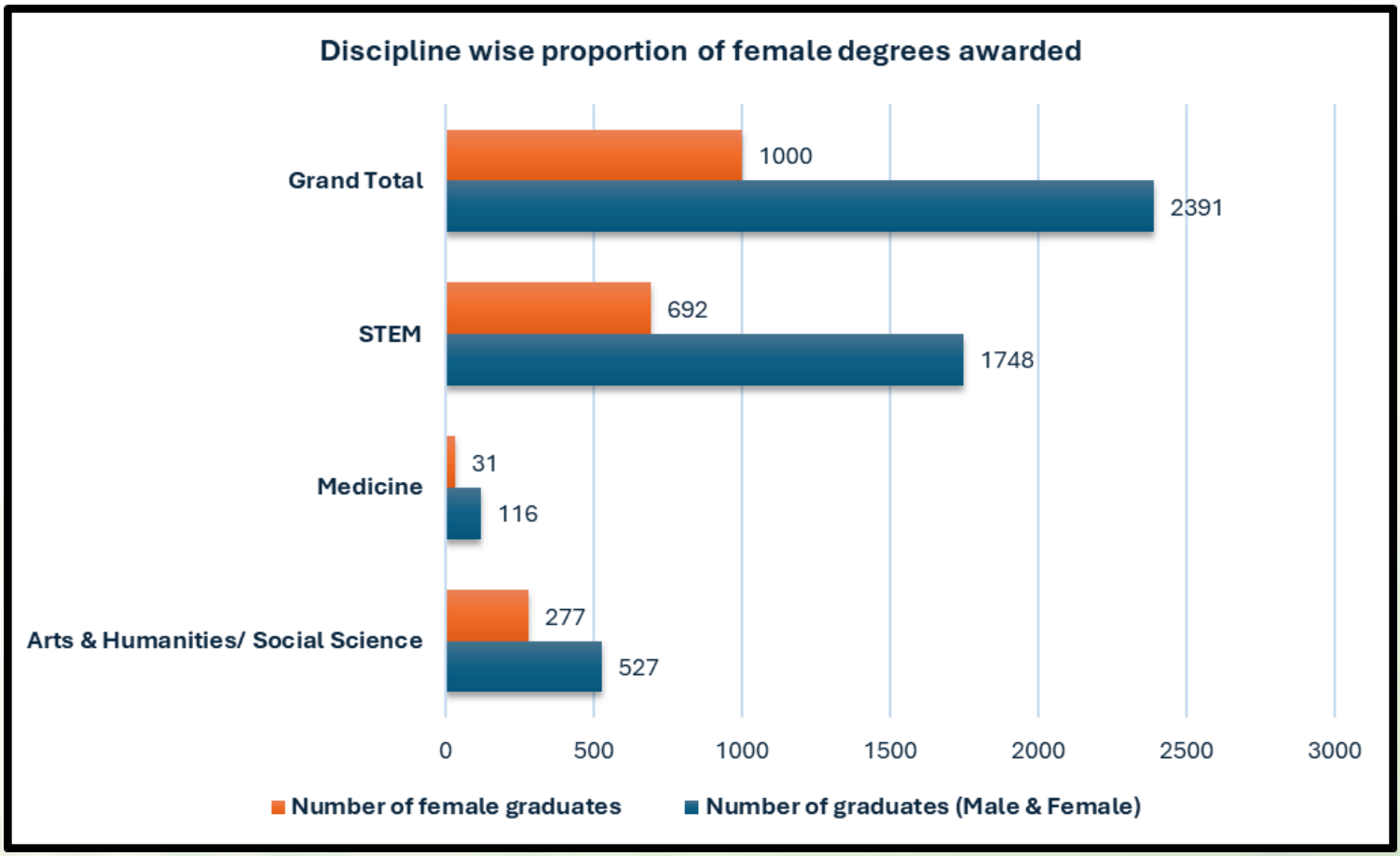
Our university is dedicated to supporting the work-life balance of our staff and faculty members by providing comprehensive childcare facilities. These facilities are designed to create a safe, nurturing, and engaging environment for children, allowing parents to focus on their professional responsibilities with confidence.

- Spacious Play Areas
- Educational Activities
- Resting Areas
- Nutritious Meals and Snacks
- Experienced Caregiver
- Safety and Security

Face Painting Competition on International Women's Day

On 7 March 2024, the Women Cell of Uttaranchal Institute of Management, Uttaranchal University, organized a Face Painting Competition in celebration of International Women's Day. The event, held at UIM foyer, was inaugurated by Prof. (Dr.) Pradeep Suri, Dean UIM, along with other dignitaries. Dr. Suri's inspiring address emphasized women's empowerment and standing against injustice. Enthusiastic participants from various departments showcased creative artwork symbolizing women's strength and resilience. Judged by UIM faculty, the competition concluded with an award ceremony recognizing the winners' originality and impactful messages conveyed through their face paintings.

Proportion of female degrees awarded



Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.

A new approach for synthesis of bismuth oxide derived photocatalyst for degradation of para nitrophenol

More focus has recently been placed on achieving the **sustainable development objectives by 2030**. The inefficiency of different water treatment techniques restricts their widespread implementation. Furthermore, some of the procedures readily create secondary pollutants. As a result, it is critical to develop an effective and ecologically beneficial method of converting organic contaminants into non-toxic and harmless chemicals.

A **modified hydrothermal synthesis method was utilised for successfully producing Bi2O3 nanoparticles in this research. Fourier Transform Infrared (FT-IR) spectroscopy, X-Ray Diffraction (XRD), Scanning Electron Microscopy, and Energy Dispersive X-Ray were used to characterise and to find the structural, optical, morphological, and compositional aspects of the formed nanoparticles.**

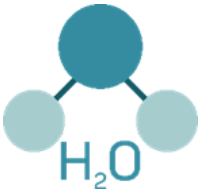
Moreover, the formed particles were used to degrade the noxious Para-nitrophenol (PNP). PNP deterioration was performed under 3 different conditions: under halogen light, under sunlight and in the dark. The experiment showed that halogen irradiation showed better results. Due to PNP adsorption on Bi2O3, even without irradiation, a small degradation was detected but in just over an hour, under halogen light the catalyst destroyed 99.23% of 4-nitrophenol. We also used natural lighting in our degradation studies. Natural daylight deterioration efficiency was 63.26%. The nanoparticles that were formed turned out to be an excellent photocatalyst for the degradation of PNP in wastewater.

Read more:
https://link.springer.com/article/10.1007/s10904-024-03221-1#citeas

Dr. Shivam Pandey,
Assistant Professor,
SALS, UU

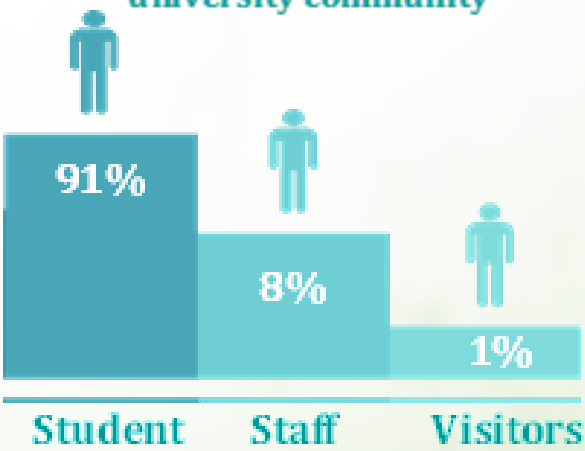
Total Volume of Water Used at Uttaranchal University

The average daily water consumption at Uttaranchal University is approximately 570000 liters, serving a campus population of 11649. This results in an average per capita water consumption of 48.93 liters per day. Overall water usage has increased this year due to the growing number of students, staff, and construction workers involved in ongoing campus expansion projects.



500 liters of water per hour

is being filtered by Water Treatment Plant for the direct consumption of a university community



Water Utilization Population Wise

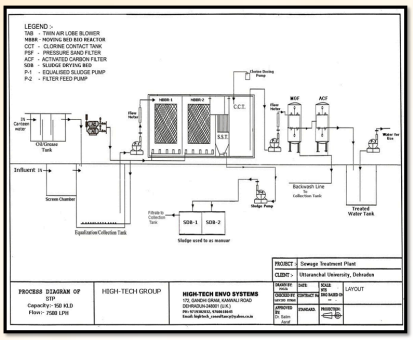
123

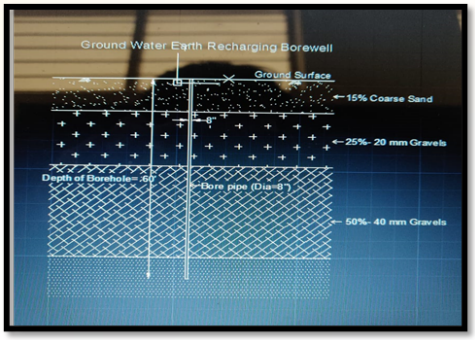
Reverse Osmosis (RO) water cooling and drinking stations for clean and safe drinking water

Water usage and care

Wastewater treatment

Each year, around 50 lakh liters of wastewater is collected in separate tanks on campus. This collected water is passed through a comprehensive filtration process in our Water Treatment Plant (WTP). The treated wastewater is then repurposed for horticultural and agricultural activities, particularly during the lean months.





