

IIT BHUBANESWAR-DRDO COLLABORATION KICK-OFF MEETING EXPLORED POSSIBILITIES OF CENTRE OF EXCELLENCE ESTABLISHMENT

IIT Bhubaneswar and Defence Research and Development Organisation (DRDO) Collaboration Kick-off Meeting was held on 7th May 2024. Dr. Binay K. Das, Director General (DG) of Electronics and Communication Systems (ECS) Cluster, DRDO, and the Directors of CHESS, LRDE, DEAL, DLRL and IRDE of DRDO Labs along with senior scientists were present during the handing over of projects and kick-off function.



During the meeting, 9 sanctioned projects from ECS Cluster of DRDO were handed over, followed by an interaction session with IIT Bhubaneswar faculty members and Research Scholars. Further another 7 projects are in process to be sanctioned with a total worth of Rs. 18 crore funding. IIT Bhubaneswar will work on the sanctioned projects, which would be beneficial in Electronics warfare, Al Driven surveillance, power systems, Radar systems, etc.

Prof S.R. Samantaray, Head of the School, Electrical Sciences in his welcome note said: "The collaboration of IIT Bhubaneswar and DRDO will contribute to the emerging Research and Development need of defence applications, creating a platform for 'Atma Nirbhar Bharat.' Speaking on the occasion, Prof. Shreepad Karmalkar, Director said: "The IITs have moved beyond knowledge generation and knowledge across the country dissemination to knowledge application, wealth generation through start-ups & entrepreneurship and producing quality teachers. Our research scholars are the backbone in producing great research. They should work 24x7 and develop technical competence through extensive reading beyond textbooks." Dr. Das said that DRDO is going through a transformation from technology chasers to becoming technology enablers and trend setters. In this context, this collaboration, and the further opportunity to set up a Centre of Excellence at IIT Bhubaneswar would prove crucial. He further advised the researchers and faculty members associated with various DRDO sanctioned projects to work systematically with proper review and risk management systems to complete the projects in time and come up with unique solutions.

Prof. Dinakar Pasla, Dean- SRIC and Dr. Vijay Shankar Pasupureddi, Associate Head, Electronics & Communication Engineering also spoke on the occasion. Dr. D.P. Dogra, Associate Head, Computer Science Engineering coordinated the programme. On behalf of DRDO, Dr. Jagannath Nayak, Director, Centre for High Energy Systems and Sciences (CHESS); Shri N. Srinivas Rao, Director, Defence Electronics Research Laboratory (DLRL); Shri G. Viswam, Director, Electronics & Radar Development Establishment (LRDE); Dr. Ajay Kumar, Director, Instruments Research & Development Establishment (IRDE) and Shri L.C. Mangal , Director, Defence Electronics Application Laboratory (DEAL) spoke on the occasion.



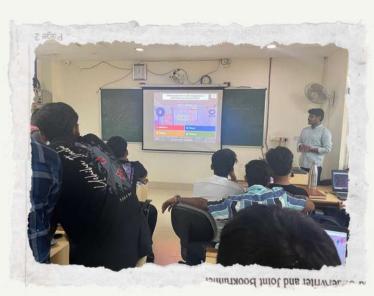
SESSIONS ON LEARNING OUTCOMES AND ACTIVE-COOPERATIVE LEARNING



These sessions were organized on 13th and 14th May 2024 with Prof. E. Prasad, Head, Teaching-Learning Center, IIT Madras as the main resource person. The sessions saw an overwhelming participation of about 180 faculty. Introducing the sessions, Director, Prof. Shreepad Karmalkar mentioned that the implementation of these approaches will improve the level of learning among students, and guide the faculty on how the Active Learning Classrooms created at IIT Bhubaneswar can be utilized fully. He also shared his insights while addressing the queries of the participants. The programme was coordinated by Prof. Mihir Kumar Pandit, Dean-Faculty Affairs. Based on the deliberations, LHC will henceforth be referred to as the "Learning Hall Complex" rather than "Lecture Hall Complex."



