



IIT Bhubaneswar and Shiksha Sanskriti Utthaan Nyaas organise workshop on 'Bharatiya Knowledge System'

IIT Bhubaneswar, in collaboration with Shiksha Sanskriti Utthaan Nyaas (SSUN), Odisha organised a two-day workshop on the theme 'Bharatiya Knowledge Systems (BKS)' on 5th and 6th October 2024.



As part of the workshop a public lecture was delivered by Dr. Atul Bhai Kothari, Secretary, SSUN on the topic 'Research and Innovation in Bharatiya Knowledge System.' Dr. Kothari's talk, which was interactive in nature, focused on the question why and in what way we need to study Bharatiya Knowledge Systems (BKS).

Dr. Kothari explained that a study of Bharatiya Knowledge Systems may lead to better solutions of the contemporary world, the best source to tap into is Bharatiya Knowledge Systems. Further, reading about our intellectual ancestors would greatly motivate our students to pursue high quality research in their respective fields. He stressed that BKS offered a holistic knowledge of finding the interconnection between the Self, the Supreme and Nature. He urged that the education system should take an indigenous turn at all levels, the nature of the institute, the syllabus, the pedagogy and at the assessment level.

In the welcome address, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar reminded the audience that though science is universal, scientists may not be. Hence, by studying the Bharatiya Knowledge System (BKS) we could find alternate ways of looking at the world which are free from certain biases. He, however, cautioned that such perspectives must be backed with appropriate evidence. He pointed out that BKS is not a single subject but includes several disciplines within it. A general knowledge of different disciplines is not sufficient to either understand or propagate BKS. We need a deep expertise of a discipline, be it Mathematics, Metallurgy or Architecture, for a proper appreciation of the BKS element in that discipline. He stated that, in addition to emotional fulfilment, other motivating factors for BKS study should include the search for practical solutions to current problems and intellectual curiosity.

Speaking on this occasion, Prof. Savita Sengar, Vice Chancellor, Jharkhand Rai University stressed that we must critically evaluate the relevance of BKS and take that which is suitable to our times. Honourable Member of Parliament from Balasore, Shri Pratap Chandra Sarangi also graced the event. He shared his opinion about the continuity of Indian culture, training the mind as the best form of education and the importance of learning Sanskrit and other native languages, deftly switching between Odia, Hindi and English.



In addition, during the workshop, the poster of Gyan Kumbh to be held in the month of November was also released by the guests. Dr. R. Venkata Raghavan, Assistant Professor, School of Humanities, Social Sciences and Management proposed a vote of thanks. The session was attended by over 100 members including faculty, staff and students of IIT and other institutes.

IIT Bhubaneswar hosts 17th Project Appraisal and Monitoring Committee (PAMC) Hydrology & Cryosphere meeting



IIT Bhubaneswar hosted the 17th Project Appraisal and Monitoring Committee (PAMC) Hydrology & Cryosphere meeting. The meeting organised jointly by Ministry of Earth Sciences, Govt. of India and IIT Bhubaneswar was held from 3rd to 5th October 2024. The objective of the programme was to assess the projects being carried out by different researchers in the field of Hydrology and Cryosphere. IIT Bhubaneswar is hosting the MoES PAMC meeting for the first time.

Dr. Aparna Shukla, Member Secretary, MoES, welcomed participants, outlined the Ministry's initiatives for sustainable use of natural resources, and provided an overview of the meeting. She shared that the 17th PAMC will evaluate new projects under "Risk Reduction in the High Mountain Regions of the Himalayas" for potential funding. Research proposals were invited under three themes: Glacier Hazard Mapping, Hazard Modelling for Risk Assessment, and Risk Reduction Strategies, focusing on the 4 Himalayan States and 2 Union Territories.

Prof. A. V. Kulkarni, PAMC Chairman, emphasized that the committee's primary goal is to address climate change impacts in the Himalayan region, focusing on the cryosphere and hydrology. He highlighted the need for research to mitigate risks in high mountains, with findings intended to guide state governments and policymakers for societal benefit.

In his address, Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar shared a brief overview of the Institute and its commitment towards the earth and climate sciences. He said that IIT Bhubaneswar is working on 5 pillars: 'Knowledge Dissemination (Teaching), Knowledge Creation (Research), Knowledge Application (Consultancy), Wealth Generation (Innovation and Entrepreneurship) and Teacher Education through Integrated Teacher Education Programme. He also highlighted the new course launched by the Institute namely 'Introduction to Research and Entrepreneurship' for the students.

