

Rhythm NEWSLETTER

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Indian Institute of Technology

Bhubaneswar



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Amidst the complete chaotic situation and uncertain human existence, the campus nature is offering a pleasant amusement to all the campsites. The plethora of colours and seasonal variations is a constant joy for all the ecofreaks.

> Stay with nature and relish its divinity.



Republic Day celebrated with Patriotic Fervour on Campus

IIT BHUBANESWAR

Director's Message

Prof. Raja Kumar R. V. Director



extend my warmest wishes for a very happy, healthy, safe and prosperous New Year 2022 to all. With the advent of the New Year, we welcome new hopes and aspirations for a better tomorrow. Through this message I am happy to bring some significant happenings at the institute during the last few months.

Resilient academics during the pandemic: In its commitment to provide education on par with the global standards, the institute has never been closed but provided uncompromised education during the pandemic, while following the government guidelines and aggressively protecting the campus against Covid-19, at high safety standards. As of now it is one of the few pathfinding institutions in the country to bring back all batches of students comprising 95% of them to the campus. Perhaps it is second to none in admitting the fresh B.Tech first year students right into the campus on 25th Dec 2021 within one week after the completion of the last counseling on 19th Dec 2021. Classes including theory and laboratory sessions have been conducted with physical presence of students on Hybrid mode in an innovative way, right from Sept 2021. At present, 90% of the students are staying inside the campus during the post and the peak of the 3rd wave of Covid. For the last 3 weeks, however, the institute switched to online mode of classes temporarily due to the 3rd wave of Covid.

Outstanding Placements: This year's placements have been marvelous and the best amongst the IITs in terms of jobs in core sector. During the first phase, as high as 55% of the students were placed in reputed companies. This placement record is on par with the senior IITs.

High Standard Protection against Covid-19: The institute could successfully create and implement appropriate SOPs of high standards against Covid-19 in its endeavour to safeguard the community towards pursuing its academic commitments. The institute organized 23 drives of vaccination so far and ensured full vaccination of all of its students, faculty and staff including the outsourced staff. In view of these spirited steps, the institute could achieve the commendable record of zero cases for most of the pandemic period.

A Rare Achievement of Creating 150% of Infrastructure Facilities with the Funds Sanctioned: I am very happy to share that the institute could have the rare achievement of building 50% more infrastructure than what is stipulated by the DPR and what was built at the sister 2nd generation IITs within the funds provided by the union government on par with the global standards. In 2015, I took up the responsibility of planning, monitoring in creating a signature infrastructure onto my shoulders. We meticulously planned ahead, optimized the infrastructure, prevented over designs, saw to it that there is near-zero hindrance in achieving this rare feat.

Development of the First Set of Semiconductor Chips: Recently, IIT Bhubaneswar received has its first set of data conversion ICs designed at the institute and fabricated at SCL, Chandigarh, and some more for cutting-edge applications like IoT are in the pipeline. These developments from the institute would give confidence to the industry and catalyze the IC design activity and would highlight IIT Bhubaneswar in the emerging cuttingedge technology. This achievement is the result of hardwork for the last four years in building teams, expertise, and carrying on the design and development work as a part of our vision to create a sustainable chip design and fabrication echo system at the institute and its hinterland. The institute also has plans to further enhance the capabilities and taking it forward in the coming years.

Dynamic Performance from Student Gymkhana: I personally found a lot of enthusiasm and longing attitude particularly amongst those students who missed the campus due to the pandemic. On our advice, majority of the students stayed back in the campus during the inter-semester break in Dec 2021. In our commitment to engage the students constructively during this time, the Student Gymkhana organized several Sports, and Socio-cultural activities successfully by adhering to Covid protocols with a huge participation from the students, following the spirits of the 'Fit India' call given by our Hon'ble Prime Minister. It is very heartening to mention that the students themselves took up the responsibility of ensuring implementation of Covid protocols. Perhaps it is the only student gymkhana amongst all the IITs to organize two different sets of events during the last 6 months with huge participation and high standards. In this regard, I appreciate the tireless efforts of Student Council.

The institute is all set to review its curricula in its commitment to offer holistic education which is broad based and aligns with the vision of the NEP-2020. There have been many more outstanding achievements and activities that could not have been possible without the commitment and teamwork by the faculty, staff, and students of the institute.

I congratulate all the members of the IIT Family and urge everyone to continuously pursue our commitment with passion in achieving holistic education-teaching and research,



spreading the culture of innovation, creating outstanding personalities, and new knowledge. I am sure, our students would make use of the grand opportunities, participate in the education with objectivity and responsibility for strengthening and beautifying the structure of the society and the nation.

Key Achievements of the Institute

IIT Bhubaneswar showed huge resilience in successfully completing the curriculum maintaining the highest standards. Some of the recent achievements of the institute are:

- Honoured with the "University of the Year" award by FICCI in 2021.
- Provided education in with uncompromised standards during the timely pandemic through several unique innovations such as the following:
 - Switched to live streaming of lectures without losing even a single day.
 - Devised and successfully applied a robust and uniquely innovative method of conducting conventional pen and paper exams with invigilation. in the online mode. During the last year the outgoing students have earned their degree in full, taking the end-semester examinations and performance evaluation as usual, despite the pandemic. The institute did not have to make any changes in the academic regulations except for reducing the 3-hour examination to 2 hours.
 - Conducted Lab classes in a state-of-the-art hybrid mode.
 - Conducted extra-academic and yoga activities in virtual mode.
 - Organized convocation with real participation of students in Actual Reality.
- Organized lectures by international faculty from across the globe and recruited Faculty of Foreign Origin.

University of the Year Award 2021 by FICCI

IIT Bhubaneswar has been working on very fundamental aspects of academics to be amongst the global cream and to help the nation in re-establishing its glorious past rather I also urge everyone to take good care of themselves against the pandemic.

Jai Hind!

Prof. Raja Kumar, R. V.

than obtaining a good rank in the ranking frameworks. However, the strategic initiatives taken in recent times have not only fostered the development of the Institute but also resulted in a significant position in the institute's ranking performance in both national and international scenarios.



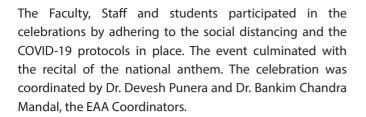
University of the Year Award – 7th FICCI Higher Education Excellence Awards 2021

IIT Bhubaneswar Celebrates Republic Day with Patriotic Fervour Amidst the Pandemic

IIT Bhubaneswar celebrated the 73rd Republic Day in the Institute with patriotic fervour. The function started with unfurling of the National Flag followed by review of the parade by Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar.

Speaking on the occasion, Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar reminded that Republic Day commemorates the adoption of Constitution of India which assures citizens of the nation with justice, equality and liberty, and endeavours to promote the core values our nation has been grounded in for ages. On this occasion, he called on everyone at IIT Bhubaneswar to up-hold the core values that were the foundation for the Constitution of India in governance, functioning at the workplace as well as in day to day life.