Layout of one of the Wastewater treatment facilities at Uttaranchal University

Measurement of Water-reuse

The reuse of treated wastewater at Uttaranchal University is focused on reducing reliance on external freshwater resources. **We are dedicated to monitoring water consumption, including the reuse of treated water, across the campus by tracking daily water usage**.

- We ensure that **treated wastewater is efficiently utilized for various purposes, including irrigation, sprinkling, and flushing in common toilets**.
- Through our wastewater treatment plants, Uttaranchal University **successfully reuses approximately 60% of the water, which is then used for various campus needs. This approach is essential for promoting water reduction and reuse within our institution**.

Smart Sensor Based Flow meter

Smart Sensor Water Level Sensor with Alarming System

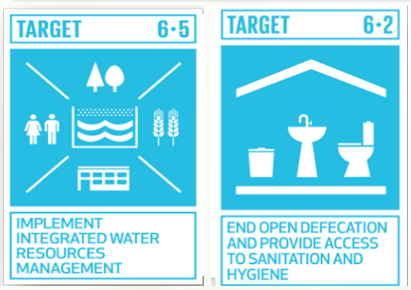
Mechanical Flow Meter

Water in the Community

Water management educational opportunities

Uttaranchal University is committed to advancing the United Nations Sustainable Development Goals (SDGs) by focusing on four critical areas of societal importance: water, food, healthcare, and sustainable energy. In support of these goals, the university offers diverse academic programs related to **Environment and Energy management**, from undergraduate to doctoral levels. These programs are designed to address the multifaceted aspects of water resources, **emphasizing conservation, sustainable practices, and innovative solutions for water management**. By equipping students with the knowledge and skills needed to tackle global water challenges, Uttaranchal University plays a pivotal role in shaping a more sustainable future.

Courses Related to SDG Goal 6 – Clean Water and Sanitation



Awareness Campaign & Training Programs

SDG- 6

Affordable and clean energy

Ensure access to affordable, reliable, sustainable and modern energy for all.

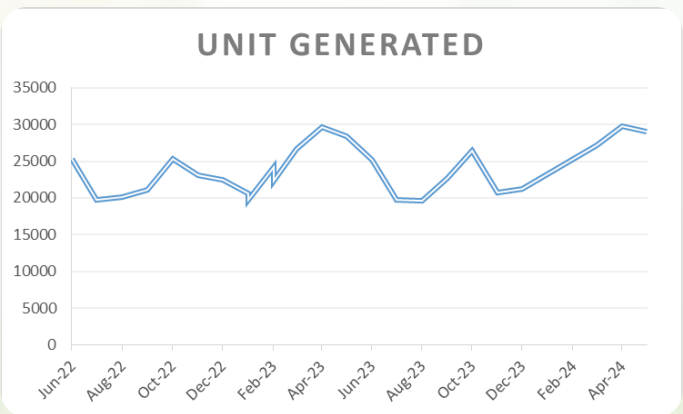
A Seminar on National Energy Conservation Day- 2023 "Connect, Collaborate, and Innovate! Be part of India's Energy Transition"

The Department of Mechanical, Aerospace, and Civil Engineering at Uttaranchal Institute of Technology, Uttaranchal University, organized a seminar on National Energy Conservation Day 2023 titled "Connect, Collaborate, and Innovate! Be part of India's Energy Transition" on 14 December 2023.

The guest speaker, Dr. Madhu Sharma, a certified Energy Auditor (BEE), emphasized the significance of energy audits in transforming conservation ideas into reality. Dr. Dharam Buddhi, Vice Chancellor, stressed the need for collaboration and innovation for sustainable energy use. He highlighted the role of energy audits in analyzing consumption and promoting sustainable alternatives. **Prof. (Dr.) S. D. Pandey, Dean UIT, encouraged students to actively participate and understand how energy audits contribute to saving energy while improving human comfort and health**.

The seminar aimed to raise awareness among students and faculty about the environmental impact of energy usage and highlighted sustainable practices like green buildings to promote societal development.

UU- Solar Units Generated



Professor Dharam Buddhi's work focuses primarily on renewable energy, energy efficiency, and thermal energy storage. His research is pioneering in the development of sustainable solutions that can be applied to real-world challenges, particularly in the Indian context.

Professor Buddhi's recognition as one of the top 2% of scientists globally reflects his wide-reaching influence in the field of sustainable energy. His innovations are not only academic in nature but are also being applied to solve practical problems in energy management and conservation. His work directly contributes to achieving the global goal of Affordable and Clean energy (SDG 7) by fostering innovation that is both impactful and scalable.

Through his research, Prof. Buddhi continues to inspire the next generation of scientists and engineers, promoting a future where clean and efficient energy systems are at the forefront of development.

Prof. Dharam Buddhi,
Vice Chancellor,
UU

Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Panel Discussion on "UNION BUDGET: 2023-2024"

Uttaranchal Institute of Management, Uttaranchal University, hosted a panel discussion on the Union Budget 2023-2024 on February 11, 2023. Renowned experts, including Mr. Hari H. Pathnaik, Dr. Hiranmoy Roy, Prof. V.P Mathur, and CA Verendra Kalra, shared insights on various budget aspects such as fiscal deficit, tax slabs, and capital expenditure. The event, moderated by UIM faculty, was inaugurated by the Vice-Chancellor Prof. Dharam Buddhi with a lamp-lighting ceremony. Students from MBA, BBA, and B. Com (H) programs actively participated, gaining valuable perspectives on the budget's impact on India's economic future.

Uttaranchal University receives 'Sustainability Award – 2023'

By:

International Council for Circular Economy

Uttaranchal University received the Best Sustainability Award 2023 from the International Council for Circular Economy, presented by Managing Director Shalini Goyal Bhalla. Chancellor Jitender Joshi accepted the award, recognizing the university's commitment to reducing its carbon footprint. The university has implemented stringent environmental policies, eco-friendly practices, and a green campus. Key initiatives include integrating solar energy, energy-efficient infrastructure, and aligning with the UN's Sustainable Development Goals. The university also engages in tree plantation drives, biodiversity conservation, and promotes sustainable transportation with green vehicles, while actively participating in the Unnat Bharat Abhiyaan for community development.

TWO DAYS FINTECH CLUB WORKSHOP ON "MASTERING THE ART OF WEALTH CREATION: A COMPREHENSIVE WORKSHOP ON FINANCIAL INVESTMENT STRATEGIES, SECURITIES MARKETS AND MUTUAL FUNDS."

The FINTECH Club of Uttaranchal Institute of Management, Uttaranchal University, organized a two-day workshop on "Mastering the Art of Wealth Creation: Financial Investment Strategies, Securities Markets, and Mutual Funds" on March 19-20, 2024, for MBA, BBA, and B.Com students. Prof. (Dr.) Priya Aggarwal, Financial Markets Trainer from NISM, Mumbai, was the guest speaker. The event was graced by Vice Chancellor Prof. (Dr.) Dharam Buddhi, Dean of UIM, Prof. (Dr.) Pradeep Suri, and Dr. Tilottama Singh, HoD, UIM.

Prof. Suri emphasized disciplined financial planning, while Prof. Buddhi spoke on harnessing India's youth for economic growth. Dr. Aggarwal's expertise enriched the workshop, covering investment strategies, risk management, portfolio optimization, and securities market careers. The second day focused on capital generation, compounding, mutual funds, and NISM certifications. Over 800 participants attended, making the event a resounding success. The workshop concluded with a vote of thanks by Ms. Neeti Misra, Head of the Fintech Club.