Speaking on this occasion, Prof. Dinakar Pasla, Dean-Sponsored Research & Industrial Consultancy highlighted that IIT Bhubaneswar has the School of Earth, Ocean and Climate Sciences to encourage cutting-edge research in the fields of climate monitoring and climate change.

Dr. Syed Hilal Farooq (Head of School, School of Earth Ocean and Climate Sciences also spoke on the occasion and shared a brief overview of the School of Earth, Ocean and Climate Sciences, which takes a holistic approach towards the issues and concerns pertaining to climate change and environmental hazards.

Dr. Debmita Bandyopadhyay, Project Scientist, MoES proposed a vote of thanks. Dr. Ashim Sattar, Assistant Professor, School of Earth Ocean and Climate Sciences coordinated the programme.

IIT Bhubaneswar organizes Mathematics Problem Solving Camp

"Logical thinking and Open Mindedness not only help students solve problems in mathematics but in real life as well," said the dignitaries during the inaugural ceremony of the three-day Mathematics Problem Solving Camp held at Indian Institute of Technology (IIT) Bhubaneswar on 14th October 2024. The camp was inaugurated by Shri Prithiviraj Harichandan, Hon'ble Minister of Law, Works, Excise, Government of Odisha and Dr. Mukesh Mahaling, Hon'ble Minister, Electronics & Information Technology, Health and Family Welfare, Parliamentary Affairs, Government of Odisha, in the presence of Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar.





The residential camp was organised by the Institute for undergraduate students in association with Madhava Mathematics Competition, Dhuriapada Anka Foundation (Bhubaneswar), Institute of Mathematics and Applications (Bhubaneswar), Indian National Young Academy of Science (New Delhi) and IIT Bhubaneswar Research and Entrepreneurship Park. The objective of the camp is to identify, nurture and prepare a pool of brilliant mathematicians who shall take the lead in the scientific and education landscape of our country when Odisha will be completing her 100 years of Swatantrya in 2036. The special focus was on government-run colleges in rural areas socially, economically educationally backward districts of Odisha and to assist them for taking up and excelling in higher education.

Speaking on the occasion, Hon'ble Minister Shri Prithiviraj Harichandan stressed on the importance of logical analysis and open mindedness in solving the problems of life as they do in case of solving problems of mathematics. He also appreciated the initiative to provide a platform for young mathematicians of the State to harness their knowledge and skill under the guidance of experts.

In his address, Hon'ble Minister Dr. Mukesh Mahaling lauded the efforts of the organisers for organising the programme for the students from rural Odisha. He also urged institutes like IIT, NISER and Institute of Mathematics and Applications to conduct such programmes for school students, which can nurture the mathematics skills of the children of the State from a very young age.

Prof. Shreepad Karmalkar handled a session on 'Problem Solving', wherein he showed with examples how general discipline independent strategies help solve a variety of real-life problems. The mindset that one needs specialized knowledge from a certain area to solve problems is what prevents people from solving problems, he said. The discipline independent strategies include logical reasoning, trial and error, reformulation of the problem statement, analysis and analogy. Analysis involves three steps: separation of the whole into parts, understanding of the parts in isolation, combining the understanding of the parts so obtained to understand the whole. Analytical approach includes the strategies of representation / modeling, divide and conquer, and logical reasoning. He also mentioned that communication, collaboration and critical thinking are the three skills necessary for success in real life.

Dr. Tarakanta Nayak, Associate Professor, IIT Bhubaneswar and Coordinator of the camp provided the introduction of the programme and highlighted the objectives of the camp. Shri Smruti Ranjan Sahoo, Assistant Professor, BJB Autonomous College, Bhubaneswar proposed a vote of thanks.

Above 40 selected students from 18 districts of Odisha participated in this camp.

Stakeholder Consultation Workshop for Medtech Mission by DST

IIT Bhubaneswar organized a Stakeholder Consultation Workshop recently for the Medtech Mission by the Department of Science & Technology (DST), Government of India. The workshop explored ways to build an integrated and sustainable ecosystem for biomedical technology through innovation, entrepreneurship, and global branding. Experts stressed the importance of multi-disciplinary collaboration to develop advanced medical devices that address real-world needs. The event was coordinated by the IIT Bhubaneswar Research & Entrepreneurship Park.