BELLE II MASTERCLASS CONDUCTED BY THE EXPERIMENTAL HIGH ENERGY PHYSICS (EHEP) GROUP, SCHOOL OF BASIC SCIENCES



group, School of Basic Sciences organized a one-day Masterclass named "Belle II International Masterclass 2024" for Class XI-XII students of Cohen International School, Bhubaneswar on 10th May, 2024. 78 students and 8 teachers from the School attended the Masterclass.

The Experimental High Energy Physics (EHEP)

IIT Bhubaneswar is an active member of the Belle II international collaboration, which is dedicated to performing precision studies of particles, thus validating subatomic "Standard Model" of Particle physics and also the quest for New Physics. This event was organized as part of a global effort of the Belle Il Collaboration to popularize science among high-school kids and introduce them to the rich field of high-energy physics. This programme is carried out regularly at various international places and this was the first outreach event of this kind that was organised at IIT Bhubaneswar.

In the morning session, Dr. Seema Bahinipati, Team Leader of the Belle II group, IIT Bhubaneswar delivered an introductory lecture on the physics of elementary particles. This was followed by a talk by one of the research scholars of her group, Mr. Souvik Maity regarding experimental methods used in high energy physics. The morning lectures provided the students an overview of the detector, and the detection methods used at Belle II collaboration.



In the post-lunch session, students were connected with IISER Mohali where similar activity was being carried out. Later, they were shown the Belle II detector live by the safety shift expert, Dr. Taichiro Koga(High Energy Accelerator Research Organization, Tsukuba, Japan) through a video link took the participants on a tour of the Belle II control room, and explained them the functioning of the Belle II detector. Students and moderators interacted with the expert.

WORKSHOP ON "POLYMERS: BASIC CONCEPTS & THEIR ADVANCED APPLICATIONS"

SERB (Science and Engineering Research Board) sponsored one-day workshop on "Polymers: Basic Concepts and their Advanced Applications" was organized on 15th April 2024, at Synthetic Polymer Chemistry Laboratory, School of Basic Sciences. During this workshop the participants were provided with hands-on 'synthesis and characterization of some polymers'. Around 30 M.Sc (Chemistry) students from P.N. Autonomous College (Khordha) and B.J.B. Autonomous College (Bhubaneswar) attended the workshop. Dr. Vijayakrishna Kari, Associate Professor - Chemistry, conducted the the workshop.





STORIES OF ACHIEVEMENT

TEAM KNOCKSONIACS MAKES A MARK



Knocksoniacs, the Motorsports Club of IIT Bhubaneswar had participated in the SAE EBaja event this year. This is an annual competition organised by the Society of Automotive Engineers (SAE), which involves the designing and assemblage of an all-terrain one-seater four-wheeled vehicle by students. In the first attempt in the competition, the succeeded in qualifying for the endurance race, which was the final stage of the competition, securing a rank of 28 in the race. At the end of the competition, Knocksoniacs secured rank 8 among the new teams participating this year at the event. The Final Event was held on 12th March 2024 at Hyderabad.



DAAD BILATERAL EXCHANGE OF ACADEMICS, 2024



Dr. Rajakumar Guduru has received the DAAD Bilateral Exchange of Academics Scholarship 2024 for a short-term research project on Effective Teaching-Learning Practices of Inclusive Education: A Comparison between Indian and German School Models. The purpose of this research project is to investigate and compare the effectiveness of teaching-learning models of inclusive education practiced in schools in Kurdha district of Odisha, and selected schools in Dresden/Saxony, Germany. The major goal is to comprehend how in-service teachers and pre-service teachers perceive and execute inclusive teaching methods in regular classrooms. Dr. Rajakumar Guduru will be visiting Technical University of Dresden (TUD) for two months in exchange of Prof. Stefan Horlacher from TUD who will be visiting India for a month to conduct the research.