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Resilient Academics during the pandemic at IIT Bhubaneswar

Curriculum Review-2021 at IIT Bhubaneswar in the Context of NEP – 2020

The curricular review of IIT Bhubaneswar is underway. The Director himself volunteered to create the first version. The important features of NEP– 2020 being incorporated include:

- Multidisciplinary and a holistic education across sciences, social sciences, arts, humanities, and sports,
- Not categorically separating between arts and sciences, curricular and extra-curricular activities, vocational and academic,
- Credit transfer from reputed universities, flexibility for choosing courses as per a chosen life-long career path according to interest and talent,
- Ethics and human & constitutional values,
- Vocational and life skills, respect for diversity and pride in India,

Important HSS courses are introduced keeping, revisiting and adopting the traditional Indian education system. Some HSS courses that have already been introduced over the last 5 years, sharing the vision behind NEP-2020 include, Ethics and Epics, Indian Mathematics, Introduction to Indian Philosophy, Indian Philosophical Perspectives on Substance, Introduction to Sanskrit, German and Comparative Linguistics, Odissi Dance, Land of Odisha: History, Heritage and Language, and National Security and Defence Mechanisms, and the like.

Teaching in Hybrid Mode

Around 95% of the students of IIT Bhubaneswar are now on campus and these students are attending classes in physical mode. A hybrid mode of lecturing is used for teaching classes simultaneously for both, the students attending classes in-person and those attending in virtual mode. Those who are physically present in the class can as usual attend a lecture and interact, while those who are away can participate remotely in virtual mode accessing the live stream of the lecture. The institute devised a mechanism of holding its classes in hybrid mode, equipped the newly constructed Pushpagiri Lecture Hall Complex (PLHC) with electronic gadgets for facilitating hybrid mode lecturing and realized the same.



Speaking on the initiative, Prof Raja Kumar, R. V., Director, IIT Bhubaneswar said, "for those students who are attending the lectures in person, these are like any modern lecture halls with facilities for multimedia projection, document camera, powerpoint presentations and use of other gadgets like a tablet, PCs. In order to facilitate the participation of students in virtual mode in a physical class (i.e., in a hybrid class), the board work and the faculty member conducting the class, are both captured using AV livestreaming. This enables any remote participant to join the class not just in lecture mode, but also interact with the other participants and faculty as and when required. The Institute uses MS-Teams as the platform for conducting all classes and activities. A



faculty member can also interact with remote students in the streaming session. On top of this, the faculty members are encouraged to use their own innovative methods over and above this basic mechanism."



Students appearing in Online Examination from personal area

Uncompromising Education during the Covid-19 Pandemic

The most unprecedented Covid-19 Pandemic has changed our lives and the way we run our education. The institute functioned tirelessly to fulfil its commitment of providing world-class education without any compromise even at the time of the pandemic situation through the following:

- The institute could switch to online education with absolutely no gap by pre-planning and taking actions well ahead of the lockdown period.
- A unique method of holding comprehensive, penand-paper examinations and invigilation in the online mode has been developed in-house and adopted very successfully to conduct examinations for all the students of the institute right from the Spring 2019-20 semester onwards. The outgoing students graduated without any compromise on the examination standards. Online interactive sessions have been organized with all the groups of students by Director, Dean Academics and HoSs both centrally as well as at School level to maintain an active constant connection with students.



 Continuing in the spirit of innovation, the 10th convocation is scheduled to be organized in a unique and innovative live form by hybrid mode wherein a student can receive degrees either by physical or online presence during the pandemic.

IIT Bhubaneswar Coordinated Inspection Tour Programme of the First Sub-Committee of Parliament on Official Language

IIT Bhubaneswar successfully coordinated the Inspection Tour Programme of the First Sub-Committee of Parliament on Official Language of Nine (09) Central Govt. Offices located at Bhubaneswar from 27th December to 29th December 2021. The inspection of IIT Bhubaneswar was held on 29th December by the committee. The program was successfully conducted, and IIT Bhubaneswar received lots of appraisal from the Hon'ble committee members and all the government officials. Dr. Sunil Kumar Prajapati, PIC-Rajbhasha, coordinated the program.



Participation in PAN IIT Global Virtual Technology Summit PI-WOT2021

This event which was organized on the 17th and 18th of September 2021 was attended by our director Prof R.V. Raja Kumar and Dean Alumnai Affairs & International Relations, Prof. Swarup K Mahapatra focused on the key issues such as the need for a change in the Startup Ecosystem in India, the need to expand on the basic education structure, he need to include the idea of startups as well as the need to building a scalable mentoring model.

Latest Research and Development Activities at IIT Bhubaneswar

First Semiconductor Chip Development at IIT Bhubaneswar for Cutting-Edge Applications

In the fields of sensors, internet of things (IoT) and some artificial intelligence (AI) applications, the challenge of extending the battery life is still persisting and creation of innovative low-power application specific integrated circuits (ASICs) assumes a lot of significance. Research teams from IIT Bhubaneswar have been working on designing low power Integrated Circuits (IC) targeting IoT based sensing, monitoring and wireless devices. Efforts towards the raising of research teams, and developing technologies started yielding results, and the first batch of ICs have been successfully fabricated, recently.

The team headed by Dr M S Manikandan and Dr Srinivas Boppu has designed and developed an ultra-low power CMOS data conversion integrated circuit (IC) with the support of the Special Manpower Development Program for chips to system design (SMDP-C2SD) of the Ministry of Electronics and Information Technology (MEITY) which got fabricated at the Semi-Conductor Laboratory (SCL), Mohali. This indigenously developed IC is targeted for energyefficient secured biomedical data transmission in internet of medical things (IoMT) and wearable body area networks (WBANs) to Edge or Cloud computing devices.

The team lead by Dr. Vijaya Sankara Rao Pasupureddi has designed and developed a digitally intensive sub-sampling

short range low-power RF front end IC for the IEEE802.15.4e standard targeting IoT applications. This chip includes several design innovations. This development activity too is funded by MEITY, the chip is being fabricated at TSMC, Taiwan and likely to be received, soon.



Another effort spearheaded by Dr. Debapratim Ghosh is developing microwave passive and active components, filters and power-detectors aimed at RF instrumentation and ASIC applications.

Outstanding Placement Record

55% of IIT Bhubaneswar Undergraduates Get Top Placements in 3 Days

Amidst doubts expressed all around about the effect of placements for undergraduates during placement season 2021-22, the placements at IIT Bhubaneswar have shown a record rising trend. More than 55% B.Tech students were placed in the first 3 days (85% of them are of CSE, B.Tech). This is the first time that such a large number of undergraduates got offers in just 3 days of the opening season. Some of the blue-chip companies ranging from Amazon, Goldman Sachs, Flipkart, Paytm, Google, Microsoft, Oracle, Tata Steel, Unacademy, Samsung RI, Mathworks, Silicon Lab, Analog Devices, D.E. Shaw, GE, Ring central, Future First have taken part in the placement drive. Majority of the recruiters are IT & Start-Ups indicating a growing trend in niche sectors also. There is a 50% increase of median salary to 24 LPA from 16 LPA of last year.





Key highlights

- Total 214 students from UG received offers.
- Undergraduate placement is over 90% and placements would continue till November 2021 due to the outbreak of pandemic.
- Highest domestic CTC offered was 56 Lakhs per annum.
- Average salary is 16.27 Lakh per Annum for UG. A sharp increase of 15% over the last year.
- M.Tech placements are close to 70%. Placements would continue till November 2021 due to the outbreak of pandemic.
- PSU's like Oil India Limited, REC, TRAI, GAIL, CDAC, WAPCOS have participated in the campus placements.
- MNC companies like Jaguar LandRover, Goldman Sachs, GE India, Amazon, Honeywell, Adobe, Vedanta, Qualcomm, TCS R & D, and Tata Steel have participated in this year of placements.
- 3rd year students have received internship offers in reputed industries. Majority of CS and circuital branches engaged in Internships has the possibility of a full-time offer.

