

Respected Chief Guest Prof. L.M. Patnaik, Dr. R. P. Singh, Chairman Board of Governors, members of the Board of Governors and Senate members of the Institute, distinguished guests, the graduating students and their family members, my faculty and staff colleagues, dear students, media persons and friends - it gives me great pleasure to extend a very warm welcome to you all on the occasion of the Eleventh Convocation of the Indian Institute of Technology Bhubaneswar.

Today, we are privileged to have amidst us Prof. L. M. Patnaik, former Professor IISc Bangalore, Adjunct Professor and NASI Senior Scientist, National Institute of Advanced Studies, Bengaluru. He was gracious enough to accept our invitation to be the Chief Guest on this solemn occasion where a total of 666 students will receive their degrees. Many other dignitaries have kindly consented to grace this solemn occasion with their august presence. I extend a cordial welcome to all of them.

My warm congratulations and best wishes for all the degree recipients. The current graduating batch of students had almost their full education under Prof. Raja Kumar, former director of IIT Bhubaneswar. He has sent his congratulations to all of them and their parents, and wished them all the best in their forthcoming endeavors in life.

For the IIT Bhubaneswar family, it has been a wonderful journey of fifteen years. I take this privilege to share with you a brief account of our journey with important milestones, emphasizing achievements in the year 2022-23, and our dreams of building an institute of distinction.

Campus and Infrastructure

IIT Bhubaneswar is situated at the foot of the historic Barunei hillock, and spans 3.8 km² which is 1.5 times larger than my alma matter IIT Madras. The campus

maintains outstanding landscapes. It is home to more than 40,000 evergreen and deciduous flower and fruit trees, of which 2000 were planted last year. The trees include Bauhinia, coconut, guava, mango, jamun, papaya, grapefruit and foxtail palm, which create a healthy eco-system for attracting exotic and migratory birds. We are highly committed towards promoting a culture of eco-friendliness and green belt. IIT Bhubaneswar is setting up roof top and surface rainwater harvesting, waste management and wastewater recycling systems to make the campus zero-discharge.

By the next convocation, we expect to have infrastructure to enable 5000 bright minds to pursue research in high-end technologies. It is noteworthy that this infrastructure is 30% more than initial projections for the Rs. 1260 crores budget sanctioned. The master plan envisages accommodation of 10,000 students, 1000 faculty, 2100 support staff and a Research Park much like that of my alma matter IIT Madras.

Academics

IIT Bhubaneswar has 7 schools, namely – Basic Sciences; Electrical Sciences; Mechanical Sciences; Infrastructure; Earth, Ocean and Climate sciences; Metallurgy, Mineral and Material Sciences; and Humanities, Social Sciences and Management. Presently, we have more than 3000 students of which 14 % are Ph.D, 17 % Masters (M.Sc. + M.Tech.), 17 % Dual-Degree and 52 % B.Tech. There are more than 160 regular faculty and 100 non-teaching staff. In addition, 34 adjunct faculty from reputed foreign and Indian institutes / organizations have delivered lectures in different courses. These lectures raise standards of education and provide international flavour to its students. This endeavour is ahead of the SPARC and VAJRA schemes of MoE.

Our institute has promoted holistic and multidisciplinary courses envisaged in NEP 2020 since its inception. Cutting edge technology courses in AI, Data Sciences, Nano Science and Augmented and Virtual Reality have been offered.

During orientation, new entrants are taken to places of historical and monumental importance to make them aware about the locality, culture and heritage.

Placement

About 95% B.Tech. and 88% of M.Tech. have got placed so far. For the first time, as high as 55% of B.Tech. received top placements within first 3 days of the opening season. The average salary was about 19 lakhs per annum for B.Tech. and 11 lakhs per annum for M.Tech. Third year students have received internship offers in reputed industries. The Career Development Cell (CDC) of IIT Bhubaneswar coordinates these placement and internship activities. Many start-ups and Fintech companies have shown keen interest to hire this year.