कर्ज अर्थव्यवस्था को कर रहा बीमार

मुफ्त रेवड़ी संस्कृति गंभीर परिणाम लेकर आती है। हम सभी श्रीलंका में इसका परिणाम देख चुके हैं। 2018 में तुर्की आर्थिक संकट से जूझा और 2019 के अर्जेंटीना चुनाव के बाद उनका शेयर बाजार 35% गिरा। मार्च 2024 में आई आरबीआई की रिपोर्ट देखें तो सभी राज्य कर्ज में हैं। रिपोर्ट के मुताबिक पंजाब पर जीएसडीपी का 45 फीसदी से अधिक कर्ज हो सकता है। पश्चिम बंगाल, केरल, राजस्थान, आंध्रप्रदेश, बिहार, उत्तराखंड, हरियाणा और तमिलनाडु पर 30% से अधिक कर्ज होगा। -नवनीत शुक्ला,असिस्टेंट प्रोफेसर,उत्तरांचल विश्वविद्यालय देहरादून, व अंतरराष्ट्रीय व्यापार विशेषज्ञ

Online Workshop on Awareness Program on Intellectual Property Rights (IPR)

The Hospitality Club of USHHM, Uttaranchal University, organized an Online Workshop on Intellectual Property Rights (IPR) on March 18, 2024. The session featured Dr. Manoj Kumar Singh from the Ministry of Commerce & Industry, Government of India, who shared his expertise on IPR.

Dr. Singh's presentation highlighted the crucial role of intellectual property in promoting innovation and competition across industries. He covered key aspects like patents, copyrights, trademarks, and designs, offering practical insights into navigating the complexities of IPR. The event was a valuable educational experience for students and professionals alike.

Industry, innovation and infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Five-Day IoT Workshop at USCS, Uttaranchal University: Exploring Innovation and Practical Applications

Uttaranchal School of Computing Sciences (USCS), Uttaranchal University, in collaboration with Research and Innovation, organized a five-day workshop on IoT from March 27th to April 1st, 2024. Prof. (Dr.) Rajesh Singh and Prof. (Dr.) Anita Gehlot from R&I were the expert speakers. **The workshop aimed to introduce participants to IoT concepts, demonstrate its applications across various sectors, and provide guidance for further exploration**. Prof. Sonal Sharma, Dean USCS, emphasized the importance of innovation in her address. Prof. Singh discussed IoT applications in sectors like healthcare and smart cities, while Prof. Gehlot demonstrated Arduino software and circuit designing. Practical sessions on Arduino were conducted, coordinated by Dr. Sameer Dev Sharma and assisted by Mr. Abhishek Pathak, Ms. Manisha Saini, Ms. Divya Pandey, and student volunteers.

Website Development Competition at IT Utsav 2024: Showcasing Talent and Innovation on Sustainable Development Goals

The Website Development Club of Uttaranchal School of Computing Sciences (USCS) organized a Website Development Competition during the "**IT Utsav 2024**" on April 18, 2024. The competition, themed around "**Sustainable Development Goals**," welcomed participants from BCA, MCA, and B.S.c (IT) programs. Judges including Mr. Ashish Negi, Website Developer at Uttaranchal University, Mr. Prateek Mittal, USCS Alumni, and Dr. Amarjeet Rawat, Assistant Professor at Uttaranchal University, evaluated the presentations of 25 participating teams. **The winners were announced as follows: Meenakshi Kumari Pathak (MCA II A) secured the 1st position, Avinash Khanduri (BCA II) and Sanchita Dhyani (BCA IV) secured the 2nd position, and Sparsh and Brahm (B.Tech VI – Graphic Era University) secured the 3rd position**. The event was successfully coordinated by Dr. Sameer Dev Sharma, HoD of USCS, Mr. Ashish Bhatt, Head of the Website Development Club, Ms. Upasana Rana, and Ms. Divya Rawat, with the assistance of dedicated student volunteers and technical staff.

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    <header>
        <h1>IT Utsav 2024</h1>
        <h2>Website Development Competition</h2>
    </header>

    <section class="event-details">
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Image-sensing animal repellent and IoT-based alarm systems is closely aligned with the SDG 15 (Life on Land) and system is developed to minimize wildlife collisions with automobiles, since they contribute to biodiversity conservation and the protection of endangered species. By keeping an eye on animal movement and warning drivers when necessary, these technologies reduce the chance of accidents and protect animals. In addition, SDG 9 is furthered by the use of IoT and vision-based systems, which promote more resilient and sustainable communities by encouraging innovation and modernizing infrastructure to support the safety and security of animal and human populations. These technical advancements serve as prime examples of how the digital revolution can be used to address pressing environmental and societal issues.

H-Index: 42 **Patents Published: 635**
Research Papers: 515 **Copy Right: 80**
Patents Grants: 109 **Books: 44**

Prof. (Dr.) Rajesh Singh,
Director
Research & Innovation, UU

Uttaranchal Institute of Management organized a Seminar on "Entrepreneurship and Innovation"

Uttaranchal Institute of Management, Uttaranchal University, organized a seminar on "Entrepreneurship and Innovation" on 5th September 2023 at the Swami Vivekananda Auditorium.

The event featured Mr. Harjinder Singh, Managing Director of Cheema Boilers Ltd., as the esteemed guest speaker. Known for his entrepreneurial success, Mr. Singh shared his journey and insights on the importance of innovation in business growth. Dr. Tilottama Singh, HoD, UIM, welcomed the dignitaries, and Shri Jitender Joshi, Chancellor of Uttaranchal University, honored Mr. Singh, emphasizing willpower and dedication as key elements of success.

Prof. (Dr.) Pradeep Suri, Dean UIM, highlighted government policies available to aspiring student entrepreneurs. Mr. Singh discussed the challenges faced by entrepreneurs and shared strategies for overcoming obstacles. His session inspired students to be resilient and adaptable in pursuing entrepreneurial goals.

The seminar concluded with a Q&A session, where Mr. Singh provided valuable insights on business leadership, entrepreneurship, and innovation.

Workshop on "Hands-On Training on Analytical Techniques for Quality Research"

The Uttaranchal Institute of Pharmaceutical Sciences (UIPS), Uttaranchal University organised a workshop on "**Hands-On Training on Analytical Techniques for Quality Research**" on 09 April 2024 from 10:00 pm onwards. The workshop was collaborated with the Research and Innovation Department of Uttaranchal University. The demonstration of instrumentations was delivered by Ms. Ashima Juyal, Assistant Professor and Ms. Atreyi Pramanik, Assistant Professor, Department of Research and Innovation, Uttaranchal University. **The main purpose of the event was to make students aware of the handling and working of advanced analytical instruments such as SEM, XRD, EDX-Analysis, and FTIR which are used in the characterization of pharmaceutical formulations**. After the successful completion of the workshop, post-assessment was also conducted to evaluate students' knowledge and learning. The workshop was attended by about 30 students from UIPS.

- **3,000 research papers**
- **250 patents**
- **Student startup fund from Government (Nidhi Prayas & DSIR)**
- **Industrial Innovation Award from CII for collaborative research and development with industry leaders, driving forward practical applications of research in real-world settings.**
- **Niti Aayog- ACIC**
- **DST- iTBI**
- **Indo-Australian Project**

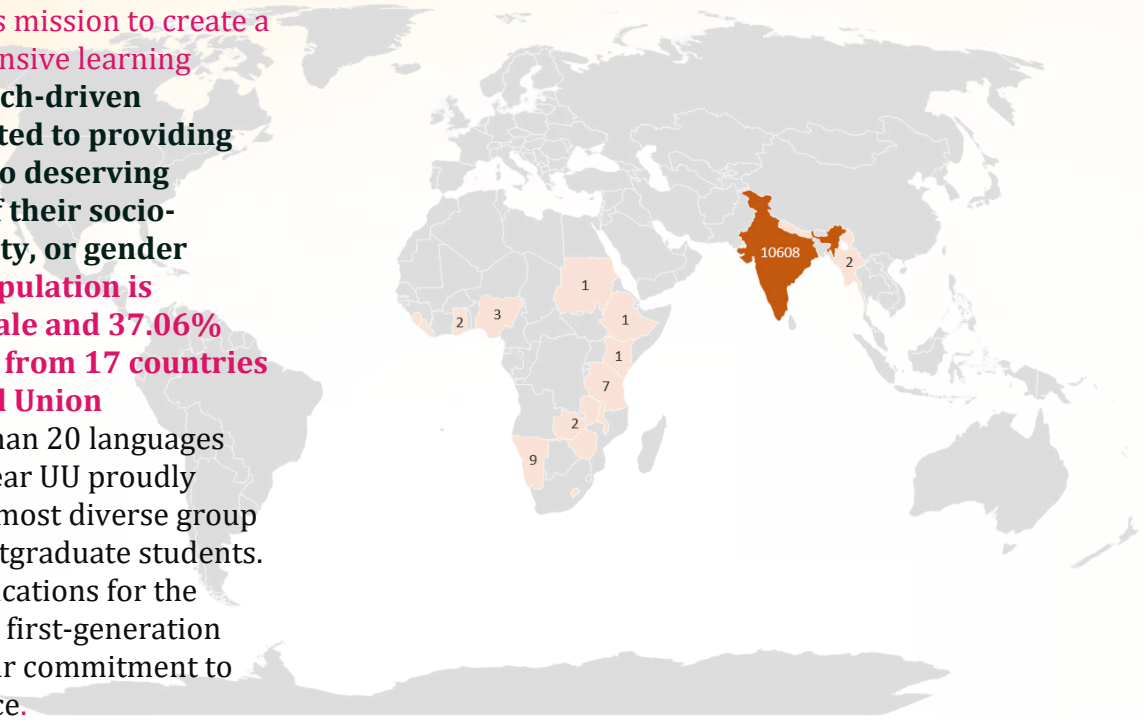
Reduced inequalities

Reduce inequality within and among countries.

