

SPARK



A Newsletter for Don Bosco University family, alumni and friends

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INTERNATIONAL CONFERENCE ON MATHEMATICS AND APPLICATIONS IN SCIENCE, TECHNOLOGY AND SOCIETY



Workshop on Pearl Farming



Industrial Visit to NESAC



Educational Tour - Dept of Education



Symposium on Construction Technologies

Message from the Vice Chancellor

As we begin the new Academic Year, let me begin this message by welcoming all of you back to our campus. Each year our university presents to us a theme to inspire us. The theme encapsulates and summates all that we strive to achieve in the new academic year. It is a path leader blazing a new trail for our daily journey in this academic year 2024-25. And the theme is:

Transforming lives - the Don Bosco way!

To widen our circle of compassion towards all living beings and nature

To realise that we are a part of an ecosystem, a thread in a web of life

To answer our calling as stewards of the earth

This leitmotif reflects ADBU's commitment to holistic education, environmental stewardship, and nurturing a sense of purpose among students.

Don Bosco's Legacy: Don Bosco, also known as Saint John Bosco, was a 19th-century visionary who dedicated his life to educating poor and disadvantaged youth. During a time marked by unemployment due to war and industrial revolution, he championed an innovative approach. Don Bosco believed in providing education alongside practical skills relevant to the job market. He networked with the employers so that they provide safe environment and fair wages to his apprentices. **Holistic Education:** At Assam Don Bosco University, holistic education is at the core of our mission. We recognize that education extends beyond textbooks and classrooms. It encompasses character development, emotional intelligence, and life skills. Our goal is to nurture proficient, adept and multi-skilled individuals, living the life in all its fullness and contributing meaningfully to the society.

Networking with national and international universities, and NGOS like Wadhvani Foundation, EnAble India, YES Earth, Cambridge University Press & Assessment, Climate Change, Naandi Foundation, has helped our university to become provider of holistic education and accompany them with mentoring at various levels and skills.

Stewards of the Earth: As stewards of the earth, we emphasize sustainable practices. The various activities proposed by our various departments all focus on Environmental Stewardship. The Autumn Semester holds for you three international conferences, MCOP 2024, over 100 seminars and workshops focused on Social, Economic and Environmental Sustainability making our academic experience in our three campuses a unique one this year. We hold our environment precious by promoting Zero Waste, Waste Management and Recycling and address the issues of climate change. We encourage students to appreciate nature, engage in eco-friendly initiatives, and become responsible global citizens. Through research, awareness campaigns, and community involvement, we aim to create environmentally conscious leaders.

Part of An Ecosystem: At Tapesia Campus, we have Waste to Wealth Group. At the department, school level and residential area levels, this group can play a creative role. We invite these students to become part of the Ecosystem to safe guard our environment. They can



help in recycling the waste generated at our campuses by:

- helping to sort the Wet/Food wastes, Paper Wastes, Hard Board/Wood wastes, Thermocol waste, Plastic Wastes, Glass, and placing them in the correct waste containers.
- reducing our reliance on single-use plastics by opting for reusable items
- adopting eco-friendly habits, such as using public transportation, cycling, or walking instead of driving
- organising Campus cleaning drives: Students can organise campus cleaning drives /neighbourhood cleaning drives etc. And the sorted waste will be taken to the recycling centre of the University.

Purpose-Driven Learning: We believe that education should ignite a sense of purpose. Whether through academic pursuits, extracurricular activities, community service, online programmes like Swayam/NPTEL, Skills acquisition through Wadhvani Ignite and Employability skills, Language skills through Cambridge Communicative English, Mandarin, students discover their passions and develop a clear vision for their future. Our campus ministry fosters personal growth, empathy, and compassion, ensuring that education transcends mere knowledge acquisition.

The Dream That Makes You Dream: In alignment with the Salesian spirit, our theme echoes the motto set by the Rector Major of the Salesians of Don Bosco for 2024: "The dream that makes you dream." This phrase encapsulates our aspiration to inspire transformative dreams within our students. Just as Don Bosco's dream transformed the lives of many, we strive to inspire our students to envision grand aspirations and make a positive difference in the world.

Through these innovative steps, we take forward the SDG goals and the ViksitBharat@2047 to newer heights in our campuses. This will create a developed nation mind-set, a sense of self-responsibility and self-dignity. We make our campuses zero waste campuses in all aspects and make our campuses truly green campuses while we pursue excellence in learning.