Research and Development

The institute has identified following nine thrust areas for making globally well recognized contributions: energy; micro and nano manufacturing and sensors; nanoscience and technology; augmented and virtual reality; climate change and extreme events, environment and sustainability; data science and machine intelligence; IoT and next-generation networks; groundwater exploration and agriculture. In these areas, during the last year, the faculty and students contributed to creating new knowledge by publishing more than 500 research papers in reputed international and national journals, 29 book-chapters, 120 conference papers, and editing 1 book; more than 50 patents were filed; funding agencies granted more than 110 sponsored research and consultancy projects to the institute.

Some notable industry-academia collaborations and R&D initiatives are as follows.

- World Bank assisted program on "REjuvenating Watersheds for Agricultural Resilience through innovative Development (REWARD)" sponsored by Govt. of Odisha.

- Virtual and Augmented Reality Center of Excellence (VARCoE): a unique center of its kind in the country that has sanctioned 9 R&D projects, pre-incubated 6 startups, and organized a number of workshops, a hackathon, an open challenge and a skilling program.
- Six projects under “IMPacting Research, Innovation and Technology (IMPRINT).”

The Institute is actively engaged in collaborative research with many reputed universities and research organizations across the world.

Entrepreneurship and Startups

The E-Cell of IIT Bhubaneswar nurtures entrepreneurship. It organized an online workshop on “How to start an enterprise” with some IIT professors and DGM of SBI Bhubaneswar as resource persons. The workshop emphasized writing of good proposals and the funding opportunities from banks, and was attended by more than 1000 participants. The E-Cell holds a yearly E-Summit, wherein guest talks, competitions, workshops, internship fair and investors drive help the participants bring their entrepreneurial skills out. The 8th edition of the summit was attended by more than 2000 participants from the colleges of Odisha and other states.

The Technology Incubation Centre (TIC) of the E-cell supports students and faculty members in prototype development. Four projects of this centre are completed. Three of these are on Applications of IoT for smart homes, power quality monitoring and health monitoring. The fourth was on Biogas production from the biowaste produced in IIT hostel kitchens.

IIT Bhubaneswar Research and Entrepreneurship Park (IITBBS REP) has supported more than 50 start-ups ideas to build into business and incubated around 20 start-ups from its Samantpuri campus. Two promising start-ups in electric vehicle and digital communication areas are being mentored and supported. Another 11 start-ups in the AR/VR domain are being inducted and incubated. The centre is being modernized with state-of-the-art facilities.

Continuing Education

Our Continuing Education cell reaches out to needy learners of diverse socio-economic background with cost-effective and high-quality technical education. During the last year, 17 international and national workshops, conferences, short term courses and symposia have been organized. The cell has actively implemented MoE schemes such as the Scheme for Promotion of Academic and Research Collaboration (SPARC) and Global Initiative of Academic Networks (GIAN). Eleven SPARC projects are running with the active involvement of 25 International professors from 15 foreign universities. This is the largest number of sanctioned projects among the 2nd and 3rd generation IITs. Further, IIT Bhubaneswar has so far conducted 34 short term GIAN courses with the support of renowned professors from foreign universities. These include “Teaching for Inclusion: Principles for Effective Practice” and “Nanotechnology in Water and Wastewater Treatment.”

Outreach

Under the Unnat Bharat Abhiyan (UBA), a team of faculty, staff and students adopted nearby villages, namely – Argul, Khudupur, Kansapada, Podapada and Padanpur for development. For instance in the High school at Argul next door - Science, English and Mathematics classes, assessment and personal guidance for the students of Classes IX-X. “Ananda Kendra” in temple premises of Khudupur and Kansapada – every Sunday morning interaction with village kids to boost their physical, mental and academic wellness

Student Activities

The Students’ Gymkhana is a central hub for all-round development of students and is active throughout the year. It has three councils - Social & Cultural, Science & Technology, and Sports & Games. The annual techno-management fest Wissenaire, socio-cultural fest Alma Fiesta, and Entrepreneurship meet E-

Summit have set a distinguished mark in the eastern zone and had their best editions yet. About 45 students have achieved laurels in these events.