Inauguration of New Campus Buildings and Infrastructure Facilities

School of Earth Ocean and Climate Sciences Building of IIT Bhubaneswar was Inaugurated by Secretary, MoES

The new building of IIT Bhubaneswar's School of Earth, Ocean and Climate Sciences was inaugurated by Dr. M. Ravichandran, Chief Guest and Secretary, Ministry of Earth Sciences, Govt. of India on 05th Jan, 2021. Dr. Mrutunjay Mohapatra, Director General, India Meteorological Department (IMD) was the Guest of Honor on this occasion. Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar presided over the function. The new building will host about 30 faculty and 100 researcher scholars with multiple laboratories in its fullest capacity.

Dr. M. Ravichandran, Chief Guest and Secretary, MoES, mentioned that the SEOCS at IIT Bhubaneswar is mandated to provide the nation with the best possible services in forecasting the monsoons and other weather/climate

parameters, ocean state, earthquakes, tsunamis and other phenomena related to earth systems, for public safety and socio-economic benefits.



Speaking on the occasion, Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar briefed the gathering of the remarkable journey of the Institute since 2015 till date despite the challenges faced. IIT Bhubaneswar could build 50% more infrastructure in the sanctioned amount without any compromise on the standards a rare feat in the country to do so. This was achieved owing to the meticulous planning and optimization of resources. He expressed his gratitude to the engineering section and NBCC for realizing the dream of SEOCS building, though it took more time than that is targeted. He reiterated the noteworthy achievements by the school for predicting the course of extreme weather events very accurately in advance in real time by applying and customizing it to the conditions of the Eastern India.



Dr. Mrutunjay Mohapatra, Guest of Honour & Director General, IMD, expressed satisfaction on the momentous occasion and expressed confidence that the SEOCS at IIT Bhubaneswar will play a major role in nation building and will play a nodal role for enhancing R & D activities in the Climate Sciences and Ocean Research. He complimented the Director of the Institute and his team for creating an excellent mix of teaching, learning platforms combined with world class Infrastructure conducive to attracting the best brains of the country.

Professor Avijit Gangopadhyay from the University of Massachusetts Dartmouth, USA, presently a VAJRA faculty at SEOCS outlined three golden principles for the general benefit of humanity: technology, ideas and initiative. He elucidated them with an example of cyclone prediction and human loss in Odisha for the period during 1970 – 2020. He exhorted the younger generation to imbibe these three golden principles in their lives. He also praised the role of the Director in implementation of the initiatives by his predecessors in realizing the dream of new building for SEOCS.



Dr. Hilal Farooq, the Head of the School presented a detailed 10-year report of the school's achievements. Many alumni from different parts of the world, faculty, staff members and students participated in the program through video conferencing.

Pushpagiri Lecture Hall Complex and Rishikulya Hall of Residence of IIT Bhubaneswar were Inaugurated by Shri Dharmendra Pradhan, Hon'ble Minister of Education

Shri Dharmendra Pradhan, Hon'ble Union Minister of Education, Ministry of Education, Govt. of India graced the campus and inaugurated the Pushpagiri Lecture Hall Complex and Rushikulya Hall of Residence, two of its new facilities, of IIT Bhubaneswar on 20th Aug, 2021, on his first visit to the state after assuming charge as Minister of Education. On this occasion, an MoU was exchanged by Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar and Shri Ranjan Kumar Mohapatra, Chairman, Skill Development Institute (SDI), Bhubaneswar in the presence of Shri. Dharmendra Pradhan., for the extension of expertise and support from IIT Bhubaneswar to SDI in SDI's endeavour enhancing skill development activities for unemployed, under-employed & underprivileged youth with technical education relevant to the industry.



Speaking on the historic occasion, Shri. Dharmendra Pradhan complemented the institute for its outstanding wellness, teaching excellence and research aura the Institute has created. He specially complemented the Director and his team for facilitating the cream of global class education through several innovations during the pandemic.

The present Lecture Hall Complex comprises of three buildings, with the following facilities:

60 seater lecture halls: 40 120 seater halls: 20 240 seaters: 4



In future as the institute grows further, the plan is to add three more buildings to complete the lecture hall complex that has circular formation. The first of the aforesaid buildings is now ready for operation which will be put into use. A part of the complex under construction now is a minicomplex comprising 10 flipped classrooms.



The Rushikulya Hall of Residence is an 800-single seated hostel with extremely good standards and atmosphere on par with international standards.



Inside the Campus



Inauguration of 2nd Nestle Kiosk by the Director, Prof. R.V. Raja Kumar



Inauguration of Apollo Pharmacy by the Director, Prof. R.V. Raja Kumar

IIT Bhubaneswar Admits Freshers into the Campus

IIT Bhubaneswar welcomed its 1st year B.Tech and Dual Degree students for the academic session 2021-22 asking them to physically report to the campus between 21st and 24th Nov 2021. A total of 472 students amongst which 90 (20%) are women and 139 (29%) are under 18, were offered admission on 20th Nov 2021, after the 6th and last round of counselling by JOSAA.

Till the end of 22nd Nov 2021, 226 students (182 boys and 44 girls) reported at the campus. The institute gave the option of staying at home and take the education online for those under 18. Only 20 (4%) of them opted to stay back at home. About 7 and 15 students requested for extension of time due to health and other reasons like natural calamity etc. The rest of the students arrived at the campus by 24th. Of those reported at the campus 50%, 27% and 23% got fully vaccinated, partially vaccinated and not yet vaccinated, respectively.



Speaking on the occasion, Prof Raja Kumar, R. V., Director, IIT Bhubaneswar said, "it is heartening to note that majority of those under 18 who are yet to be vaccinated have also chosen to join the campus hostels for education with physical presence. The IIT system is residential in nature and importance is given to peer learning too which is an essential component of creating tomorrow's leaders, today. At IIT Bhubaneswar we have been implementing Covid protocols in a spirited way, vaccinated all at the in the first opportunity, and have been protecting the campus in extremely high standards while permitting the students to stay on the campus. Our campus is Covid free at the moment and we could maintain it that way for the majority of the months during the pandemic. We will be able to take good care of those under 18 and vaccinate them too as and when they acquire eligibility as per the government quidelines. At the moment, all except for the 3rd year BTech students are in the campus and a majority of them have classes running with their physical presence."



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10th Annual Convocation Held in Hybrid Mode

IIT Bhubaneswar celebrated its 10th Annual Convocation on 20th Oct, 2021, in a hybrid mode where students participated live in-person and by online during the current pandemic time.



Shri N.R. Narayana Murthy, Founder, Infosys graced the occasion as the Chief Guest by virtual mode and addressed the Convocation. Dr. Rajendra Prasad Singh, Chairman, Board of Governors (BoG), IIT Bhubaneswar presided over by online. Prof R. V. Raja Kumar, Director, IIT Bhubaneswar presented the Convocation report and awarded the degrees to the students. The institute has evolved a very unique and innovative method of holding the convocation with participation of the degree recipients and degree awarding taking place in live form both in-person and online presence of students. During the Convocation, the Institute conferred degrees on 559 students including 35 Ph. D., 153 M. Tech., 79 M.Sc., 256 B. Tech and 36 Dual Degrees. It was a proud moment for the graduating students, their parents, the faculty members and staff members and the administration of the institute.