Embracing Diversity and Excellence in Education

International Student Diversity in India (Uttaranchal University)

Uttaranchal University places inclusion and diversity at the heart of its mission to create a supportive and comprehensive learning environment. **As a research-driven institution, UU is dedicated to providing high-quality education to deserving students, irrespective of their socio-economic status, ethnicity, or gender identity. Our student population is diverse, with 62.94% male and 37.06% female students, hailing from 17 countries and 36 Indian states and Union Territories.** With more than 20 languages spoken on campus, this year UU proudly welcomed its largest and most diverse group of undergraduate and postgraduate students. Additionally, 10% of applications for the incoming class came from first-generation students, underscoring our commitment to accessibility and excellence.



COUNTRY	INDIA	NEPAL	LIBERIA	NAMIBIA	TANZANIAN	MALAWI	ZIMBABWE	LESOTHO	NIGERIA	SOUTH SUDAN	GHANA	MYANMAR	ZAMBIA	ETHIOPIA	KENYA	SIERRA LEONE	SUDAN
NUMBER OF THE STUDENT	10608	30	23	9	7	6	5	3	3	3	2	2	2	1	1	1	1

Empowering Girls: International Day of the Girl Child Celebration

Uttaranchal College of Nursing (UCN) and Uttaranchal College of Health Science (UCHS), under the aegis of Uttaranchal Hospital & Diagnostic Centre, organized the International Day of the Girl Child. The event, held from 9:30 a.m. to 1:00 p.m. at the UCN's seminar hall, featured notable guests including Dr. Dinesh Chauhan, ACMO, Dehradun; Dr. Shikha Thakur, Gynecologist, CHC Premnagar; and Mrs. Mamta Bahuguna, District Coordinator. Dr. Chauhan highlighted the achievement of improved sex ratios and the need to combat female foeticide. Dr. Shikha Thakur emphasized the importance of girls in society, while **Mrs. Bahuguna discussed the PCPNDT Act, which regulates prenatal sex determination. Dean Mr. Satheesh Kumar stressed the vital role of girls in sustaining the world. Students from B.Sc. Nursing and paramedical programs actively participated in competitions, including poster-making, essay writing, and skits on the significance of the girl child**. The event concluded with awards and a vote of thanks from Ms. Aarti Rana, Assistant Professor, UCN.

Students From

26

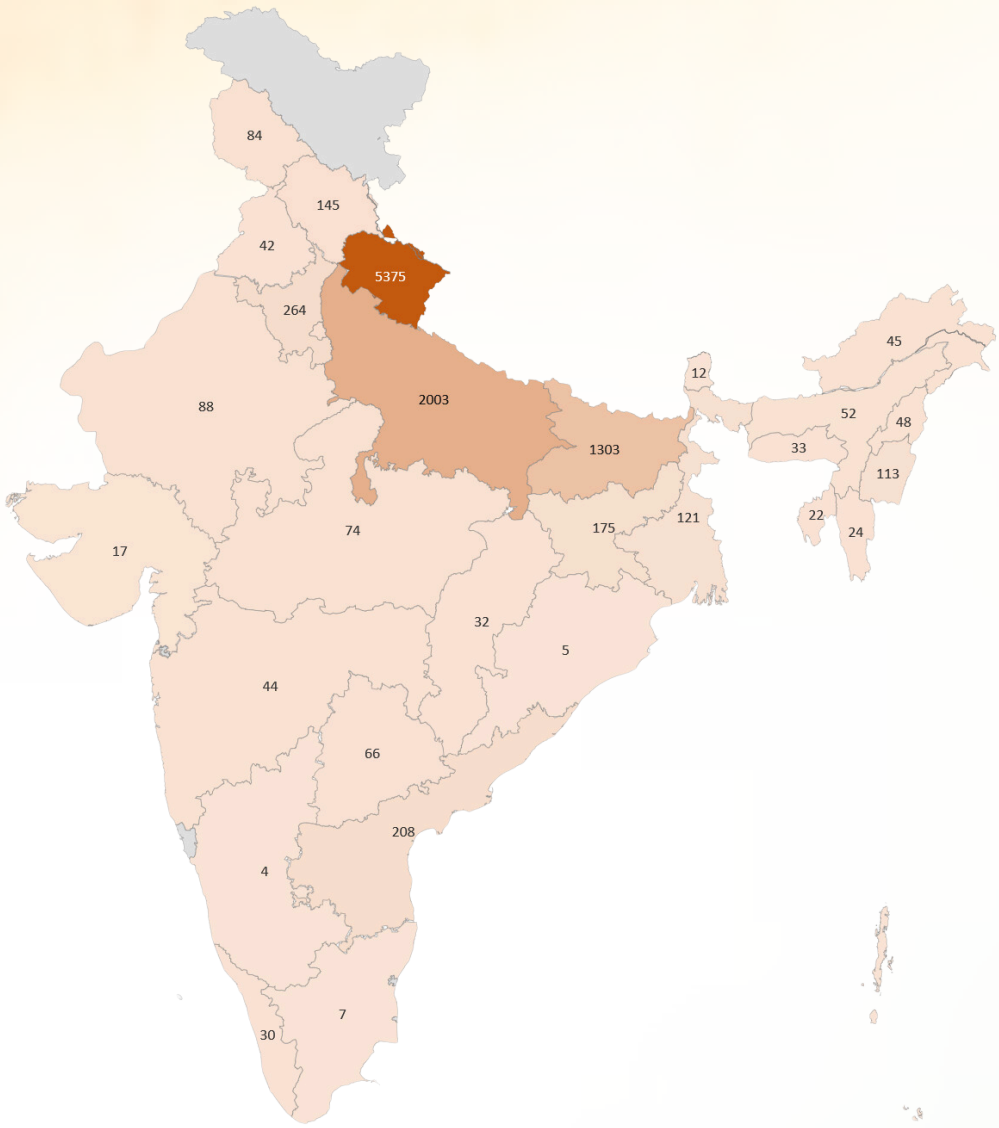
States & Union Territories

Students From

17

Countries

Diversity of Students in India (Uttaranchal University)



STATE	UTTARAKHAND	UTTAR PRADESH	BIHAR	HARYANA	ANDHRA PRADESH	JHARKHAND	DELHI	HIMACHAL PRADESH	WEST BENGAL	MANIPUR	RAJASTHAN	JAMMU AND KASHMIR	MADHYA PRADESH	TELANGANA	ASSAM	NAGALAND	ARUNACHAL PRADESH	MAHARASHTRA	PUNJAB	MEGHALAYA	CHHATTISGARH	KERALA	MIZORAM	TRIPURA	GUJARAT	SIKKIM	NEW DELHI
NUMBER OF THE STUDENT	5375	2003	1303	264	208	175	148	145	121	113	88	84	74	66	52	48	45	44	42	33	32	30	24	22	17	12	10

STATE	ARUNACHAL PRADESH	MAHARASHTRA	PUNJAB	MEGHALAYA	CHHATTISGARH	KERALA	MIZORAM	TRIPURA	GUJARAT	SIKKIM	NEW DELHI	TAMIL NADU	ODISHA	DADAR AND NAGAR HAVELI	KARNATAKA	ORISSA	ANDAMAN AND NICOBAR	CHANDIGARH	DAMAN AND DIU	ODISHA	DADAR AND NAGAR HAVELI	KARNATAKA	ORISSA	ANDAMAN AND NICOBAR	CHANDIGARH	DAMAN AND DIU	TAMIL NADU
NUMBER OF THE STUDENT	45	44	42	33	32	30	24	22	17	12	10	7	5	4	4	4	2	2	2	5	4	4	4	2	2	2	7

Sustainable cities and communities

Make cities and human settlements inclusive, safe, resilient and sustainable.