**- Fr (Dr) Jose Palely
Vice Chancellor**

International Conference on Mathematics and Applications in Science, Technology and Society

An International Conference on 'Mathematics and Applications in Science, Technology and Society' was organized by the Department of Mathematics on 9-10 May 2024. The conference was financed and catalysed by Science and Engineering Research Board of India (SERB)-DST, Government of India.

The title conference brought renowned Mathematicians from across the country and abroad and also provided a common platform to not just research scholars and academicians but to post-graduate and under-graduate students, to share their research ideas and results.



Some of the eminent speakers were Professor M. Sundararajan, Professor & Head, Department of Mathematics and Computer Science, Mizoram University; Professor Anna Maria Spagnuolo, Oakland University, Michigan, USA; Professor Stefano Galatolo, University of Pisa, Italy; Professor Robin M. Dunbar, Emeritus Professor of Evolutionary Psychology, University of Oxford, United Kingdom; Professor Mohammed Sajid, Professor, Department of Mechanical Engineering, Al-Qasim University, Saudi Arabia; Professor James F. Peters, Computational Intelligence Laboratory, University of Manitoba, Winnipeg, Canada; Professor Martin Bohner, Curators' Distinguished Professor of Mathematics and Statistics, Department of Mathematics and Statistics, Missouri University of Science and Technology, USA; Professor Ravi Madhavan, Professor of Business Administration, University of Pisa, USA; and Professor Dhiren Kumar Basnet, Professor of Mathematical Sciences, Tezpur University, India.

The talks were divided into plenary sessions and invited talks that were spread over the two days of the conference. There were oral presentation sessions on both days. There were 200 participants in all, counting online and offline participants.

The keynote speaker at the talk was Prof. M. Sundararajan, who highlighted the importance of Mathematics to address many real life issues. He also elucidated his ground breaking work on mapping water quality dynamics in the Damodar River, showcasing a model with remarkable predictive accuracy. He also talked about many possible applications of his work and stressed the importance of these kind of researches.

Professor Anna Maria Spagnuolo, in her talk, addressed "how mathematics have had wonderful applications in the treatment of different human diseases", Professor Bohner Martin, discussed on the advancement of mathematics from the point of quantum theory", Professor Ravi Madhavan talked about "how the modern human culture, human civilization and various economical advancements are stimulating for innovation and discoveries in mathematics from time to time", Professor James F. Peters discussed about "how different mathematical tools are helping the advancements of modern science and technology", Professor Stefano Galatolo focused on the role of Dynamical systems in modern mathematics, Professor Robin M Dunbar delivered a wonderful talk on "the close link between mathematics, human psychology and brain", Professor Mohammed Sajid and Professor Dhiren Kumar Basnet discussed on some interesting aspects of Pure Mathematics.

The participants had a wonderful experience witnessing the presentations made these eminent Professors. Overall, the conference brought to focus the central role of Mathematics in our life. The Conference achieved the following prime goals:

- to bring together leading international experts to discuss the latest trends and advances in mathematics and their applications in various fields,
- to build future collaborative activity and to contribute to the achievement of the Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations.
- to give a chance to the young researchers working at different parts of our country and abroad to present their research work with opportunities to exchange ideas on relevant mathematical problems with their counterparts and specialists.
- to make the students aware of some thrust areas relevant to contemporary research in mathematical science, groom their budding talents, and mould their careers in the field of research.
- to make the upcoming mathematicians understand the value of mathematical education and its tremendous impact on society in a better way,
- to play a crucial role by the mathematicians as "Cradle of Knowledge"—how to solve the problems being faced by the whole mankind on the globe.
- to create a culture of holistic & multidisciplinary education and research for all round development of North East India.

Symposium on Construction Technologies

The Department of Civil Engineering organized a symposium on 'Construction Technologies: Changing Paradigms from past to present' on 18th May 2024.



In the first session, a talk was delivered by Professor (Dr.) TV Bharat, Professor, Department of Civil Engineering, IIT Guwahati. He spoke on the 'Relevance of Indian Knowledge System in Civil Engineering.' His talk highlighted the rich technical prowess of the indigenous construction technology that created exquisite structural masterpieces be it temples, step wells, forts or bridges that have existed since centuries without damage. An overview of the scientific principles of Vaastu Shastra, an integral component of the ancient Indian Design philosophy was also provided. In conclusion, the talk underscored the need of an extensive scientific study of the ancient Indian Construction Technology and its integration in Modern Construction methods.