Conferences Attended / Lectures Delivered / Papers Presented

Dr. Sumanta Haldar delivered Keynote Lecture on "Challenges in Design of Foundations for Offshore Wind Energy Converters" at IIT Roorkee Research Conclave 2021, December 4th – 5th, 2021.

Dr. Sumanta Haldar delivered Invited Lecture on "Emerging Trends in Offshore Geotechnical Engineering" in the Faculty Development Programme (FDP) on "Experiential Learning in Geotechnical Engineering" from December 6th -8th, 2021, Department of Civil Engineering, VNIT Nagpur.

Dr. Arindam Sarkar attended the HYDRO 2021- International Conference (Hydraulics, Water Resources and Coastal Engineering) (23-25 December 2021) under the aegis of The Indian Society for Hydraulics (ISH), Pune.

Dr. Anush Konayakanahalli Chandrappa attended and presented a paper in the "6th Conference of Transportation Research Group (CTRG)" in the month of December 2021, which was conducted in Trichy.

Dr. Mayank Mishra attended the INTERSPECIES School International Summer School online (ZOOM platform) on 6th-11th September 2021 organized by Department of Civil Engineering and Architecture –conducted at University of Pavia Italy (3 European Credit System (ECTS)).

Dr. Mayank Mishra attended the 6th international course on Seismic Analysis of Structures using OpenSees, July 19th-22nd University of Palermo ITALY (online platform) 2021.

Dr Shantanu Patra presented a paper "3D Numerical Analysis of Screw Pile Subjected to Axial Compressive and Lateral Load." In the Indian Geotechnical Conference, held from 16-18 December 2021, Tiruchirappally, India.

Dr. Meenu Ramadas, Assistant Professor, IIT Bhubaneswar, delivered a technical talk on 'Impacts of Climate Change on Hydro-Meteorological Extremes Through Case Studies' on 6th October 2021 in the online training program on Faculty Development Training Sessions for Civil Engineers organized by the Department of Civil Engineering, Government College of Engineering, Kannur, Kerala.

Dr. Remya Neelancherry presented a paper "Preparation and characterization of TiO2/GO composites for photocatalytic degradation of selected pharmaceutical products by Advance Oxidation Process," in the International conference on Advances in Energy and Environment for Sustainable Development (AEESD-2022), held from 7-8 January 2022.



Dr. Remya Neelancherry, Neha Shukla, and Kondragunta Prasanna Kumar Ramesh presented a paper "Techno-Economic Analysis and Life Cycle Assessment of Microwave Co-Pyrolysis of Food Waste and Low-Density Polyethylene," in the International Conference On WATER, ENERGY & ENVIRONMENT (WEECON 2021), 23- 24 Dec 2021 organized by ISET Research India & IEI Vietnam.

Dr. Gowtham Mondal, presented a paper "Efficient Numerical Analysis of Hybrid Shear Wall with Internal Energy Dissipating Reinforcements," in the Indian Structural Steel Conference – 2022, held in January from 06-08, 2022 – IIT Hyderabad, India.

Dr. Gowtham Mondal presented a paper "Development of an effective and efficient Baseline Free Damage Detection Scheme for Structural Health Monitoring", Indian Structural Steel Conference – 2020, January 06-08, 2022 – IIT Hyderabad, India.

Dr. Gowtham Mondal, presented a paper "Numerical Study On Steel Jacketing Retrofitting Scheme for Experimentally Damaged Reinforced Concrete Frames Subjected to Lateral Loads", Indian Structural Steel Conference – 2020, January 06-08, 2022 – IIT Hyderabad, India.

Dr. Allu Vasudeva Rao delivered an Invited talk "Bohr radius for Banach Spaces on Simply Conned Domains" at the International Conference: "Computational Methods in Function Theory" organized by The Federico Santa María Technical University in Valparaíso, Chile during January 10-14, 2022 through virtual mode.

Dr. Allu Vasudeva Rao delivered an Invited talk "Logarithmic coefficients for the class of univalent functions" on the occasion of the Birth Anniversary of Srinivasa Ramanujan: National Mathematics Day at Amity University, Haryana on December 22-2021.

Dr. Sasmita attended the "International Conference on Linear Algebra and its Application (ICLAA-2021)", in December from 15-17, 2021, MAHE, Manipal, endorsed by International Linear Algebra Society.

Dr. Sasmita conducted a Webinar: "Empowering Women at the Workplace" on December 29, 2021, IIT Bhubaneswar.

Dr. Vijayakrishna Kari delivered a talk on 27-11-2021, in a 5-day online national level faculty development programme held at Bhavans Vivekananda College, Sainikpuri, Hyderabad under DBT, Star college scheme.

Dr. Rajakumar Guduru delivered a lecture on the topic ""English for Writing and Publishing Academic Research" in a

five-day International Online Faculty Development Program on "A Renewed Perspective to Language Teaching on par with Industrial Revolution 4.0" from 25-10-2021 to 29-10-2021, organized by the department of English, Mepco Schlenk Engineering College (Autonomous) Sivakasi, Tamil Nadu.

Dr. Rajakumar Guduru delivered two lectures on the Faculty Development Programme on the theme "Emerging Trends in Teaching Language & Literature" organized on 12th & 13th October 2021 by the Department of English, Aurora Degree and PG College, Hyderabad.

Dr. Rajakumar Guduru delivered a lecture in a National Webinar on "Essentials of Effective Presentation Skills" organized the Department of English, KL University, Vijayawada, Andhra Pradesh, on 25-09-2021.

Dr. Madhusmita Dash, has been invited as a resource person and discussant of a session at the International conference on "Environmental Challenges and Agricultural Sustainability in Asia: Inter linkages and future implications", hosted by Asian Development Bank Institute (ADBI), Tokyo, Japan, held during 8-10 December, 2021.

Dr. Madhusmita Dash participated in the Ministry Training programme on "Biodiversity Conservation and Livelihoods" Sponsored by Ministry of Environment, Forests and Climate Change (MoEF), Govt. of India from 25-26th November 2021.

Dr. B. Hanumantha Rao attended IGS-2021 National Conference from 16-18 Dec-21.

Dr. Kodanda Ram Mangipudi delivered a lecture on Embedded dimensions in Chaos control, Workshop for Jindal Stainless engineers on "Control of Chaotic Dynamical Systems in Steelmaking".

Dr. Amritendu Roy delivered a lecture on the topic" Essential crystallography for engineers – I" on 03.01.2022, and "Essential crystallography for engineers – II" on 04.01.2022, in Essential Materials Chemistry for Engineers' held from January 03, 2021 to January 07, 2021.

Dr. Amritendu Roy delivered a lecture on the topic "Fundamentals of crystallography-I & II" in the Online Short-Term Course on 'Essential Materials Physics for Engineers' during December 27, 2021 to December 31, 2021.

Dr. Sivaiah Bathula delivered a talk on the topic "Nanostructured thermoelectric Materials" in the INTERNATIONAL E–CONFERENCE ON ADVANCES IN NANOTECHNOLOGY(ANT-2021),24th25thSeptember–2021, Organized by Department of Physics & Electronics, in

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Association with IQAC Vaagdevi Degree & PG College, Affiliated to Kakatiya University Warangal, Telangana, India.