Prof. Shreepad Karmalkar highlighted IIT Bhubaneswar's openness to diversity and evolving focus on interdisciplinary studies, fostering collaboration. He praised the workshop's goal of uniting participants to develop products and technologies for societal benefit.



Dr. Anita Aggarwal, Scientist- "F" & Head, SEED, Department of Science & Technology, Ministry of Science and Technology outlined the workshop's purpose and stressed the importance of collaboration among stakeholders, including industries, to develop medical technologies for public benefit.



Dr. Sanjay Behari, Director, Sree Chitra Tirunal Institute for Medical Sciences and Technology spoke on the multi-disciplinary and collaborative approach towards developing medical devices, products and technologies that can be accepted by the end-users.

Dr. Amitabh Bandhopadhyay, Professor, Department of Biological Sciences & Bioengineering, IIT Kanpur presented on the proposed draft for Medtech Mission by DST.

Dr. Dipti Kakkar Thukral from Anusandhan National Research Foundation (ANRF) also highlighted the objectives of the mission.

Dr. Soobhankar Pati, CEO & Director, IIT Bhubaneswar Research & Entrepreneurship Park proposed a vote of thanks.

IITBBS REP and evACAD join hands for Advanced Certificate Programs in e-Drives and Battery Systems

IIT Bhubaneswar Research and Entrepreneurship Park, (IITBBS-REP) has signed an MoU with Nagpur based pManifold EV Academy Pvt. Ltd. (evACAD) to collaborate in research, consulting and training in the New Energy areas of electric vehicles (EVs) and broader Zero Emission Vehicles (ZEVs) and other related Green Technologies (like Hydrogen, CCUS) for multi-sectoral applications, leveraging both organisations' expertise. As part of the MoU, both the organisations have agreed to pool their resources and initiate this partnership through joint offerings of Advanced Certificate Programs (postgraduate, diploma, short-term certificate) in e-Drives and Battery Systems, which is specifically designed to meet the needs of the modern automotive and e-mobility industry.



The MoU was signed between Dr Soobhankar Pati, CEO, IIT Bhubaneswar Research and Entrepreneurship Park and Mr. Rahul Bagdia, Chairman & Managing Director, pManifold EV Academy Pvt. Ltd., on 16th October 2024, in the presence of Prof. Shreepad Karmalkar, Director, IIT Bhubaneswar.

Prof. Karmalkar praised the initiative, stating, "Such partnerships advance education and innovation in EVs and green technologies. Aligned with our mission to transform Odisha's entrepreneurial landscape, this program will equip students with industry exposure, nurturing talent for real-world, sustainable innovation."

Speaking on this occasion, Mr. Bagdia said: "With the given initiatives evACAD would like to foster and drive EV ecosystems around the world with multiple credible institutes. This MoU will act as a bridge for industry and academia to be connected and evolve workforces as per the needs of the hour."

Workshops on Material Science and Trends in Scientific Research

IIT Bhubaneswar organised workshops on Material Science and Trends in Scientific Research for science students and scholars on 5th October 2024. These workshops are supported by Indian Academy of Sciences. This is an initiative from the Editorial Board of Bulletin of Materials Science, published by the Indian Academy of Sciences. Prof. B.L.V. Prasad, Director of the Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru; Chief Editor of Bulletin of Materials Science chaired the programme.





As part of the programme, three parallel workshops were held:

- 1. Contemporary Areas in Material Sciences (CAMS) for science post-graduate students and research scholars. The workshop was conducted by Prof. G.S. Vaitheeswaran from University of Hyderabad and Prof. Ritu Gupta from IIT Delhi.
- 2. Trends in Scientific Research (TSR), for science undergraduate students, with two esteemed speakers, Prof. A. Sundaresan from JNCASR Bengaluru, Prof. R. Nagarajan from University of Delhi.

Learn to Lead (L2L), for school children, which was conducted by Prof. B.L.V. Prasad and Prof. P.V. Satyam from IIT Bhubaneswar.

Prof. Shreepad Karmalkar, Director of the Institute interacted with the experts. Prof. B.L.V. Prasad delivered the welcome address and introduced about the workshops. Dr. Vijayakrishna Kari, Convener of the programme proposed a vote of thanks.