Dr. Rizwan Uz Zaman, Senior Technical Consultant, Assam Climate Change Management Society, Govt. of Assam delivered a speech on 'India's Climate Policy-Climate Resilient Urban Planning and Processes' in the second session. His talk highlighted the Climate-resilient urban planning and processes that are imperative for India and Assam to effectively address the challenges posed by climate change. Through a comprehensive policy framework, and innovative strategies, climate resilience is ensured by implementing Blue-Green Infrastructure, Sustainable Transportation, Water Management and Energy Efficient integrated Urban Planning. This includes incorporating climate risk assessments in land use planning, zoning regulations, and building codes.

Both the sessions were highly appreciated by the participants as they provided the changing landscape from the glorious of construction heritage of the past to the more sustainable and green infrastructure of the present. The event was coordinated by Dr. Pori Das and Dr. Chinumani Choudhury, Assistant Professors with sincere support from Dr. T.R. Girija, Head, Department of Civil Engineering. 90 students and faculty from the Department of Civil Engineering participated in the symposium.

Workshop on Career Guidance Counselling

A workshop was organized on 6th May 2024 by the Department of Psychology in collaboration with the School of Police Science and Security Studies (SPSSS), National Forensic Science University (NFSU), Gandhinagar, Gujarat, India, on career guidance counselling.

The mode of the workshop was online (Google meet), and more than 50 students actively participated in the workshop. The workshop was organized for the final semester UG students and open for all the departments of the University. The resource persons were Mr. Abhishek Dadhich, Assistant Professor, School of Police Science and Security Studies (SPSSS), Gandhinagar, Gujarat and Mr. Keval Pandya, Lecturer, School of Police Science and Security Studies (SPSSS), Gandhinagar, Gujarat. The resource persons discussed about Geopolitics, International Relations, Risk Analysis, Network Security, Cyber Defense, and Homeland security and talked about the promising career opportunities related to these areas of professional development.

Seminar on Relevance of IPR in Innovation and Entrepreneurship

The Department of Civil Engineering, in collaboration with the Institution's Innovation Council (IIC), organised a seminar on 'Relevance of IPR in Innovation and Entrepreneurship' on the occasion of World IP Day, 26th April 2024. The event aimed to raise awareness about Intellectual Property (IP) and its significance in fostering innovation and entrepreneurship.

Dr. Girija T R, Head of Civil Engg. Department, delivered the welcome speech, setting the tone for the event. Mr. Arup Baruah, President of IIC and Assistant Professor, Department of Computer Science and Engg., highlighted the initiatives of IIC and the commitment of Assam Don Bosco University towards fostering innovation among students.

Dr. Karabee Das, Program Manager, Technology Innovation at Atal Incubation Centre SELCO Foundation then delivered her address on the "Relevance of IPR in Innovation and Entrepreneurship," where she elucidated different types of IP with practical

examples. She showcased a case study on Zerund Manufacturing Pvt. Ltd., illustrating the challenges and stages of innovation. Dr. Das also discussed the key focus areas of Atal Incubation Centre, SELCO Foundation.

The session concluded with an interactive question and answer segment, providing students with an opportunity to engage with Dr. Das. The seminar served as an important platform for students to gain insights into Intellectual Property and its relevance in innovation and entrepreneurship. It aligned with the objectives of the Institution's Innovation Council, reflecting the commitment of Assam Don Bosco University to nurturing a culture of innovation among its students. The seminar was attended by 114 students and 11 faculty members of Assam Don Bosco University.

Department of EEE conducts student internship and industry visit

The Department of Electrical and Electronics Engineering conducted an intensive in-house summer training program for second-semester students from June 19 to June 28, 2024.

This program was designed to provide a robust foundation in electrical engineering, combining theoretical knowledge with practical skills. The syllabus encompassed a broad range of topics including an introduction to the workshop, attributes of an electrical engineer, scientific temper, and career progression. It also covered the historical perspective of electricity, famous inventions, the AC vs. DC debate, and profiles of renowned electrical engineers and scientists. Current advancements in electrical engineering were discussed, along with fundamental concepts of electricity, AC and DC systems, and measurement techniques for current, voltage, power factor, power, and frequency. Emphasis was placed on electrical safety rules, the Indian Electricity Act of 1910, the Indian Electricity Rules of 1956, and typical IEEE standards.



Students were introduced to simulation, its importance, limitations, and various simulation software. Practical aspects included house wiring types, calculations, battery connections and maintenance, DC and AC sources and loads, power rating determination, earthing, and fuse protection. The program also covered DB connections, switch-board and inverter connections, electrical lamps and lighting, pumps, ventilation, air conditioning, and single-line diagrams. Simulation examples were provided for hands-on experience.