Dr. Srikant Gollapudi delived a talk on the topic "An overview of kinetics of corrosion in a short term workshop on "Corrosion, its control and characterization" organized from December 13th to 17th 2021.

Prof. Brahma Deo conducted a workshop for Jindal Stainless engineers from 3rd Aug. 2021 to 7th Dec. 2021 on "Control of Chaotic Dynamical Systems in Steelmaking."

Prof. Brahma Deo conducted a workshop for TATA Steel Engineers from (Ag. 10 to Sept 10 2022) on BOF Dynamic Control.

Prof. Brahma Deo presented a paper at the International Conference: 7th virtual International Conference on Science, Technology and Management in Energy on Control of Post Combustion to Stabilize Power Generation in a Sponge Iron Plant.

Dr. Rajakumar Guduru organised an International Webinar on "Passionate Teaching: A Strategy for Awakening Thinking among ESLers" on 11th November, 2021.

Publications

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Awards and Honours

Team IIT Bhubaneswar has Bagged Innovation Award in the NTPC Green Charcoal Hackathon

IIT Bhubaneswar team led by Dr. Remya Neelanchery, Assistant Professor, SIF bagged the Innovation award and cash prize at the prestigious Green Charcoal Hackathon, a Technology Challenge organized by National Thermal Power Plant (NTPC) and Energy Efficiency Services Limited (EESL). The event was organized with a motto to fast track the development of technology to convert agro residue to charcoal in the pursuit of reducing carbon footprint. The purpose of the event is to bridge the technology gap with the prime objective to clean the air by eliminating farm fire, to produce renewable energy from agro residues, to promote local entrepreneurship, and to increase the income of the farmers. The competition has witnessed exceptional submissions from across the country.



Team IIT Bhubaneswar

Awards, Grants, Fellowships Received

Dr. Remya Neelancherry received the Innovation Award, National Green Charcoal Hackathon 2021 organized by NTPC, in Nov 2021.

Dr. Remya Neelancherry received Women Researcher Award in the International Scientist Awards on Engineering, Science and Medicine, held on 04 & 05-Dec-2021, Visakhapatnam, India.



Dr. Allu Vasudeva Rao was selected for "Chebyshev Grant" from the International Congress of Mathematicians 2022 (ICM 2022).

Dr. Sasmita Received Chebyshev Grant, ICM (International Congress of Mathematicians)-2022

Dr. B. Hanumantha Rao developed Novel technology on "Geopolymer concrete product with industrial wastes" stood among one of the top innovative projects (out of 77) in ALL IIT R&D Fair 2021.

Dr. Rajakumar Guduru, Assistant Professor, School of Humanities, Social Sciences and Management has been awarded with the "2022 Betty Azar Travel Grant for Practicing ESL/EFL Teachers" by the TESOL International Association - Received \$US1,500 for attending the TESOL 2022 International Convention & English Language Expo, Pittsburgh, PA, USA, 22-25 March 2022.

Projects

Dr. Arindam Sarkar	"Hydraulic and Structural design of water supply project of Rural Water Supply and Sanitation."
Dr. Mohammad Masiur Rahaman	"A thermodynamically consistent model for designing high-performance ceramic laminates with tailored residual stresses." SCIENCE & ENGINEERING RESEARCH BOARD (SERB).
Dr. M. Aneesh	"Hypercyclic and chaotic behaviour of adjoint multiplication operators on Banach space of analytic functions" (14.5 lakhs approx.) Start Up Research Grant (SRG) under Young Scientists' Scheme of SERB (DST)
Dr. Abhijit Datta Banik	Development of computational method for finding the exact results on the queueing models involving heavy-tail distributions using complex analysis" Mathematical Research Impact Centric Support (MATRICS), the Science and Engineering Research Board (SERB), DST, New Delhi, India.
Dr. Hanumantha Rao, B.	Sanction of bilateral project on "Development of green construction materials using red mud and phosphogypsum" under Indai-Slovenia Science and technology cooperation for three years.
Dr. Sivaiah Bathula	Band and nanostructural engineering of doped Mg₂Si composite for optimized thermoelectric and mechanical properties. Funding Agency: SERB, DST Amount: 14.5 Lakh

Conferences / Seminars / Webinars

International e-Workshop on Radiation Transport and Applications

International e-Workshop on Radiation Transport and Applications was organized Virtually by Indian Institute of Technology Bhubaneswar during 21-22 January, 2022.

The main objective of the workshop was to bring together scientists, engineers, and doctors involved in radiation transport and its interaction with other modes of heat transfer research, and to provide a relaxed atmosphere for in-depth discussion of theory, experiments, and applications. A special focus was placed on sharing the research ideas on radiation in biomedical applications for tumor diagnosis and therapy which serves as guidepost for treatment modalities and clinical trials.

Topics covered in the workshop were:

- Novel numerical, analytical and hybrid techniques for the solution of radiation transfer equation in multidimensional and complex geometries
- Conjugate heat transfer
- Atmospheric radiation
- Radiation in multiphase heat transfer
- Radiative transfer in participating media
- Fundamentals and applications of radiative transfer in biomedical science
- Nano- and micro-scale radiative transfer
- Radiative transfer-based diagnostic systems
- Far and nearfield radiation
- Radiative heat transfer in combustion
- Solar radiation
- Radiation in planetary systems
- Gas radiation
- Optical imaging and optical tomography
- Radiation properties

International e-Workshop was sponsored by Scheme for Promotion of Academic and Research Collaboration (SPARC), MOE, Govt. of India

Workshop was successfully coordinated by Prof. Swarup K. Mahapatra and Dr. Prasenjit Rath, Indian Institute of Technology, Bhubaneswar, Odisha, India; Prof. Sunil Kumar, New York University, Brooklyn, New York, USA; Prof. Zhixiong (James) Guo, Rutgers University, New Brunswick, New Jersey, USA; Prof. Kunal Mitra, Florida Institute of Technology, Melbourne, Florida, USA; Prof. Dilip K. Parida, AIIMS, Bhubaneswar, Odisha, India.

Some of the Speakers of the Workshop





Swarup K. Mahapatra Professor IIT. Bhubaneswa



Kyle Daur Professor Professo University Waterloo



Himanshu Tyagi

IIT, Ropar

University





CNRS, ISAE-ENSMA Poitiers

Professor, New York Professor, Ozyegin University

AIIMS, Bhubaneswa

IIT Bhubaneswar Research Park to Host Open Challenge for Incubating Start-ups in AR-VR

The Research & Entrepreneurship Park of IIT Bhubaneswar (IITBBS-REP) is all set to host an Open challenge program (OCP) in AR-VR on 2nd and 3rd March 2022 in association with Software Technology Parks of India (STPI), Ministry of Micro, Small and Medium Enterprises (MSME), Govt of Odisha, Start-up Odisha, Ministry of Electronics and Information Technology (MeitY), Govt of India as a part of its endeavour to help to create an entrepreneurial ecosystem in AR-VR in the country, especially in Odisha by on boarding start-ups both in physical and virtual mode. The objective of this year's Open Challenge Program (OCP) is to select upto 20 best submissions led and executed by start-ups, actively involved in research, development, and application activities related to AR-VR. The project proposals with potential to entail a substantial advance in the state-ofthe- art technologies by delivering new services, improve the solutions based on AR-VR with an ability to reach the market in the short run, will be selected. The open call is divided into four participation tracks namely Augmented Reality platform for Medical Planning, Tourism, Cultural Heritage and Education and Skilling.