National Workshop on Sustainable Smart Waste Management for Smart Cities Held at Uttaranchal University: Exploring Technological Innovations and Policy Frameworks

Uttaranchal School of Computing Sciences, Uttaranchal University hosted a national workshop on "**Sustainable Smart Waste Management for Smart City (Hybrid mode)**" on April 1, 2024. The event aimed to showcase innovative technologies and solutions for efficient waste management, reducing environmental impact, and optimizing resource usage. Dignitaries including Shri Jitender Joshi, Chancellor of Uttaranchal University, and Dr. Kalachand Sain, Director of Wadia Institute of Himalayan Geology, attended the inaugural ceremony. Prof. (Dr.) Sonal Sharma emphasized the importance of sustainable waste management for cleaner cities, while Prof. (Dr.) Dharam Buddhi highlighted the role of technology integration. Dr. R. P. Singh discussed policy frameworks for supporting sustainable waste management, and **Dr. Kalachand Sain elaborated on the 5R's principle (Reduce, Reuse, Recycle, Refuse and Repurpose). Dr. Arijit Roy presented on the Digital twin approach within smart cities. Over 800 participants attended the hybrid-mode workshop, with thanks extended to all contributors by Dr. Sameer Dev Sharma, with support from Dr. Meera Sharma, Mr. Abhishek Pathak, Ms. Manisha Saini, Ms. Manisha Khanduja, Ms. Divya Rawat, and Mr. Harshit Gupta**.

E-Vehicle Transportation

Uttaranchal University **has introduced electric vehicles (e-vehicles) for transportation within the campus**. **These e-vehicles provide a green alternative to traditional fuel-powered vehicles, significantly reducing carbon emissions. The e-vehicles are used for transporting students, faculty, and visitors across different areas of the campus, such as between academic buildings, hostels, and administrative offices. This initiative contributes to lowering air pollution and decreasing the university's reliance on fossil fuels**.

Pedestrian-Friendly Footpaths

To further reduce the **environmental impact, the university has developed well-maintained pedestrian footpaths that connect major buildings and facilities**. These walkways encourage students and staff to walk instead of using motorized transport for short distances. The footpaths are designed to be safe, accessible, and comfortable for everyone, promoting physical activity while reducing the overall need for vehicular movement within the campus. **By facilitating easy movement on foot, the university is minimizing traffic congestion and contributing to lower greenhouse gas emissions**.

Responsible consumption and production

Ensure sustainable consumption and production patterns.

Development of Composites by Using Cellulose Extracted from Pomelo Peel with Red Mud and Chitosan/PVA Polymer

This work focuses on developing **environment-friendly red mud/polymer-based composite films that can effectively degrade dye from industrial effluent. In this study, the cellulose biopolymer was extracted via greener rot from pomelo peels with subsequent leaching and bleaching processes**. Using a scanning electron microscope (SEM–EDX), X-ray diffraction (XRD), and Fourier Transfer Infrared spectroscopy (FTIR), the morphological, structural, and phase analysis of the synthesized microcrystalline cellulose was examined. The results demonstrated its potential as an efficient and sustainable solution for reinforcement material and wastewater treatment applications. The hydrophilic nature of composite films was analyzed using a water contact angle analyzer and the contact angle of the film is approximately 50° which shows the desirable hydrophilicity of composite film towards aqueous solution. The PVA red mud-based composite film's moisture content and water solubility were also investigated, and the results demonstrated that it would perform significantly in aqueous solutions, particularly the PVA/RM/Ch/C composite film, which has a water solubility of 54% and can be used to treat wastewater.

Read more:
https://link.springer.com/article/10.1007/s10904-024-03221-1#citeas

Dr. Ajay Singh,
Dean, Research Studies ,
SALS, UU

Proportion of recycled waste: Waste tracking

At Uttaranchal University, **waste tracking is a vital part of our commitment to sustainability and effective waste management. Through systematic waste audits and monitoring processes, the university tracks various waste streams, including recyclables, compostables, hazardous materials, and non-recyclable waste**. This data-driven approach helps measure waste generation across campus facilities, enabling us to identify trends and areas for improvement. By tracking key metrics such as recycling rates, waste diversion rates, and overall waste reduction, the university ensures transparency and accountability in its waste management efforts. This ongoing process allows us to refine our strategies, minimize waste sent to landfills, and align with our sustainability goals.

Reducing Waste Generation

Uttaranchal University is committed to promoting sustainability and closely monitoring its environmental footprint, including tracking food waste generated from campus dining services. The table below presents data for the last two years, reflecting our ongoing efforts to measure and reduce food waste. Notably, all food services are managed in-house, with no outsourcing involved.

Year	Amount of food waste generated in a year (in Metric Tons)	Action taken
2022	7.56*	• Implemented a food waste reduction program. • Launched awareness campaign on food waste. • Improved food portion control in our residential messes, food courts, and cafeteria's etc. • Collaborated with local charities for minimizing food waste.
2023	2.52*	
2024	3.67*	

Climate action

Take urgent action to combat climate change and its impacts.

Design and Development of Exploratory model in AI for Addressing CO_2 Emission for a Sustainable Future by School of Computing Sciences

The global challenge of **Carbon Dioxide (CO_2) emissions and their environmental impact form the core focus of this research endeavor**. Through an exploration of various visualizations and analyses, this study delves into the intricate dynamics surrounding CO_2 emissions, providing insights into global trends, country-specific trajectories, and the imperative for sustainable practices. Beginning with an overview of worldwide CO_2 emissions, the study uncovers the exponential growth trajectory, highlighting the urgency for proactive measures to address this issue. The research further dissects the top 10 CO_2 emitting countries over the last decade, emphasizing the importance of collective efforts in emission reduction. Shifting the lens to India's emissions, the study examines the century-long journey of CO_2 emissions, capturing the nuanced shifts from the early 20th century to the present day. The graph's portrayal underscores the pivotal role of industrialization, urbanization, and demographic changes in shaping **India's carbon footprint**. The turning point around 1960 signifies a transformational moment that propelled emissions on a steep upward trajectory. Economic growth emerges as both a driving force and a challenge. **The narrative concludes with an exploration of future research avenues, spanning alternative energy sources, policy frameworks, technological innovations, behavioral changes, and inclusive strategies.** This study underscores the complexity of the emissions landscape, weaving together historical insights, present-day challenges, and a visionary perspective for the future. As societies navigate the intricate balance between development and environmental responsibility, this research serves as a compass, guiding us toward a world where CO_2 emissions are not just numbers but a collective call to action for a sustainable and harmonious future.

Educational Visit to Sewage Treatment Plant

The Department of Civil Engineering at Uttaranchal Institute of Technology organized a one-day educational excursion to the **150 KLD in-house Sewage Treatment Plant (STP) located at Uttaranchal University near Kasturba Girls Hostel on April 2, 2024**. This visit was exclusively designed for B.Tech. and M. Tech. Civil Engineering students. The main aim of the industrial visit was to acquaint students with the various preliminary, primary, secondary, and advanced processes involved in sewage treatment, exposing them to new technologies and knowledge in the field of municipal wastewater treatment.

Two-day National Conference InnoSustain 2023: Pursuit for Sustainable Development Goals with Great Grandeur

The Law College Dehradun, Uttaranchal University, hosted the **UCOST-sponsored National Conference InnoSustain 2023 on September 22-23, 2023, focused on Sustainable Development Goals (SDGs)**. The event saw participation from over 470 attendees, including 200 researchers who **presented papers on innovation, intellectual property rights (IPR), and sustainability**. Key speakers included Chief Guest Dr. Renu Singh (IFS), Director of FRI, Dehradun, Dr. D.P. Uniyal (UCOST), and keynote speaker Prof. Amar Pal Singh (GGSIU, New Delhi).

The conference, divided into six technical sessions, provided a platform for discussions on climate change, energy security, patents, AI, and digital growth. Prof. Singh highlighted AI's role in achieving SDGs and urged for adaptable laws. Dr. Uniyal stressed the importance of University-UCOST collaboration to meet SDG targets. Dr. Singh encouraged joint research between FRI and Uttaranchal University for societal benefit. The event concluded with a valedictory session led by Principal, Prof. Poonam Rawat.