A notable highlight was the industry visit to Elen Engineering, a transformer manufacturing industry at Garal, Kamrup, where students observed the transformer manufacturing process from the scratch to completion, providing real-world context to their learning. The training program was highly successful, equipping students with essential skills and knowledge, and preparing them for future academic and professional challenges in the field of electrical engineering.

Fund Raising Campaign

The Department of Psychology initiated an Autism Awareness Campaign by organizing Fund Raising Campaign for Society for Health & Education Development (SHED), Projonmo and Ashadeep. These three reputed organizations of Guwahati are dealing with children with special needs. The fund-raising campaign was organized on 14th May 2024 from 2 PM onwards at Academic Block-II of Assam Don Bosco University, Tapesia Gardens, Sonapur Assam.

The students of these organization made beautiful handicrafts such as flowers, flower pots, pen stands, greeting cards, decorative diyas and wall hangings, particularly using ropes, wool and waste materials. These items were brought by the staff members and were put up on sale for the purpose of fund raising. Many students and faculty members from different departments participated in the event and contributed to the fund-raising activity.

Self Composed Singing Competition

On 20 May 2024, the Department of Education in collaboration with Educare Club organised a self-composed singing competition to fulfil one of the objectives of Vikshit Bharat Abhiyan.

The programme began at 2:45 PM. The MC of the programme was Florence Lallungawi, the Educare Club Coordinator, who gave a brief introduction of the programme and welcomed our judge Dr. Sontara Konwar Boruah, Associate Professor, Department of Chemistry. The competition had two categories: Solo performances and Group performances. At around 4:00 PM the winners were announced after the competition was over. It was an interesting, fun and memorable day of finding many talented students in the campus.



Lecture on Application of GIS in Public Health

The Institute of Pharmacy conducted a Special Lecture Series 2 on “Application of GIS in Public Health” was held on 15th May 2024, at the Auditorium (Block 1) of Assam Don Bosco University. The event commenced with a warm welcome address and introduction of the esteemed speaker, Dr. Stabak Roy, by Ms. Waibiangki Lyngdoh, Assist. Prof., Institute of Pharmacy, ADBU.



Dr. Stabak Roy, a prominent figure in academia and industry, delivered a captivating talk encompassing the comprehensive spectrum of Geographic Information Systems (GIS) during the Special Lecture Series 2 on the “Application of GIS in Public Health.” With a Ph.D. and a position as a Lecturer at the University of Gdansk, Poland, Dr. Roy brings a wealth of knowledge and expertise to the discussion. As the Co-founder & CEO of Kinetic Craft Career Solution Pvt Ltd. and Director of KND Think Thank Academy LLP, he possesses a deep understanding of both theoretical concepts and practical applications of GIS.

Dr. Roy’s talk provided an insightful overview of GIS, covering its definition, historical evolution, and significance in various domains. Specifically, he elucidated the pivotal role of GIS in public health, showcasing its applications in disease surveillance, epidemiology, healthcare planning, and environmental health analysis. By exploring real-world case studies and examples, Dr. Roy demonstrated how GIS technology can revolutionize public health practices, facilitating informed decision-making and proactive interventions. His expertise and engaging presentation style left a lasting impression, inspiring attendees to harness the power of GIS to advance public health initiatives.

The purpose of conducting the Special Lecture Series 2 on the “Application of Geographic Information Systems (GIS) in Public Health” for pharmacy students and faculty is multifaceted. Firstly, it aims to expand the understanding of how GIS technologies can effectively analyze and address public health challenges. Secondly, it seeks to equip pharmacy students with practical skills and knowledge to integrate GIS into their future practice, enabling them to comprehensively contribute to community health initiatives. Additionally, it serves as a platform for faculty to stay updated with emerging trends in healthcare technology, fostering continuous learning and innovation within the academic community. The series fosters a collaborative environment for advancing public health outcomes through GIS expertise.

The lecture was followed by an engaging discussion session, allowing participants to delve deeper into the subject matter. Dr. Devid Chutia, Associate Professor, IoP, ADBU, provided a concise summary of the event, highlighting key takeaways and emphasizing the importance of GIS in the field of public health.

Industrial Visit to NESAC

On 22nd May 2024, a group of 33 students accompanied by 2 faculty members from the Department of Computer Science and Engineering paid a visit to the North Eastern Space Applications Centre (NESAC) in Shillong. This industrial visit was organized to provide students with insights into space technology applications, specifically tailored for the North Eastern region of India.

The visit commenced with informative talks that highlighted NESAC's pivotal role in disaster management, resource monitoring, and telecommunication services using space technology. These sessions were led by NESAC experts who shared their experiences and discussed ongoing projects that directly benefit the Northeastern states.