A Three Day National Seminar on History and Heritage of Sun Worship By IIT **Bhubaneswar**

The School of Humanities and Social Sciences and Management, IIT Bhubaneswar organized a 3-day National seminar on "History and Heritage of Sun Worship- Scientific and Religious Implications of Sun - The Centre of Solarsystem" during December 26-28, 2021 in hybrid mode. The inaugural event was held on 26th Dec, 2021 at Yatri Nivas, Orissa Tourism Development Corporation (OTDC), Konark with the participation of many scholars, researchers and technocrats in the areas of History, Culture, and Literature and Technology. The participants deliberated on diverse aspects of Sun worship with the Konark temple as the thrust. The seminar aimed to revisit the concept and the role of the sun in human existence in historical, scientific, literary and philosophical domains and connect with the recent scientific developments. The seminar was sponsored by Indian Council of Historical Research (ICHR), New Delhi and Indian Oil Corporation, New Delhi and was organized following strict Covid protocols.



The event was coordinated by Prof. Godabarish Mishra, and Prof. Swarup Kumar Mohapatra, SHSSM. The threeday event consisted of invited expert presentations from 32 speakers from across the country and several audiences participating in the hybrid event. The speakers deliberated on the theme of the event and enlightened the participants with newer perspectives on the historical, religious and scientific implications of Sun worship in general and Konark temple in particular. The event with the unique theme and approach created lasting benchmark by unravelling new dimensions of art and culture of Odisha.





10th National Power Electronics Conference (NPEC 2021)

The 10th National Power Electronics Conference (NPEC 2021) was organized at IIT Bhubaneswar from 15th-17th Dec, 2021. The main motto of this conference was to enhance the interaction of the peers in the field of Power Electronics. The Conference majorly focuses on the latest technologies, strategies and challenges that are faced by power Electronics systems. The conference was inaugurated by Shri Nikunja Biharai Dhal, IAS, Principal Secretary, Department of Energy, Govt. of Odisha and Chief Guest on the occasion. Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar presided over the function.



The Inaugural event was held in hybrid mode with a splendid cultural performance by the Social cultural society of IIT Bhubaneswar. An excellent mix of national and international speakers from the Industry and Academics for the keynote sessions and for tutorials were - Prof. Sheldon Williamson from Canada; Prof. Bhim Singh from IIT Delhi; Mr. Vivek from Delta Electronics; Prof. Sanjib Kumar Panda from NUS; Prof. Joseph M. Guerrero from Albargo University, Denmark; Prof, Alberto from KUAS Japan; Shri V Chandrasekhar from CDAC.

This edition of conference has received near to 200 research articles in six different tracks such as, Drives and Control, Power Electronics for Renewable Energy Systems Integration, Power Flow Control, Power Converter Topologies, Components and Devices, Electric Mobility and wireless power transfer, Energy Storage Systems. As many as 97 research articles were shortlisted for this edition of conference. All the sessions and events were conducted in virtual mode.

The conference was Technical Co-Sponsored by IEEE PELS Society, IEEE IAS Society, IEEE Kolkata Section and IEEE Bhubaneswar Sub Section. NPEC 2021 has financially sponsored by Delta Electronics Private limited Bangalore, OPTCL and NREDCAP, Balco and Power Grid Cooperation of India.



Webinar on "Living by the Natural Way"

Mr. M. H. Dalmia (Dalmia Group Holdings) delivered a lecture on the topic "Living by the Natural Way" on 01 Jan 2022. Mr. M. H. Dalmia is a leading Indian businessman, from a prominent business family with consolidated revenue of US\$250 million.

Webinar on "Emerging viral infections: New frontiers and challenges"

Dr. Atanu Basu delivered a lecture on the topic "Emerging viral infections: New frontiers and challenges" on 13th Nov. 2021. Dr. Atanu Basu is presently Joint Director & Head, Electron Microscopy and Pathology Group, National Institute of Virology Pune, India.

Webinar on "Cyber Security Awareness"

Padma Shri Prof. Manindra Agrawal, IIT Kanpur, delivered a lecture on the topic "Cyber Security Awareness" on 28th October 2021. Prof. Manindra Agrawal is a professor at the Department of Computer Science and Engineering and formerly Deputy Director at IIT Kanpur and presently N Rama Rao Chair Professor.

Webinar on "The Unsung Heroes of India's Freedom Movement"

Commander V. K. Jaitly (IIT KGP Alumnus, INS (Retired), delivered a lecture on the topic "The Unsung Heroes of India's Freedom Movement" on 25th August 2021. He is the Author of Book- We Can! We Can! Commander V. K. Jaitly is the ex-President of IIT Kharagpur Alumni Foundation, India that integrates KGP alumni across the world. He is an IIT Council nominee by HRD Ministry on the Board of Governors of IIT Bhubaneswar.

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Foreign Faculty Teaching at iit, Bhubaneswar

SI No.	Name of the Foreign Faculty	Course Name / Guest Lecture
1	Prof. Kaliappa Pillai Kalirajan The Australian National University	International Business
2	Prof. Ram Prasad Chakravarthi Department of Politics, Philosophy and Religion Lancaster University, United Kingdom	Ethics & Epics
3	Prof. Arindam Chakrabarti, Distinguished Professor, Department of Philosophy, University of Hawaii, USA	Ethics & Epics
4	Dr. Aruni Mahapatra Deparment of English, University of Alabama Birmingham, USA	Dimensions of Creativity: Indian Writing in English
5	Prof. Roger Webb Department of Physics, University of Surrey, UK	Guest Lecture in Sub: Accelerator Based Physics of Solids
6	Prof. William A. Lanford Department of Physics University at Albany, USA	Guest Lecture in Sub: Accelerator Based Physics of Solids
7	Prof. Brain Dolan Maynooth University, Ireland	Guest Lecture in Sub: Guest Lecture (part of M.Sc. Physics 1st Year Classical Mechanics Lecture)
8	Dr. Gregory Kozyreff Universite Libre de Bruxelles, Campus de la Plaine, 1050 Brussels, Belgium	Guest Lecture in Sub: Quantum Mechanics-1
9	Prof. S.D. Mahanti Michigan State University, East Lansing, MI, USA	Guest Lecture in Sub: Condensed Matter Physics
10	Prof. David Mecerreyes Vice Director, Centro Joxe Mari Korta Avenida de Tolosa 7220018 Donostia-San Sebastian, Spain	Guest Lecture in Sub: Polymer Chemistry
11	Prof. Isabel Marrucho Instituto Seperior Technico, Chemical Engineering Department, University of Lisbon	Guest Lecture in Sub: Polymer Chemistry
12	Prof. Martin J. Gander University of Geneva, Switzerland	Guest Lecture in Sub: Lecture Series on Introduction to Domain Decomposition Methods
13	Prof. Uri Onn Dept. of Mathematics, Australia National University, Australia	Guest Lecture in Sub: Linear Algebra

14	Prof. Toshiyuki Sugawa Graduated School of Information Sciences, Tohoku, University, Japan	Guest Lecture in Sub: Integration on Manifolds (part of the course Functions of Several Variables)
15	Prof. Alexander Sosnikov University of California, Davis USA	Guest Lecture in Sub: Riemann zeta function & random matrix

Other Activities

Medical Unit at IIT Bhubaneswar

The Covid-19 Pandemic has spawned the entire world. In this difficult and crisis time IIT Bhubaneswar Medical unit has been responding rapidly, working with other essential services round the clock. The medical unit is equipped with 24X7 Doctors and Nurses services, all Lifesaving Drugs, Oxygen, Nebulizer machine, ECG machine, Glucometer, Multipara Monitor and 24 hours Pharmacy.