Extra Academic Activities (EAA) which connect the students with the local community and bring a sense of social responsibility are compulsory part of course work for first year undergraduate students. The NSS volunteers cleaned up the foothill of Baunei Hills which is a heavily visited area as a part of Swaach Bharat mission. They also created social media campaigns on child labour, ill effects of tobacco and yoga.

Inclusivity

In our institute, 95 % of B.Tech / Dual Degree and 86 % of the M.Tech students are from outside Odisha. About 75% of the faculty and 25% of the staff are non-Odiya among which Thelugu, Bengali and Hindi are the prominent language speakers. Women comprise 25 % of PhD students, 20 % of B.Tech. / Dual Degree / M.Tech. students, 14 % of faculty and 12 % of the non-teaching staff.

Alumni activities

The Alumni association of IIT Bhubaneswar was founded in 2016 and has about 2800 members today. The association works closely with the PAN IIT Alumni India. It has launched a mentorship program to bolster alumni-student relations via collaborations on various technical and non-technical projects. It has helped many students in getting internships and placements through its contact network.

Computer and IT Services

The Computer and IT Services Cell (CITSC) helped the institute immensely in COVID pandemic. It is responsible for making all arrangements for online meetings / classes / talks / seminars / examinations, providing MATLAB and other software to all, and for LAN and WiFi connections to various residences and offices in the campus.

Distinguished visitors

Several distinguished personalities addressed the faculty, students and staff. These include Shri Dharmendra Pradhan, Hon'ble Minister of Education; Shri Ashwini Vaishnaw, Hon'ble Minister for Railways, Communications, Electronics & IT; Mr. Sanjay Kumar Mishra, Managing Director, OPTCL; Dr. Minati Behera, Chairperson, Odisha State Commission for Women; Dr. R. Chidambaram, former Principal Scientific Adviser to GoI; Prof. Damodar Acharya, former director, IIT Kharagpur; Shri Ram Madhav, leading Author.

Faculty awards

Four teachers have been chosen for teaching excellence awards based on the students' feedback. These include Nijwm Wary, Srinivas Karanki, Siddhartha Borkotoky, School of Electrical Sciences, and Raj Kumar Guduru School of Humanities, Social Sciences and Management.

Other significant awards / honours received by the faculty are as follows.

Faculty	Award / Honour
Venugopal Arumuru	SERB International Research Experience (SIRE) fellowship.
Chandrasekhar Perumalla	"Transnational Access Researcher" under the H2020 program of the European Union to work at National Smart Grid Laboratory, Norway.
Debapratim Ghosh	Affiliate Membership of IEEE MTT-S TC-3
S. R. Samantaray	INAE Fellowship, OPTCL Chair Professor, SERB Science & Technology Award for Research
Sudipta Saha	Best Paper Award in IEEE CCNC 2022 and IEEE COMSNETS 2022

Sasmita Barik	<ul style="list-style-type: none"> ●Academic Secretary of the "Academy of Discrete Mathematics and Applications (ADMA)" ●Chebyshev Grant, International Congress of Mathematicians (ICM) 2022.
Remya Neelancherry	Editorial Board Membership of Environmental Nanotechnology Monitoring and Management journal (Elsevier)
Rajan Jha	Associate Editor of IEEE Sensors Journal
Syed Hilal Farooq	DAAD and UNESCO fellowships

Student medal winners will be announced separately

To conclude, IIT Bhubaneswar has grown steadily and surely along several dimensions with its mission to become globally competitive and locally relevant. We will strive to hasten this growth, add new dimensions, and improve the perception about our institute by broadcasting our capability and achievements.

Acknowledgements

This Institute and its entire activities could not have been achieved without the full participation and support of all stakeholders – our faculty, students and staff; agencies and industries sponsoring R&D and consultancy projects; professionals from other organizations and our alumni. The Institute is grateful to the Ministry of Human resource Development, Govt. of India for its continued and sustained encouragement and support.

I end by congratulating all the graduating students, awardees and medal winners and wish all happiness, professional success and fulfilment in their lives.

Jai Hind!