Students were treated to a comprehensive tour of NESAC's state-of-the-art facilities. This included visits to the Space and Atmospheric Science lab, Navigation lab, and the Geographic Information System (GIS) and IT department. The tour provided a firsthand look at the sophisticated infrastructure and equipment used for satellite data analysis and application development.



A particularly fascinating part of the visit was the demonstration at NESAC's Unmanned Aerial Vehicle (UAV) lab. Students witnessed how UAV technology is employed for various applications such as agricultural monitoring, environmental surveys, and disaster response. The practical demonstration sparked enthusiasm among the students regarding the integration of drone technology with space applications.

NESAC's dedication to leveraging space technology for sustainable development in the Northeastern region was clearly evident throughout the visit and interaction with their scientists. The center's initiatives in disaster management, ecological monitoring, and connectivity enhancement play a crucial role in addressing regional challenges and fostering growth. The industrial visit to NESAC proved to be an invaluable educational experience for the students. It not only broadened their understanding of space technology applications but also provided inspiration for potential career paths in the field. Interacting with professionals at NESAC and witnessing cutting-edge technologies in action left a lasting impression on the students, igniting their curiosity and enthusiasm for the limitless possibilities of space exploration. In conclusion, the industrial visit to NESAC was a resounding success. It offered students a rare opportunity to explore the intersection of space technology and regional development firsthand. The Department of Computer Science and Engineering, Assam Don Bosco University, extends its heartfelt gratitude to NESAC for facilitating this enriching experience. Such initiatives are instrumental in nurturing the next generation of innovators and professionals in the field of space science and technology.

DBU Students Shine in PwC Launch Pad Programmes

PricewaterhouseCoopers (PwC) International Limited, a multinational professional services company, had two launch pads namely "Cyber Security" and "Cloud Computing".

The following students were selected for both launch pads and students were able to perform their best in both the categories in pan India level in their first six month's certificate programme.

For Cyber Security launch pad in PwC - Snehil Jha, Piyush Roy, Musaddique Anwar, Hrishiraj Modi, Mmhachio Yanthan
For cloud computing launch pad in PwC - Aman Kayum, Ankit Prasad Verma, Mostafizur Rahman, Anirban Paul, Tanmay Das, Ashraful Haque, Dilshad Anwar



Educational Tour by Department of Education

The students of BA 6th Department of Education went on an Educational Tour to Kolkata and Bolpur in West Bengal from 18th April-25th April, 2024.

12 students were accompanied by Dr. Zacharias Tirkey, Assistant Professor (Stage-2) Department of Education. On arriving their destination, students learned by observing the majestic architectural design of the 17th Century ruler in India. There were various sections wherein various pictures, drawings, art and literatures of the past Capital City of India during the British Period portrayed for knowledge on the rich heritage of India.



Student also visited Indian Museum Kolkata where their eyes were captured by various fossil plants, animals, humans, mummy that totally gave them a glimpse of ancient, medieval and modern India as well as European world and the evolution engravings of human ancestors which gave a tone to biological history of how life unfolded through evolution. The group also paid a visit to Mother's Wax Museum, Kolkata; the old resident of Rabindranath Tagore; Victoria Palace and Santiniketan Bolpur.

Workshop on Pearl Farming

The Department of Zoology Assam Don Bosco University, in collaboration with IQAC conducted a One Day Workshop on Pearl Farming on the 9th May, 2024. The Resource person for this event was Dr. Akalesh Kumar Verma, Assistant Professor, Department of Zoology, Cotton University.

The primary objective of this workshop was to train the students in the field of Entrepreneurship with regards to Pearl farming. The event was divided into two sessions. The first session was theoretical and the second session was practical in which the students had a hands-on session to learn about pearl farming. In the first session, Dr. Akalesh introduced the participants into the world of pearls. He dived into the various tools required for pearl farming, the different techniques used for different types of pearls, methods of surgery and rearing of the different types of molluscs used for Pearl culture. He explained the benefits of Pearl farming especially in North Eastern parts of India where very few farmers take up pearl farming and that a huge scope and opportunity is available for people from the region.



The second session was a hands-on training. Dr. Akhalesh showed the participants how to make a nucleus for pearl farming and showed them the surgical aspect after which all students were provided with mussels so that they can do the hands-on surgery. The workshop concluded with good feedbacks from all the participants. Dr. Jane Shangpliang, Head, Department of Zoology extended her sincere gratitude to the Resource person and presented him with a certificate of appreciation. The workshop was attended by a total of 35 participants.