Vigilance Awareness Week Observed at IIT Bhubaneswar

IIT Bhubaneswar observed Vigilance Awareness Week 2021, a week long programme starting from 26th October to 01st November 2021 with the theme "Independent India @ 75: Self Reliance with Integrity" as mandated by the Central Vigilance Commission (CVC). On 26th Oct, 2021, a pledge taking ceremony was organized at the Admin Building. A program was organized at the Community Centre of IIT Bhubaneswar on 1st Nov, 2021. The chief guest of the event was Shri. R. Manga Babu, Chief Commissioner, CGST & Customs, Bhubaneswar, Odisha. The event was presided by Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar.

Speaking on the occasion, Prof. R. V. Raja Kumar reiterated that IIT system is known for its transparency and ethical standards, while contributing to the nation building. He reminded about the clarion call made by the Hon'ble Prime Minister of India for the creation of "Aatma Nirbhar Bharat"



wherein we have all engaged ourselves in our own ways for achieving self-sufficiency by the integrity model. He urged the faculty, staff and research scholars to incorporate integrity, honesty and sincerity as a part of their daily routine for creation of an enlightened society and thereby paving the path for a corruption free society.

Shri R. Manga Babu, Chief Guest on the occasion mentioned about IIT Bhubaneswar being an ideal example of "Self Reliance with integrity" and complimented the charismatic leadership of Prof. R.V, Raja Kumar for making the Institute a role model among its peer Institutions. He provided a detailed insight into the theme of self-reliance with Integrity and reiterated on the need to have preventive measures in place for fighting corruption at all levels and thereby instilling transparency and accountability in the overall functioning. He emphasized on the need for preventive Vigilance by incorporating the integrity model for creation of a vigilant organization. He also explained in detail about the importance of ethics in an organization and urged the employees to make integrity a part of their daily lives by being vigilant to fight corruption and contributing to the nation.



Also present at the occasion were Prof. P.R. Sahu, Chief Vigilance Officer (CVO), Shri Debaraj Rath, Registrar along with active participation by faculty, staff members and students.

Blood Donation Camp organized at IIT Bhubaneswar

IIT Bhubaneswar in association with NSS Odisha organized a Blood Donation Camp on 07th November 2021 in collaboration with Capital Hospital, Bhubaneswar and NGO Sahaya at its Community Centre located in its Campus. Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar graced the camp and expressed appreciation for the participation of students, faculty, and staff at IIT Bhubaneswar in the Blood Donation Camp.

The drive saw close to a total of 92 people which included students, faculty and staff members coming together to donate blood for the noble cause. Volunteers helped and gave moral support to those donating blood.

The programme was coordinated by the NSS coordinator, Dr. Sasidhar Kondaraju, and EAA coordinators Dr. Srikant Gollapudi and Dr. Bankim Chandra Mandal, faculty members of IIT Bhubaneswar. Also present on the occasion were Dr. Ashima Sarkhel, Medical Officer and Shri Swapnil More, VP, Student Gymkhana along with other faculty, staff and students. The medical unit of the Institute was monitored and supported the blood donation drive.



Mini-Marathon as Part of Fit India Freedom Run 2.0

IIT Bhubaneswar organized a Mini-Marathon as part of the 'Fit India Freedom Run Drive 2.0' on 25th September, 2021. The Freedom Run is a new initiative under the aegis of the Fit India Movement and is conceived with a vision to keep ourselves fit while maintaining social distance during the event. The event was inaugurated and flagged off by Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar.

Speaking on the occasion, Prof. R.V. Raja Kumar, Director, IIT Bhubaneswar said, "Physical and mental fitness and wellbeing is very essential for every citizen for leading quality life. In times of pandemic, keeping fit has become an even more important requirement. IIT Bhubaneswar is designed to be a spread campus and adopted a cycling culture for

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movement within the campus. A wellness environment has been created at the institute by giving equal importance to health and fitness among the campsites by regular practise of sports, cycling and yoga. Besides, a clean and green campus environment has been created. The Institute celebrates events such as the Freedom Run, Mini-Marathon and the International Yoga Day in its endeavour to create awareness amongst all the stakeholders. The "Fit India Movement" initiative by Shri Narendra Modi, Hon'ble Prime Minister of India in making India a Fit Nation is truly a visionary step in this direction and the nation needs to be reminded about it in these times. On this occasion, I would urge the students, faculty, and staff members to continue to exercise daily".

The Institute saw enthusiastic participation of a moderate number of participants comprising faculty, officers, staff and student community of the institute, the number which was restricted due to Covid-19. The event was organized with strict observation of social distancing norms and COVID-19 protocols in view of the ongoing pandemic. The event was coordinated by Dr. Srikant Gollapudi, and Dr. Bankim Chandra Mandal, EAA Coordinator.



Hindi Pakhwada Program Organized at IIT Bhubaneswar

On the occasion of Hindi Diwas, Rajbhasha Ekak and Hindi Literary Society of students Gymkhana "Abhivyakti", IIT Bhubaneswar organized a 14 day (1st-14th Sept, 2021), "Hindi Pakhwada" in the Campus. Owing to the ongoing pandemic situation, all programmes were organized through the online mode. The motto of the programmes organized was to celebrate the importance of the Hindi language and create awareness about its use in daily life. Dr. Raj Kumar Singh, PIC, Rajbhasha Ekak, IIT Bhubaneswar welcomed everyone to the program.



Winter Activities under Student Gymkhana

Winter Fiesta: The Cure for your Ennui

Culture fests and sports tournaments are unquestionably the two most important traditions of any college life. This year, despite the hurdles posed by the pandemic and the subsequent restrictions on offline schooling and functioning, IIT Bhubaneswar upheld these traditions successfully. The 'Winter Fiesta,' a month-long technosocio-cultural-sports festival filled with a plethora of events, stimulating workshops, and challenging competitions, was successfully conducted. This could not have been possible without the constant support and guidance from the director, Prof. R V Raja Kumar; the Dean of student affairs, Prof. Parlapalli Venkata Satyam; and the President of Students' Gymkhana, Dr. Srinivas Bhaskar Karanki. All the students on campus showed undying co-operation and abided by all the Covid protocols to prevent the spread of the disease. All the clubs and societies actively organized events to boost students' creativity and enthusiasm.

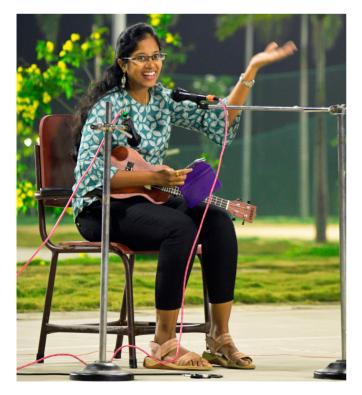




Firstly, we had the English Literary Society, Panacea, that organized events which appealed to the interests of both orators and writers alike. Events like Debate, Devil's Advocate, and Shipwrecked were organized to foster creativity and spontaneity in the participants, and test their knowledge of current affairs. Abhivyakti, the Hindi Literary Society, conducted a'Just a Minute' competition and a Poetry Slam, which was organized to encourage and showcase the talents of young writers. Panacea, too, conducted a Poetry Slam competition.