Poster Presentation Competition on the Theme of 'Montreal Protocol: Restoring the Ozone Layer and Mitigating Climate Change' on 'Ozone Day'

Uttaranchal Institute of Pharmaceutical Sciences (UIPS) organized a Poster Presentation Competition on '**Montreal Protocol: Restoring the Ozone Layer and Mitigating Climate Change**' on September 16, 2023, to mark '**Ozone Day**'. The event, under the University Eco Club, was inaugurated by Prof. (Dr.) Vikash Jakhmola, Dean, UIPS, along with other faculty members. The competition aimed to educate students about protecting the ozone layer and controlling global emissions. It also provided a platform for students to showcase their skills in poster presentation and raise awareness. Judges for the event were Dr. Tarun Parashar and Dr. Nidhi Nainwal.

UIPS celebrated 'Zero Emission Day' with a debate competition on the topic 'Tax on Industries According to Carbon Emissions'

UIPS celebrated "**Zero Emission Day**" on September 21, 2023, with a debate competition on the topic '**Tax on Industries According to Carbon Emissions**' for university students. The event was inaugurated by Prof. (Dr.) Vikash Jakhmola, Dean, UIPS, along with faculty members. The competition aimed to raise awareness about the environmental impact of carbon emissions, such as climate change and air pollution, and promote sustainable living. Dr. Jakhmola encouraged participants to exchange ideas on reducing carbon footprints. Judges for the event were Dr. Supriyo Saha and Mrs. Pallavi Ghildiyal, evaluating the participants' communication and critical thinking skills.

Life Below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Clean Water & Green Environment for Quality of Life

The seminar focused on the **importance of clean water, a key element of the Sustainable Development Goals, and was organized in collaboration with the University, Life Mission (an initiative by the Ministry of Environment, Forest & Climate Change), and supported by Sharon Bio Medicine**. The event commenced with a ceremonial lamp lighting by dignitaries. Prof. Ajay Singh, Dean of Applied Sciences & Research, welcomed participants, stressing the importance of clean water and a green environment for maintaining quality of life.

Prof. Dharam Buddhi, Vice Chancellor, highlighted the role of research in promoting clean water and achieving sustainable development. **Dr. Vipin Gupta from MoEFCC shared insights on Mission Life's initiatives, while Mr. Manoj Mamgain from Sharon Bio Medicine emphasized the need for maintaining high-quality standards in both industries and social life**.

Over 150 students participated in debate and poster competitions, with winners announced for each. The seminar was convened by Prof. Ajay Singh and coordinated by Dr. Bharti Ramola, Dr. V. K. Srivastava, and Dr. Nishesh Sharma.

Assessment of the Ichthyofaunal Diversity in Relation to Physico-chemical attributes of River Asan in the Garhwal Himalaya, India.

This study examined the water quality of the River Asan in the lower Himalayas by analyzing various physicochemical parameters and assessing the diversity of its freshwater fish fauna. A total of 95 fish specimens, representing 13 species from 1 class, 4 orders, 4 families, and 9 genera, were collected across two sampling sites. Among these, Barilius bendelisis was the most abundant species. Overall, the River Asan's water quality was found to be good, with no significant pollution detected. Four primary ecological indices applied to the fish data revealed that fluctuations in fish numbers are primarily seasonal. However, declines in several fish populations were noted, likely due to illegal fishing and disturbances from human activities. Protecting natural habitats, implementing effective policies, and encouraging public involvement are essential for the sustainable management and conservation of fish diversity in this river.

Read more:
https://www.researchgate.net/publication/378496107_Assessment_of_the_Ichthyofaunal_Diversity_in_Relation_to_Physico-chemical_attributes_of_River_Asan_in_the_Garhwal_Himalaya_India

Dr. Dhyal Singh,
Assistant Professor ,
SALS, UU

Impact of prevailing factors on assemblages and status of freshwater fish fauna of River Song in the Lower Himalaya

Regional studies on fish communities are essential for assessing fish population status and implementing conservation measures. Accordingly, this study examined the influence of various factors on the distribution and status of freshwater fish in the River Song, located in the Lower Himalayas. Across nine sampling sites in three sections (upper, middle, and downstream), 268 fish specimens were collected, representing 20 species from 4 orders, 6 families, and 12 genera. Barilius bendelisis and Noemacheilus rupicola were dominant in the upstream section, B. bendelisis was prevalent in the midstream, and Glyptothorax pectinopterus was abundant in the downstream section. The upper section of the River Song, relatively undisturbed, featured good water quality, rich riparian vegetation, and ample food sources, positively influencing fish communities. In contrast, fish populations in the middle and downstream sections showed declines, likely due to anthropogenic disturbances such as channelization, construction, wastewater discharge, and the removal of riparian vegetation by locals. With 80% of fish species facing declines, there is an urgent need to protect natural habitats, enforce policies, and encourage public involvement in fish management and conservation efforts.

Read More:
https://www.researchgate.net/publication/378496107_Assessment_of_the_Ichthyofaunal_Diversity_in_Relation_to_Physico-chemical_attributes_of_River_Asan_in_the_Garhwal_Himalaya_India

Dr. Dhyal Singh,
Assistant Professor ,
SALS, UU

Underwater Life: Potential Hazards to Coral Reefs

Coral reefs, often called the "**rainforests of the sea**," are vital yet highly threatened ecosystems. Overfishing, pollution, ocean acidification, and rising sea temperatures are endangering these rich habitats. Acidification, driven by increased CO_2 absorption, lowers ocean pH, weakening coral skeletons and making reefs vulnerable. Coral loss is occurring at an unprecedented rate, risking significant economic loss, coastal protection, food security, and ocean health. Protecting coral reefs is essential. Strategies include reducing greenhouse gas emissions, establishing marine protected areas, and restoring damaged reefs through techniques like reef reconstruction and coral gardening. By addressing these threats, we can safeguard coral ecosystems for future generations.

PHYTOPLANKTON DIVERSITY AND WATER ECOLOGY OF RIVER NUN, UTTARAKHAND GARHWAL HIMALAYA

LOCAL FISH COLLECTED FROM RIVER NUN

As an alumnus of Uttaranchal University, I am thrilled to share my journey in sustainable aquaculture. My **fisheries farm** is a testament to the knowledge and values I gained during my time at the university. By employing environmentally friendly practices, I contribute to the **"Life Below Water"** initiative, aiming to preserve biodiversity and maintain water quality. The hands-on education and mentorship I received at Uttaranchal University equipped me with modern aquaculture techniques, empowering me to make a meaningful impact. I am proud to play a role in protecting our aquatic ecosystems and supporting sustainable food production for future generations.

Mr. Satyam Singh,
Alumnus,
SOA, UU

Monitoring river health is crucial for maintaining water quality, supporting biodiversity, and sustaining ecosystems. Regular assessment helps detect pollution, changes in aquatic life, and water flow issues. This process involves tracking chemical, physical, and biological indicators, ensuring that rivers remain safe sources for drinking, agriculture, and wildlife habitats.

Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Plantation & Seminar organised in Uttaranchal University on "World Environment Day"

The School of Applied & Life Sciences at Uttaranchal University celebrated **World Environment Day** by organizing a plantation drive and a seminar on "**Environment Protection & Sustainability**." The keynote address was delivered by Dr. Manmohan Rawat, Senior Scientist and Research Head at Uttarakhand State Council for Science & Technology. The event was inaugurated by Dr. Rawat, Dean Prof. (Dr.) Ajay Singh, Dr. V.K. Srivastava, Dr. Bharti Ramola, and Dr. Nishesh Sharma. Prof. Singh stressed the need for environmental awareness and encouraged students to promote sustainability through community programs. Dr. Rawat discussed factors impacting environmental protection, and Dr. Sharma addressed biodegradability. The event also saw the inauguration of "**Amrit Herbal Vatika**," and about 40 students actively participated in the plantation session. Dr. Ramola proposed a vote of thanks.

Uttaranchal University and Indian Scout Guide Fellowship came together for tree plantation

A tree plantation program was jointly organized by the Indian Scout Guide Fellowship and Uttaranchal University on July 17, 2024. Shri Jitender Joshi, President of Uttaranchal University, Prof. (Dr.) Rajesh Bahuguna, Pro Vice-Chancellor, Dr. Daljit Kaur, President of the Scout and Guide Fellowship of Uttarakhand, and Mr. Rajiv Sharma, Secretary of the Scout and Guide Fellowship, inaugurated the event by planting saplings.

Shri Joshi highlighted that the university is planting trees not only on its campus but also in five villages it has adopted as part of the Harela festival. University faculty and students are actively advancing this plantation drive with support from local Panchayat representatives. He noted that collaboration with the Indian Scout and Guide Fellowship has energized the campaign.