Certificate Course in Effective Communication Skills

A Certificate Course in 'Effective Communication Skills' was conducted jointly by the Internal Quality Assurance Cells (IQACs) of Assam Don Bosco University (ADBU) and Don Bosco College Kohima (DBCK), Nagaland from 25 June to 29 June 2024 at Don Bosco College, Kohima.

The course aimed to enhance communication skills and improve interpersonal skills among newly inducted 468 undergraduate students from various departments of DBCK. The four resource persons from Assam Don Bosco University were – Dr. Nabamita Das, Dr. Alpana Choudhury, Dr. Pritam Priya Goswami & Mr. Gautam Gogoi. The students were divided into four groups to ensure impactful learning and interaction during both practical and theoretical sessions. The structured curriculum of the course effectively blended practical application with theoretical understanding of concepts.

The sessions during the five-day programme were meticulously planned to cover essential aspects of communication, including verbal and non-verbal communication skills, interpersonal communication, body language, basic phonetics, presentation skills and effective writing skills for professional success. The programme, coordinated by Dr. Nabamita Das from ADBU, facilitated interactive discussions, practical exercises, and group presentations to foster a holistic learning experience for all the students. Participants from all the four groups were actively engaged in insightful discussions and group activities throughout all the sessions. Overall, the certificate course was instrumental in equipping the fresh UG students with essential competencies vital for their academic journey and future professional success. Further, this joint academic collaboration fostered a bond of cooperation between the two institutions and paved the way for future collaborative ventures in the field of higher education.

Navigating the journey from Academic to Entrepreneurship

The Department of Zoology in collaboration with Eco Club, Assam Don Bosco University organized a Counselling Session on 'Navigating the Journey from Academia to Entrepreneurship' on 26th April, 2024, at the Auditorium Academic Block I. The Speaker for this event was Dr. Bula Choudhary, Senior Scientist, Guwahati Biotech Park, Assam.

The objective of the session was to bring together students of the various departments of the School of Life Sciences and introduce entrepreneurship opportunities, that are often considered distant from the usual academic professions, and help them navigate through the process.

The program kick-started with Ms. Natasha Boruah, student of MSc Zoology 2nd Semester, sharing a short idea about the objectives and role of the counselling session. Dr. Prasanta Kr. Choudhury, Director, School of Life Sciences, felicitated the guest speaker and presented the welcome speech. He urged the students as well as the faculty to seize any opportunity that comes with the session.



Dr. Bula Choudhary was then invited to the stage to start the presentation where she explained basic concepts about the entrepreneurship ecosystem. She introduced the risks and opportunities that comes with venturing into entrepreneurship from an academic background. She elucidated different examples of innovations and entrepreneurship journeys in the scientific field such as, biodegradable plastic, fabric dye produced from bacterial culture, local fish feed, eco-friendly packaging material, water purifier and so on. She briefed about the different funding agencies and schemes in both the public and the private sector like the National Innovation Foundation, the Global Bio-India, National Science and Technology Entrepreneurship Development Board, Oil India Limited, Ideation by NRL, NECTAR, and so on. She also introduced the variety of facilities, instruments and laboratories that are presently available at the Guwahati Biotech Park, Assam, as well as various upcoming projects and plans of the institute. She emphasized on the importance of choosing the right partners in any entrepreneurial ventures. Dr. Choudhary urged the students to visit the Guwahati Biotech Park and also expressed her desire to collaborate with Assam Don Bosco University in future projects that will be hosted at the institute.

Dr. Bula Choudhary's presentation was followed by a brief Question and Answer session for the students. The session had 105 students in attendance, along with representatives from 10 different Faculties from various Departments.

Seminar on Sustainable Development

Debraj Roy College, in collaboration with Assam Don Bosco University, Tapesia, hosted a comprehensive One-Day Workshop titled "Techniques for Wildlife Monitoring: Occupancy Sampling and Hands-on Session with Presence and R Program" on May 13, 2024. This joint venture was undertaken as a part of the MoU between the two institute in their endeavour to promote academic collaboration and foster excellence in research acumen among the students and the faculties of both the institute. The workshop was facilitated by Dr. Samrat Sengupta, Assistant Professor at Debraj Roy College, Golaghat, and Subhasish Arandhara, Wildlife Ecologist at CBRC Wildlife Trust of India, Arunachal Pradesh, and aimed to equip participants with essential skills and knowledge for effective wildlife monitoring and conservation.