Above 400 participants attended the workshops and gained insight into the emerging developments in the field of material science and research.

DRDO Leadership Commends SECS, IIT Bhubaneswar for Outstanding Progress on Key CARS Projects

Dr. B.K. Das, Director General (Electronics and Communication Systems) of DRDO, and Dr. Jagannath Nayak, Director of CHESS, visited the School of Electrical and Computer Sciences (SECS) at IIT Bhubaneswar on 4th October 2024 to review 12 ongoing DRDO-funded CARS projects. The visit aimed to assess the progress made by the research teams at IIT Bhubaneswar. Both Dr. Das and Dr. Nayak expressed their appreciation for the researchers' significant advancements and commended the efforts of the Principal Investigators (PIs) and Co-PIs for their dedication and innovation.

The DRDO officials assured full support from ECS and other DRDO cluster labs to ensure the successful and timely completion of the projects. They also highlighted the importance of generating high-quality academic outputs, such as impactful publications and intellectual property, while stressing the development of products aligned with the operational needs of the Indian Armed Forces.

The meeting reaffirmed the strategic importance of these projects for national defense and strengthened the collaboration between IIT Bhubaneswar and DRDO, opening doors for more ambitious research partnerships. This visit has positioned IIT Bhubaneswar as a key contributor to the country's defense R&D efforts and paved the way for impactful, long-term collaborations.



IIT Bhubaneswar signs MoU with Cognavi India to boost Student Placements in Japan

IIT Bhubaneswar has signed an MoU with Cognavi India Private Limited, Forum Engineering Inc., a Japanese company to collaborate and facilitate student placements by acting as a bridge between IIT Bhubaneswar and Japanese companies. The MoU was signed between prof. P. Dinakar, Dean (Sponsored Research & Industrial Consultancy) from IIT Bhubaneswar and Mr. Mitsutaka Sekino, Director from Cognavi India Private Limited on 23rd September 2024. The programme was coordinated by the Career Development Cell of IIT Bhubaneswar, under the supervision of Dr. Srikant Gollapudi, Professor-in-Charge, Career Development Cell.



On behalf of IIT Bhubaneswar, Prof. Prasant Kumar Sahu, Dean (Dean - Alumni Affairs & International Relations), Prof. Ashis Biswas, Associate Dean (Alumni Affairs & International Relations), Shri Pradeep Kumar Sahoo, Deputy Registrar (Continuing Education, Alumni Affairs & International Relations) and Shri Rabi Kumar Patnaik, Career Development & Placement Officer were present on the occasion.

PM Shri, JNV, Mundali, Cuttack Students visit IIT Bhubaneswar

Under the Vigyan Jyoti programme, 80 students, along with 4 escort teachers from PM Shri Jawahar Navodaya Vidyalaya, Mundali, Cuttack visited several core science and engineering laboratory facilities of various schools of our institute on 4th October 2024.

Dr. Seema Bahinipati, Nodal Officer, Vigyan Jyoti programme took care of the overall coordination, and all faculty members and volunteers of the Vigyan Jyoti team participated actively in this programme. The students had an enriching experience at our campus, and were enthusiastic about learning more about the demonstrations showed in the various laboratories.



Academic Visit of Students

M.Tech. Environmental Engineering students went for an academic visit to Solid Waste Material Recovery Facility and Micro-composting facility at Pokhariput Bhubaneswar on 19th October 2024. Solid waste is a major concern in India and its management is highest priority. Recently MoE had organised Swachhata hi Seva campaign on sanitation and solid waste management during 1st September to 2nd October 2024 to sensitise citizens about solid waste management.





The students along with subject teacher Prof. Rajesh Roshan Dash visited one of the decentralised solid waste management facility at Bhubaneswar, managed by Bhubaneswar Municipal Corporation. Students are welcomed at the venue traditionally by Swachhata Sathi. Mr. N. Ganesh Babu, Assistant Commissioner Sanitation, BMC was present there and explained the working details of Material Recovery facilty and microcomposting system. Students were also made understood, how solid waste is segregated as dry and wet waste in the city and get collected in two bin system. This was a great practical learning experience for students.



"If you want to walk fast, walk alone. But if you want to walk far, walk together."

— Ratan Tata