Dr. Daljit Kaur remarked that state Scout and Guide volunteers are participating enthusiastically in the Harela Mahaparva. She acknowledged the challenges of finding suitable land for tree planting and emphasized the greater challenge of nurturing the trees.

The event saw the participation of numerous volunteers, including Dr. Poonam Rawat, Lt. Nitin Duklan, Arjun Sirohi, Harjit Kaur, and Tina Arya.

Sustainable Farming Practices for Climate Resilience

On Earth Day, students from the School of Agriculture at Uttaranchal University organized a plant awareness initiative with the theme "**Save Earth, Plant Trees**." **They set up a stall on the university campus, offering a variety of plants at reasonable prices to the local community, including faculty, staff, and students**. The initiative aimed to encourage people to contribute to environmental conservation by planting more trees. By promoting the message "**Prithvi Bachao, Ped Lagao**," the students not only raised awareness about the importance of protecting the Earth but also actively engaged the community in sustainable practices.

Ecological Restoration to enhance the quality of life on Earth

Law College Dehradun, Faculty of Uttaranchal University, organized an International Webinar on Earth Day, under the aegis of Vasundhara – The Green Society. The webinar, themed "**Ecological Restoration to Enhance the Quality of Life on Earth**," was inaugurated with opening remarks by Ms. Hritul Rawat, Executive Member of the society, followed by a warm welcome from Dean, Prof. Rajesh Bahuguna. Dr. Lakshmi Priya Vinjamuri, Chairperson of Vasundhara, introduced the keynote speaker, **Dr. Philippe Cullet, Professor of International and Environmental Law at SOAS University of London**.

Dr. Cullet emphasized the pressing need for ecological restoration to address the rapid degradation of ecosystems, noting that over 60% of Earth's ecosystems have been compromised in the last 60 years. He explained how living organisms depend on balanced ecosystems to thrive and stressed the urgency of conservation efforts to prevent further damage. The webinar concluded with a vote of thanks from Mr. Shaurya Negi, Executive Member of the society.

Guest lecture on "Finding Inner Self for Soul Salvation"

In a bid to delve into the realms of spirituality and self-discovery, the Department of Mathematics, School of Applied and Life Sciences, Uttaranchal University hosted a captivating guest lecture on the topic "Finding Inner Self for Soul Salvation" on 23 February 2024, by **Dr. Vinaya Kumar Sethi, the esteemed Nodal Officer of the Environment Awareness and Value Consciousness Cell at Uttarakhand Sanskrit University, Haridwar**.

The lecture, attended by approximately 700 students from both undergraduate and postgraduate courses of the School of Applied and Life Sciences (SALS), along with faculty members, proved to be a momentous occasion. Prof. Ajay Singh, Dean SALS delivered a welcome address, expressing gratitude to Dr. Vinaya Kumar Sethi for sharing his invaluable insights on spirituality and self-discovery. Prof. Rajesh Bahuguna, Pro Vice-Chancellor extended his greetings to all attendees, applauding their enthusiasm for intellectual exploration.

Prof. Bharti Ramola extended heartfelt gratitude to Dr. Vinaya Kumar Sethi and all the dignitaries for their enlightening discourse, which ignited a spark of introspection among the attendees. The guest lecture on "Finding Inner Self for Soul Salvation" reaffirmed Uttaranchal University's dedication to spiritual enlightenment and holistic education, serving as a beacon of inspiration for the campus community.

Peace, justice and strong institutions

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT, PROVIDE ACCESS TO JUSTICE FOR ALL AND BUILD EFFECTIVE, ACCOUNTABLE AND INCLUSIVE INSTITUTIONS AT ALL LEVELS.

National Human Rights and Social Justice Commission honored the students of Uttaranchal University

The Best Student Award Ceremony for 2023-24 was organized by the School of Applied & Life Sciences with the support of the **National Human Rights and Social Justice Commission (NHRSJC)**. Held on 9th August 2024, top NHRSJC officials, including National Joint Secretary Mr. S. P. Chaudhary, State President Mr. Amit John, and District President Mr. Pramod Sharma, alongside Vice Chancellor Prof. Dharam Buddhi and Dean-Research Prof. Ajay Singh, honored students in various categories. **Awards were presented for achievements in literature, research, sports, and more**. Mr. Amit John highlighted NHRSJC's objectives, and Prof. Buddhi praised the school's efforts. A vote of thanks was delivered by Prof. Singh, recognizing NHRSJC's support. The event saw the participation of several dignitaries and faculty members, who celebrated student excellence across multiple fields.

Law College Dehradun organized Legal Awareness Camp in a Junior High School

Law College Dehradun organized a Legal Awareness Camp on 19 February 2024 through its Legal Aid Centre and the Pro Bono Club at Junior High School, Aamwala, Dehradun. The camp aimed to address **social and legal issues faced by students and the school administration**. Dignitaries including Prof. Rajesh Bahuguna, Prof. Poonam Rawat, and Mr. Abhiranjan Dixit attended. Topics covered included **women's and children's rights, FIR importance, and gender equality**. The event concluded with feedback collection from participants and support through thumb impressions. Coordinator Shri Dinesh Bhatt appreciated the efforts of the Pro Bono Club team.

Faculty Development Programme on Quality Legal Research-Initiatives and Innovations "Legal Research-Unleashing the contemporary dynamics"

Law College Dehradun organized a Faculty Development Programme (FDP) titled "**Legal Research- Unleashing the Contemporary Dynamics" from 24 January to 01 February 2024**. **The FDP aimed to address challenges faced by traditional legal researchers in adapting to modern, technologically advanced research methods**. It focused on three key objectives: **optimal utilization of legal databases and e-resources, effective research paper and proposal writing, and understanding copyright issues and violations**.

The programme commenced with a traditional lamp lighting ceremony by Prof. (Dr.) Rajesh Bahuguna, Dean of Law College Dehradun, along with Prof. (Dr.) Poonam Rawat. The opening session featured **Mr. Abijeet Gupta from Lexis Nexis, who discussed "Legal Research Beyond Cases**," and Mr. Arun Singh Thakur, Senior Librarian, who spoke about the authenticity and proper use of legal resources.

Additional sessions included discussions on the intersection of law and technology, featuring talks by Prof. (Dr.) Rajesh Singh and Dr. Anita Gehlot. The event concluded with rigorous training on legal databases like SCC Online and Manupatra.

Hindustan Yuva Sansad at Law College Dehradun

"**The Hindustan**" daily in collaboration with Youth Parliament Society of Law College Dehradun conducted "**Aao rajneeti karein**" an event on 1 April 2024. This Yuva Sansad was an open discussion with students about the importance of politics in the light of the upcoming elections 2024. Students and faculty of Law College Dehradun actively participated in the discussion. The event was moderated by Ms. Anushka Singh, President, Youth Parliament Society who initiated the session by sharing her views on the importance of youth participation in the politics. She then invited Prof. (Dr.) Rajesh Bahuguna, Pro Vice- Chancellor and Dean, LCD, to enlighten the students with his perspective on the right to vote and the value of each vote in a democratic setup. Mr. Ankit Raj, a student member, expressed his views on strengthening the roots of politics in student life to become a good leader in future for a better India.

He also stated that more than half of the population are youth in India and the rate of unemployment in India is increasing day by day. Hence, we need more job opportunities and a visionary leader. Besides, students the chairperson of the society, Youth Parliament Society, Dr. Bhawna Arora presented her views about the responsibilities of a leader towards its citizens. Thereafter, Mr. Krishna Sharma, student member, proposed his point on the importance of politics in students' life for the emergence of more empowering young leaders. Subsequently, Saumya Rawat, highlighted the expectations of teachers from the government regarding their wages, pension and training sessions and Amrit Raj Dubey, critically analysed the shortcomings of negative practices which is rampant in the field of politics and concluded the session by suggesting some of political reforms which shall be implemented for smooth governance of the nation.

Workshop on RTI Application and Drafting

Law College Dehradun hosted a workshop on RTI and an RTI Application Drafting Competition on 26 February 2024, organized by the Pro Bono Club in collaboration with the Legal Aid Centre. The event featured Mr. Virendra Kumar M. Thakkar from G. B. Pant Institute as the resource person, introduced by Prof. (Dr.) Poonam Rawat. A Q&A session followed his presentation, and a 30-question test assessed participants' understanding of RTI. After a break, students participated in the RTI drafting competition. The valedictory ceremony welcomed Mr. Yogesh Bhatt and Dr. Abhishek Joshi, along with university officials, for closing remarks and awards.

