





Short Term Course on “Transportation Geotechnics” under GIAN

The School of Infrastructure conducted a short term course on “Transportation Geotechnics” during 9-13 December 2024 under the Global Initiatives for Academic Networks (GIAN), an initiative by the Ministry of Education, Govt. of India. One of the objectives of GIAN is to provide opportunity to our students to seek knowledge and experience from reputed International faculty. It was attended by more than forty participants, which include largely the students, faculty members, researchers and Engineers from the Industry.



Transportation Geotechnics is a crucial field that plays a pivotal role in ensuring safe and efficient movement of people and goods on our roadways, railways, and other transportation infrastructure. Lectures in the course were delivered by Dr. Deb Mishra from Oklahoma State University, USA and the programme was coordinated by Dr. U. C. Sahoo. Dr. Mishra has research interests in the generic areas of Infrastructure Materials, Pavement Engineering, Railroad Engineering, and Transportation Geotechnics. He serves as an active member of several Transportation Research Board (TRB) and American Society of Civil Engineers (ASCE). The course was very interactive and highly appreciated by the participants.





Short course on Next-Generation Semiconductors: RISC-V, AI, and TL-Verilog

School of Electrical and Computer Sciences, IIT Bhubaneswar conducted a two-week short course on Next-Generation Semiconductors: RISC-V, AI, and TL-Verilog from 09th December to 20th December 2024. This course was funded by GIAN (Global Initiative on Academic Network), an MOE scheme. Mr. Steve Hoover, founder of Redwood EDA, a Massachusetts startup specializing in emerging digital logic modeling tools and methodology, was the main resource person along with Dr. Srinivas Boppu, and Dr. Ayan Palchadhuri from school of electrical and computer sciences.



This course has provided hands-on experience with next-generation design methodology and tools, RISC-V CPU design, and exposed the participants to semiconductor fabrication process. Participants learnt how large design teams work together to accomplish one of mankind's most remarkable accomplishments—turning sand into microchips with billions of transistors and teraflops of computing power. Participants were exposed to advanced design tools and methodologies powered by the open-source community before they are broadly adopted by the industry. Participants learnt Transaction-Level Verilog, exposed to the Makerchip IDE, including the Open Lane flow. Participants had a chance to design and demonstrate their simple designs using a TinyTapeout FPGA boards throughout the course. Towards the end of the course, participants were able to design their own simple pipelined version of RISC-V core using TL-Verilog.



Scientific Talks at SEOCS



Two scientific talks were organised at the School of Earth, Ocean & Climate Sciences for the school's faculty and students on 29th November 2024.



Prof. Joseph Meert of the University of Florida, a global expert in the study of Paleomagnetism, Polar Wander and Supercontinent Reconstruction” gave a talk on “Quarter Century of Indian Paleomagnetism: A comprehensive history”. He illustrated the suturing of Dharwar and Bastar Craton occurred at ~ 2.5 Ga while Bhandara and Bundelkhanda Cratons took place at ~ 1.0 Ga.

Prof. Stephanie Werner of the Centre for Earth Evolution and Dynamics of the University of Oslo in Norway, an eminent researcher in the study of Martian meteorites, and Craters of different planets, gave a talk on “Time travel on Earth, Moon and Mars”. She explained vividly about the difference in the distribution of impact craters on Earth, Moon, Mars, and Venus surfaces as a phenomenon of planetary dynamics.





NVS PM Shri Science Teachers Training Programmes

The Continuing Education Section of the Institute organised Navodaya Vidyalaya Samiti PM Shri Science Teachers Training Programmes in two batches. The first batch was imparted training from 10th December to 14th December 2024. The programme for the second batch was conducted from 17th December to 21st December 2024. More than 100 participants participated in the both the batches.



Prof. Shreepad Karmalkar inaugurated the programmes and deliberated upon pedagogy, levels of thinking and the measurement of learning outcomes. He stressed that best method for learning includes interaction and activity.

Prof. V. Pandu Ranga, Dean (Continuing Education) gave an overview of IIT Bhubaneswar and informed them about the objectives and various activities being taken up by the Continuing Education Section.