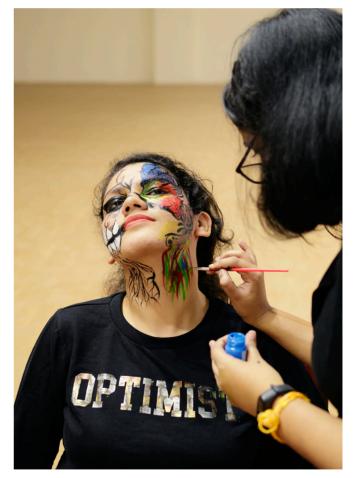
The music club, Aaroh, held multiple workshops that provided professional training on vocals and guitar to help participants hone their musical skills and build new hobbies. The workshops were conducted in numerous slots owing to the significant participation.



Cinewave, the film-making society, also organized cinematography and video editing workshops. These were focused on teaching the fundamentals of film-making and cinematography to aspiring filmmakers and helped explore the vast ocean of video rendering. They conducted an Ad making competition based on the skills they picked up from these workshops.

Clix, the photography society, held a workshop on photography to let participants in on the tips and tricks of taking aesthetic photos to enhance their Instagram and other social media handles. A competition providing the platform to budding phoyographers to display their talent was organised.

The Fourth Wall, the dramatic society of our Institute, conducted Dumb Charades on the theme of movies.



We also had D-Gang, the dance society, organizing hiphop and a salsa workshop to take us through the culture of various diverse dance forms. They also organized a Flash Mob to get the masses moving on the dance floor and be one with the rhythm.

Kalakriti held multiple events like face painting, live sketching, and painting in the Fine Arts Society. In addition, they organized in-depth workshops on sketching and painting, teaching the fundamentals of perspective painting, live subject study, and the basics of sketching.

The Quiz Club organized a series of four quizzes to keep everyone's neurons pumping, the MELA quiz testing the participants' knowledge on Music, Entertainment, Music and Arts, the Sci-Biz-Tech quiz, an India quiz, and a general quiz just so one's random internet surfing doesn't go in vain.

Souls for Solace, the Social Welfare Society, organized a First Aid workshop to give the real-life skills necessary to cater to the needs of the injured in emergencies as good Samaritans.



The Socio-Cultural Council organized an Open Mic night to showcase their talents and explore new interests. To ensure that students adhere to covid regulations set by the government, students volunteered to be a part of the Covid Protocol Management Team.

Numerous sports tournaments were organized apart from these cultural programs, seeing hundreds of participants. It started with the Basketball tournament in the second week of December. It saw both second-year students and the veteran champions of fourth and fifth years battling it out. They were followed by Table Tennis and Badminton tournaments. There were over 70 participants in Basketball and a whopping 200 in Badminton. After these, Cricket and Football tournaments commenced as well and again, unsurprisingly, there were over 400 participants due to its immense popularity in India. There was active participation in the Throwball and Volleyball tournament as well as they brought in over 150 participants. Competitions were conducted in board games, like Carroms and Chess, to test concentration, critical thinking, and cognitive skills. Further, BGMI and Valorant tournaments also brought in over 200 participants.

The icing on the cake was the productions by the three performing societies- Aaroh, D-Gang, and The Fourth Wall in the closing ceremony of the Winter Fiesta. This ceremony was graced by the presence of all the dignitaries- the director of IIT BBS, member of the board of governors of IIT Bhubaneswar, Dean student affairs of IIT Bhubaneswar,



former head of Rubber Technology Center (IIT KGP), and the President of Gymkhana. In this closing ceremony, the winners of various competitions organized in Winter Fiesta were felicitated with mementos and certificates by our respected dignitaries.

Students are happy that they made some good memories in this vacation, learnt some new skills, and relished college life to the fullest!





Photographs of Phase-II Construction - IIT Bhubaneswar Campus

Residential Faculty Quarters



SMS Extension Building



Auditorium



Basketball Court



School of HSS&M Building



SES Extension Building



CRIF Building



Playgrounds





Online Outreach Program

On

26–27 May, 2022

Timings: 10:30 AM to 1:30 PM

(GET YOUR HANDS-ON TRADING EXPERIENCE WITH INNOVATIVE TOOLS)

TRADING IN EQUITY

For Online Registration: <u>https://forms.gle/krx65uE5AinPt4YJ8</u>

About the Course

After the successful completion of Online QIP Short Term Course on Stock Market, Portfolio Management and Trading by IIT BBS, this time IIT BBS and NISM are coming with two-day online Program on "Trading on Equity" for the finance executives from public and private organizations, faculty members, and research scholars of the universities and other academic institutions across the country. The programme aims to provide useful insights to the understanding vis a vis the hands-on practices to do trading in equity. The program will be delivered in an online web-based format. Therefore, we may like to consider nominations from your organization for this unique program, which will also add immense value to your organization. E-Certificate will be issued after the completion of the program.

About Indian Institute of Technology Bhubaneswar

IIT Bhubaneswar is one of the eight new Indian Institutes of Technology established by the Ministry of Human Resource Development, Government of India under The Institutes of Technology (Amendment) Act, 2011. Indian Institute of Technology Bhubaneswar (IIT BBS) was established on 22nd July, 2008. The Institute strives to offer the best engineering education with unmatched novelties in curriculum. Within a short span of incipience, IIT BBS has made rapid strides towards becoming one of the elite technology institute of India spurred by sustained creation of knowledge and innovation, through high quality R&D activities and commitment to holistic education. The Institute aims to develop and pursue dynamic and flexible curricula designed to facilitate creativity and cognitive thinking among students through productive partnership with industries.

About NISM

National Institute of Securities Market (NISM) is a premier Institute promoted by Securities and Exchange Board of India (SEBI), the securities market regulator, for promoting Research and Training in the securities market. It carries out a wide range of activities and at enhancing the quality standards of academicians and research scholars and also in providing them with the latest developments in the securities market through a pragmatic approach.

Topics to be covered

Overview – Financial Markets, Market Operations- Trading, Clearing and Settlement Process, Trading Products, Cash Market, Trading Rules, Margins and Risk Management – Client Level Technical Analysis – Moving Averages, Candlesticks, Bollinger Bands & RSI. Back testing of technical indicators

Learning Outcomes

The program will give hands on experience and confidence to trade in the market. Participant will understand risk management tools to control downside risk of trading.

Course Coordinator

Dr. Naresh Chandra Sahu (<u>naresh@iitbbs.ac.in</u>), School of Humanities, Social Sciences and Management, Indian Institute of Technology Bhubaneswar (IITBBS) Dr Pradiptarathi Panda (pradiptarathi.panda@nism.ac.in), National Institute of Securities Market (NISM)

Who Should Attend?

Faculty Members, academicians, and research students Program Duration 6–8 hours for two days

NiSM

Program Fee

Rupees 3000/- (Inclusive of all taxes) per participant. Seats are limited as batch size is restricted to 45 participants only.