The workshop attracted 37 participants who were keen to delve into the intricacies of wildlife monitoring techniques. The event was structured into three insightful sessions, each led by a distinguished resource person. Dr. Samrat Sengupta commenced proceedings with a detailed discourse on wildlife monitoring, emphasizing various sampling techniques and the significance of laying out transects. Drawing from his expertise, Dr. Sengupta elucidated on estimating occupancy under

imperfect detection, population estimation, census methodologies, and the importance of biostatistics in designing effective monitoring protocols. Encouraging participants to engage in fieldwork and pursue projects, he underscored the critical role of methodology design tailored to target species.

Mr. Subhasish Arandhara then took over, providing participants with fundamental insights into ecology and the commendable conservation efforts led by organizations like WTI and IFAW. Mr. Arandhara introduced attendees to various study designs, occupancy models, and software tools such as Presence and R. The hands-on session saw participants actively engaging in occupancy modelling exercises, gaining practical experience in data management and analysis.



The culminating session featured a captivating field survey, where participants were led to the Elephant Walk for an owl survey. During the survey, participants identified and reported four species of owls, underscoring the significance of conservation efforts for these majestic creatures. Dr. Sengupta also imparted valuable insights into owl conservation and recommended tools for future surveys. Reflecting on the event's success, Dr. Samrat Sengupta expressed his gratitude to the participants and emphasized the importance of collaborative efforts in wildlife conservation. "This workshop not only equipped participants with practical skills but also fostered a deeper understanding of the urgency of conservation efforts," he remarked.

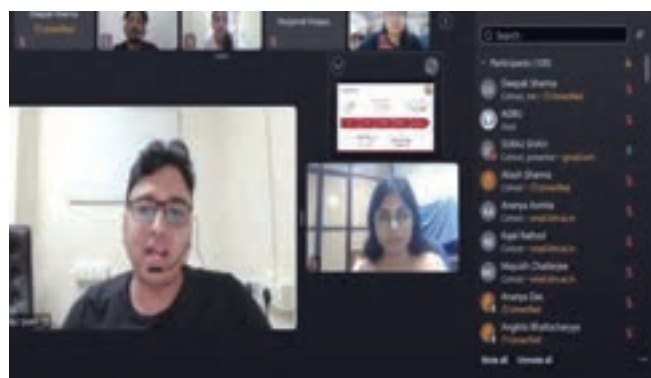
The workshop served as a testament to the commitment of Debraj Roy College and Assam Don Bosco University towards environmental stewardship and wildlife conservation. By empowering participants with knowledge and practical skills, the event has undoubtedly contributed to the ongoing conservation endeavours in the region.

Workshop on Proteins in the Lens of Molecular Landscape

The Institute of Pharmacy conducted a 4-day workshop on 'Proteins in the Lens of Molecular Landscape: Computational Biology in Drug Engineering and Targeting Diseases - under the aegis of Viksit Bharat @ 2047 on 9-12 August 2024.

The "Proteins in the Lens of Molecular Landscape" workshop aimed to enhance participants' comprehension of disease mechanisms at the molecular level, proficient exploration of protein structure and function, familiarity with molecular biology instrumentation techniques and assays, hands-on experience in Molecular Dynamics (MD) simulations, improve skills in drug engineering and disease targeting, and networking opportunities with fellow researchers.

In the first session, Ms. Kajal Rathod, a PhD Scholar and Prime Minister's Research Fellow at the Department of Biotechnology, IIT Madras, delivered an insightful talk on "Molecular Basis of Diseases & Molecular Targets." In her presentation, she delved into the intricate molecular mechanisms underlying various diseases and identified potential molecular targets for therapeutic intervention. Attendees appreciated the depth of her analysis and recognized the relevance of her research in advancing our understanding of disease pathology and developing targeted treatments.



Ms. Ananya Asmita, a PhD Scholar and Prime Minister's Research Fellow at IIT Madras, delivered a concise yet insightful talk "Proteins: Structure, Function, & Determination" in the second session. She elucidated the complexity of protein structures, their diverse functions, and the advanced techniques employed for their determination, including X-ray crystallography and NMR spectroscopy. Attendees appreciated the clarity of her presentation and recognized its potential implications across various scientific disciplines.

In the third session, Ms. Diksha Mall, a PhD Scholar and Prime Minister's Research Fellow at the Department of Biotechnology, IIT Madras, delivered a talk on "Functional Assays & Instrumentation Techniques." In her presentation, she elucidated various experimental assays used to assess the functional properties of biomolecules and discussed the instrumentation techniques

essential for conducting these assays effectively. Attendees commended Ms. Mall's comprehensive overview of functional assays and instrumentation, recognizing the significance of these techniques in elucidating biological processes and advancing scientific research.