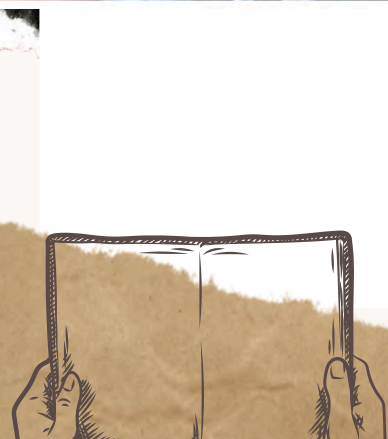
Prof. Snehasis Chowdhuri, School of Basic Sciences was the coordinator of the programmes.





Talk on "Scientific Writing: how to make it easier and enjoyable?"

Prof. Avijit Gangopadhyay, Commonwealth Professor at UMass Dartmouth and ANRF-VAJRA Faculty at IIT Bhubaneswar, delivered a talk titled "Scientific Writing: How to Make It Easier and Enjoyable?" on 17th December 2024 at SEOCS seminar room. The session aimed to make scientific writing more engaging and efficient, followed by an interactive discussion that encouraged active participation from over 50 attendees across various Schools of IIT Bhubaneswar. The talk was to benefit students and researchers by improving their writing skills.





Short-Term Training Course on Computer Basics

The certificate distribution programme of short-term training course on computer basics was held on 21st December 2024. This course was conducted from 8th July 2024 to 22nd August 2024. The programme spanned 16 classes, offering fundamental knowledge of computer applications and practical skills. It was jointly organized by UBA (Unnat Bharat Abhiyan) and CDC (Career Development Cell), IIT Bhubaneswar, with a focus on empowering individuals from rural and institutional backgrounds with digital literacy.

On 21st December 2024, the certificate Distribution program was organised. All the respected dignitaries including Prof. Shreepad Karmalkar, Director, Dr. Seema Bahinipati Chief Coordinator, UBA, Dr. Srikant Gollapudi, Professor-in-Charge, CDC, Dr. Tarakanta Nayak, Co-coordinator, UBA and Dr. Raj Kumar Singh graced the occasion





The programme focused on a diverse group of beneficiaries, including security guards of IIT Bhubaneswar and young residents from nearby villages, namely Khudupur, Padanpur, Podapada, and Argul. Additionally, security personnel of the Institute also participated in the programme.

The sessions were conducted by a team of dedicated instructors, including UBA volunteers and SBS lab attendants.

The training covered a broad syllabus, which included modules from PGDCA (Post Graduate Diploma in Computer Applications) and additional practical lessons on essential skills such as using net banking, uses of UPI and the Universal Ticketing System (UTS). These additional topics were included to address real- life applications of technology, enhancing the participants' digital competency.

This training programme proved to be highly impactful in bridging the digital divide for its participants. It not only equipped them with foundational computer skills but also familiarized them with essential tools and technologies relevant to daily life and work. Such initiatives by UBA and CDC-IIT Bhubaneswar demonstrate the institution's commitment to community outreach and skill development, particularly in rural areas. The programme successfully empowered the beneficiaries to adapt to the growing demands of the digital world, contributing to their personal and professional growth.





Success of our Students

Winner of TMS Image Competition

Ms. Sheetal Samal M.Sc. (Geology) student of 2022-24 batch is one of the winners of the TMS Image Competition 2024 organised by 'The Micropaleontological Society'.

The Micropaleontological Society (TMS) was initiated at the UK and later became a global forum for people working in the field of micropaleontology. The winning image is part of the TMS 2025 calendar.



Best Paper Award



Mr. Subhadip Pal received V.M. Shah Prize for Best Paper 2024 for paper "On Multidimensional Bohr Radii for Banach Spaces" (jointly with Prof. Vasudeva Rao Allu) by the Indian Mathematical Society at its 99th Annual Conference held at Dr. Vishwanath Karad MIT World Peace University in Pune from 23rd to 26th December 2024.

In this paper, the authors studied the multidimensional Bohr radius of bounded linear operators between arbitrary complex Banach spaces. This version of multidimensional Bohr radius generalizes the classical Bohr radius for scalar-valued as well as vector-valued holomorphic functions defined on complete Reinhardt domain. Further, the authors obtained the exact asymptotic estimates of multidimensional Bohr radius for both finite and infinite dimensional Banach spaces. As an application of their results, the authors derived an improved lower bound of arithmetic Bohr radius.



Let our shadowy beauty bloom
When the stars give quiet light;
And let us offer our faint perfume
On the silent shrine of night.

Felicia Dorothea Hemans