National Workshop on Insolvency and Bankruptcy Code

Law College Dehradun, part of Uttaranchal University, held a **National Workshop on the Insolvency and Bankruptcy Code (IBC), under its Alternative Dispute Resolution Centre**. Themed "**Cultivating Innovation: The Contribution of IBC in Fostering Indian Entrepreneurial Culture**," the event was attended by 105 students and all faculty members. **Advocate on Record Ms. Amrita Sarkar, with 12 years of experience in insolvency and arbitration law, led the session, covering key IBC concepts like CIRP, creditors, and the relationship with the SARFAESI Act. The workshop concluded with a Q&A session and a memento presentation by Dean Prof. (Dr.) Rajesh Bahuguna**.

PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

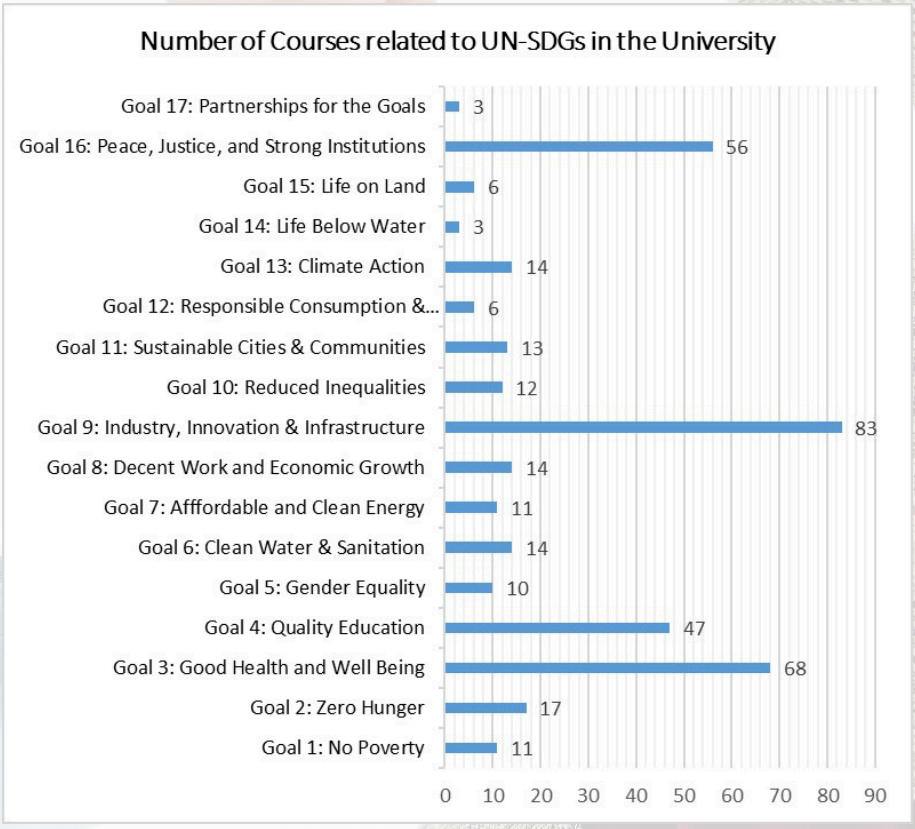
The All India IQAC Workshop fosters collaboration and connections with numerous organizations, strengthening quality assurance and innovative practices in education.

Uttaranchal University hosted the "**All India Internal Quality Assurance Cell (IQAC)-2024**" workshop on June 29, 2024, with Prof. Anil Dattatraya Sahasrabudhe, NAAC Chairman, as the Chief Guest. **The event featured prominent guests including Mr. Shailesh Bagauli (State Higher Education Secretary), Prof. Rangan Banerjee (Director, IIT Delhi), and Mr. Shantanu Rooj (CEO, TeamLease EdTech)**. Held in a hybrid format, the workshop attracted participants from universities and colleges nationwide, focusing on restructuring higher education to meet global challenges. **Key objectives included sharing best practices, addressing challenges, and fostering community engagement for ongoing academic and administrative improvements**.

Industry-Academic Collaborations

Uttaranchal University's Collaborations for Sustainable Development and Student Engagement

Uttaranchal University has forged strong collaborations with **various NGOs to promote the Sustainable Development Goals (SDGs), offering students opportunities for meaningful engagement and social impact. One key initiative is the Student Volunteering Program, where students actively work with NGOs addressing SDGs like poverty alleviation, quality education, clean water, and climate action. This hands-on experience not only enhances their leadership skills but also deepens their understanding of global issues. Notable clubs include Eco-Cops, dedicated to environmental education, and the Pro Bono Club, focused on legal aid for marginalized communities. These initiatives foster social responsibility, preparing students to contribute positively to society**.



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UNIVERSITY of Prince Edward ISLAND

UFA STATE PETROLEUM TECHNOLOGICAL UNIVERSITY

Uttaranchal University has signed several Memorandums of Understanding (MoUs) with various organizations. These partnerships aim to enhance skill development, research collaboration, and industry exposure for students, providing opportunities for internships and workshops, thus bridging the gap between academia and industry for better career preparation.

MOU WITH CPPRI

MOU WITH UTTARAKHAND POLICE

MOU WITH ICAI

80+ MoUs

EDITORS PROFILES

The Director of IQAC, Er. Rajesh Deorari possesses extensive industrial experience spanning over 15 years, with expertise in various sectors, including Paper manufacturing technology, BOPET Film Industry, Manufacturing of thick MDF lam boards, and the food industry. Notably, he contributed his valuable knowledge to a green field commissioning project in District Dhar, Madhya Pradesh, involving the erection and commissioning of a BOPET Film Plant under Vacmet Industries Ltd. His educational background includes a B. Tech and M. Tech in Mechanical Engineering, specializing in "Design & Production" from College of Technology, Pantnagar University. His primary industrial focus had been in Mechanical Machine Maintenance, Plant Equipment, and Overall Equipment Availability of the Plant. In the past, he had served as the TPM Coordinator for the BOPET- Film Plant Division at Ester Industries Ltd, Khatima. His expertise encompasses machine vibration analysis, 65, TPM, Kaizen implementation, and the implementation of Statistical Quality Tools in Production and Maintenance. Currently, under his leadership at Uttaranchal University, the IQAC is constructively engaged in various projects, including the development of ranking and accreditation frameworks for NAAC, NIRF, THE RANKINGS, QS, UNSDGS, UNEP, UNAI, and QCI etc. He is responsible for establishing a system that promotes conscious, consistent, and catalytic actions to enhance the institution's academic and administrative performance significantly, ensuring a bright future ahead.

Er. Rajesh Deorari,
Director-IQAC,
Uttaranchal University

Er. Sudhir Jugran has a comprehensive experience of 12 years in both administration and academia, serving as an Assistant Manager, IQAC at Uttaranchal University, Dehradun. He holds a pivotal role in the team of IQAC, focusing on comprehensive quality management. His expertise lies in various aspects of quality assurance, encompassing planning, strategic initiatives, auditing, and the development of quality-related documents for Higher Education Institutions (HEI). Furthermore, he shoulders the responsibility of imparting knowledge about ranking and accreditation processes to fellow employees and staff members. Sudhir is a dynamic and influential figure in his professional sphere, harnessing his positive outlook and boundless energy to motivate others towards hard work and success. His daily inspiration is drawn from the unwavering support of his wife and their delightful son, Shourya. In his leisure time, Sudhir indulges in the pleasures of reading and composing poems and stories, often revolving around ancient Indian philosophy.

Er. Sudhir Jugran
Assistant Manager,
IQAC,
Uttaranchal University

Er. Rishi Dev Nautiyal assumes the position of Assistant Manager, IQAC at Uttaranchal University, Dehradun, bringing with him a remarkable track record of over 9 years, blending experiences from the industrial and academic domains. His spirit is underscored by an impressive portfolio of published patents, one of which has been granted, underscoring his unwavering commitment to pioneering research. Mr. Nautiyal holds a pivotal role in advancing the university's pursuit of academic excellence. He is into making contributions in areas such as qualitative measures, NAAC initiatives, HEI portal management, THE Ranking , QS, UNAI engagement, institutional rankings, and the development of quality-related documentation. His leadership is instrumental in ensuring robust quality assurance practices and fostering a culture of continuous improvement within the institution.

Er. Rishi Nautiyal
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Disclaimer:
Please note that while every effort has been made to ensure the accuracy and completeness of the information presented in this report, it is subject to change and may not reflect the most current data or developments. This report represents the collaborative efforts and perspectives of various academic departments and individuals within our university community. The views expressed herein do not necessarily reflect those of the university as a whole. We welcome feedback and suggestions for future editions at iqac@uumail.in

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