In the fourth session, Mr. Mayukh Chatterjee, a PhD Scholar and Prime Minister's Research Fellow at the Department of Biotechnology, IIT Madras, presented an informative paper on "Molecular Dynamics Simulations: Basics & Practical Applications." During his talk, he provided an in-depth introduction to molecular dynamics simulations, covering fundamental concepts and demonstrating their practical applications in studying biomolecular systems. Attendees praised Mr. Chatterjee for his clear explanation of complex topics and recognized the potential of molecular dynamics simulations in advancing our understanding of biological phenomena and aiding drug discovery efforts.

Career Counselling Seminar

A Career Counselling Seminar was organized by the Department of Mechanical Engineering, Assam Don Bosco University School of Technology on 16th May, 2024. The resource person for the seminar was Partha Pratim Baruah, Founder and Director, Vidhi Analytica. The introduction of the resource person and opening speech of the seminar was given by Dr. Buljit Buragohain, Head, Department of Mechanical Engineering and Chairman, Career Guidance Cell, Assam Don Bosco University's School of Technology. The students as well as faculty members attended the seminar.



Partha Pratim Baruah said that it is very important to have a mind-set to become an entrepreneur and should be like Lord Ganesha, having a long nose to smell the future and big ears to listen to the surroundings minutely to anticipate the business trends and take necessary courses on time. Learning in the classroom should be clearly correlated to the industrial applications and try to figure out the shortcomings and come up with innovative solutions which can be translated into a business operation. Partha Pratim Baruah, as a founder of Vidhi Analytica, an agri-tech startup established in 2020 and based out of Guwahati, informed that they are trying to provide solutions to the farmers for the pressing problems with the help of state-of-the-art technological interventions with the help of Indian Traditional Knowledge system and scientific approach. They are using technologies like ML/AI and IoT for the benefit of the farmers. 40 students attended the Seminar.

Outreach Programme by the Department of Mechanical Engineering

As a part of the Outreach Program, a Career Awareness Workshop was organized by the Department of Mechanical Engineering on 4th May, 2024 at Auniati Kamaldev Higher Secondary School, North Guwahati. The resource persons for the workshop were Dr. Buljit Buragohain, a prominent career counsellor of the state and Head, Department of Mechanical Engineering of Assam Don Bosco University School of Technology and Kamaldeep Kalita, Assistant Professor of the Department of Mechanical Engineering.



Dr. Buljit Buragohain explained that students should choose disciplines and subjects in higher secondary according to their personality, interests and skills. He discussed various trades of ITIs and three-year diploma courses of Polytechnics that students can study after passing the high school examination. He talked about the importance of reading newspapers. Dr. Buljit Buragohain also mentioned the need for general knowledge in various competitive examinations and interviews conducted for recruitment. Apart from clearing the doubts of the students while choosing the right career path, Dr. Buragohain also informed about the free Career Counselling over phone (9435188630) on every Saturday from 6 PM to 9 PM. Another resource person, Mr. Kamaldeep Kalita informed the students about the importance of having a goal in one's career. He also explained about the use of technology-based learning and briefed about the proper utilisation of the internet in learning. The workshop ended by giving vote of thanks by Purabi Bhorali, Principal of Auniati Kamaldev Higher Secondary School, North Guwahati. The number of participants of the workshop was 34.

MNE Alumni Talk

The Department of Mechanical Engineering organized an alumni talk on 16th May 2024 with Bishnu Prakash Medhi and Sidartha Bora, the 2nd Batch of B. Tech Alumni of the Department of Mechanical Engineering addressing the students.

Mr. Bishnu Prakash Medhi shared his journey with the students. Mr. Medhi as a project lead in Assam Don Bosco University Consultancy at the SFURTI scheme is involved in drafting and implementing six major project clusters. These clusters focus on industries like tea, handloom, handicraft and food processing; with the aim of uplifting communities. Additionally, he recently began delving into motorcycle engineering research, specifically looking at ways to improve rider comfort through better design. He said that when we are passionate about what we do, we can overcome any challenges that come our way.



Sidartha Bora shared how he began his career as a robotic trainer in Kolkata, where he developed a keen interest in 3D Printing. He has a background in CAD Designing, under a certified course from MSME during his undergraduate studies. Recently, he had the privilege of collaborating on a project with Tezpur Medical College. Together, they successfully implemented a 3D printed scaffold for regenerative bone growth, and informed that the operation was a success. Building on this achievement, he is now pursuing his PhD, focusing on further research in tissue-engineering bone scaffolds, specifically for upper limb bones, 40 students participated in the event.



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