

DIRECTOR'S REPORT



Dr. Asutosh Sharma, Secretary DST and the Chief Guest of the 7th Convocation; Shri Pankaj Ramanbhai Patel, Chairman, Board of Governors; Hon'ble Members of the Board of Governors and the Senate; distinguished guests; dear graduating students; parents and guardians; esteemed members of the Faculty and Staff of the Institute; representatives from the media and press, ladies and gentlemen!

It gives me great pleasure to extend a very warm welcome to you all to the 7th convocation of IIT Bhubaneswar, in this scenic campus of the institute.

Today, we are delighted to have Dr. Asutosh Sharma with us, who was gracious enough to accept our invitation, as the Chief Guest on this ceremonious occasion.

This year is the decennial year of IIT Bhubaneswar, and thus, it marks an important milestone in its history. It has been a wonderful journey for ten years, during which the Institute grew steadily with its mission to become globally competitive. While the initial years went into creating transit facilities and establishing different academic operations, the last three and half years have been very crucial, through which we have achieved a phenomenal growth and the institute completely operating from the permanent campus. The institute took several pioneering initiatives in multiple fronts, towards achieving global competence such as the following:

- Rising of standards of the institute in all fronts to international level,
- Creating near-global class infrastructure – the institute is one of the top few campuses, already,
- Global search for quality faculty and faculty of foreign origin,
- Internationalisation of its academic programmes
- Enhancing of professional accountability in teaching and research,
- Encouraging quality than quantity in research,
- Establishing international collaborations on research of high industrial & societal relevance,
- Doubling of PhD scholars' intake in the next 3 years.

Some of the notable achievements of the institute, in the last three and half years, through intercalation of holistic education process, with the dedicated spirit of achieving excellence, in teaching and research are as follows:

- Improving of standards (teaching, research, faculty selections, transparency, governance, accountability, security, house-keeping, etc.).
- Doubling of B.Tech and PhD students' intake during the last two years,
- For the first time, the institute recorded improvement in closing ranks of B.Tech admissions, despite a rise in total number of seats in the country,
- During the last three years, the institute has tripled its placements with one and half times rise in average salary,
- As high as, 80% of placements of students has been in core industry which is a very desirable phenomenon markedly different from what has been happening in the country so far,
- The institute has achieved the first success in raising faculty of foreign origin and the endeavor is continuing with three colleagues on roll at the moment, with assignments for duration ranging from 8 to 24 months and several others in pipe line,



- Witnessed phenomenal rise in entrepreneurship during 2015-18 from almost zero to setting up of an incubator, start-up center and setting stage for the IITBBS Research & Entrepreneurship Park by the end of 2017.

Now, I take the privilege of sharing with you a brief account of our journey emphasizing achievements and important milestones in the year 2017-18, in fulfilling our dream of building up an institute of global class in the near future.

Performance in Institutional Rankings:

The strategic initiatives taken in the recent times have not only fostered the development of the institute, but also resulted in significant rise in institute's ranking performance. IIT Bhubaneswar's all India engineering institutional rank by NIRF in 2017-18 is at 18th position, and all India Overall rank by NIRF went up to 51st position from 66th position, in 2017-18. As per the India Today magazine's ranking, IIT Bhubaneswar's rank went up to 10th position from 22nd position; In The Week Hansa Research Engineering, the rank went up to 27th position from 32nd position. This year, our Institute also participated in QS and Times Higher Education Rankings. The Institute also ranked at 16th position by Career 360 Engineering and 20th position by Times – i3RC Engineering. The rising trend expected to continue.

Academic Programmes:

With an objective to fulfill the aspirations of the society, during the last three years, IIT Bhubaneswar raised its student intake with the current 1765 Students (B.Tech. - 1101, M.Tech. - 266, MSc – 142, and PhD - 256), 129 full-time faculty members, 15 officers and other supporting staff. This rise was made possible, despite a serious limitation caused by the Phase-1 infrastructure with only 1000 hostel rooms accommodation, and by availing hostel facilities from sister institution, NISER Bhubaneswar.

This year we started a new M.Tech. Programme in Computer Science and Engineering having two sub-specialization, viz: Cyber Security & Forensics and Data Analytics which is being offered, for the first time in the country. Intake of the B. Tech. students is increased from 350 to 370 with the increase in supernumerary seats for female students in a significant step which made IIT Bhubaneswar have the highest intake amongst 2nd and 3rd generation IITs. Now, growth is going to be a phenomenon, almost every year. With this the number of programmes at the institute includes B. Tech. programmes in 6 branches of Engineering (Computer Sciences, Electrical, Electronics & Communications, Mechanical, Civil, and Metallurgical & Materials), 5-year Dual degree programmes in 9 disciplines, M. Tech. in 11 specializations, and M. Sc. in 5 disciplines (Mathematics, Physics, Chemistry, Geology and Atmosphere & Climate Sciences) besides Ph.D. in almost all the disciplines ranging across the B. Tech., M. Tech. and MSc Programmes.

Engagement Programme for Fresh Students:

In order for the new comers, to overcome the burnout syndrome of the JEE coaching, IIT Bhubaneswar is organizing an 'engagement programme' since last year... To combat this problem, this year too, the Institute organized 'engagement programme' in a bigger way. This programme includes Director's message, interaction by the Deans of Academic and Student Affairs, Heads of the Schools, members of the faculty and a session on 'Introduction to Engineering' by the Director. As part of this programme IIT Bhubaneswar sends its new entrants to nearby heritage sites to make them familiar with the locality and make them be aware of the history and culture of Odisha. The programme also includes a three day Personality Development Programme by name 'Yes+' conducted by Sri Sri University, Cuttack, during the period 27-29th July, 2018. The programme was in line with our objective of helping the students to develop team building capabilities, creativity, leadership, independent thinking, stress management and mind control. The engagement was



accepted by everyone with great enthusiasm. The above apart, cycling culture is introduced to the students to encourage a healthy and active life-style.

Research & Development Activities:

There has been considerable progress in Research and Development front during last one year. A total of 68 sponsored research and consultancy projects worth about Rs. 16 Crore have been sanctioned to the Institute during the year (2017-18) from different funding agencies. Besides these sanctioned projects, 100 project proposals worth about Rs. 72 Crore have been submitted during the last one year to different funding agencies by the faculty members. The major funding agencies are MHRD, DST, CSIR, UGC, ISRO, DRDO, DAE, CPRI, NALCO, IUSSTF, MoM, MoWR, MoES, INCOIS, IITM, BRNS etc. The various major areas covered by these projects are: Advance Materials, Energy, Nanotech Hardware, Health Care, Defense, CS & ICT, Environmental Sciences & Climate Change, Water Resources & River Science, Manufacturing and Sustainable Urban Design. Our faculty members also actively participated in major initiatives of MHRD namely IMPRINT, UchhatarAvishkarYojana (UAY), Swachhta Action Plan etc.

The Institute initiated a collaboration with National Aluminium Company (NALCO), which resulted in projects worth Rs. 1.70 Crores in the area of utilization of industrial wastes like redmud and flyash in developing an environmental friendly geo-polymer concrete. An agreement was signed with Indo-US Science and Technology Forum on 25th September 2017 for research collaboration on "Smart Distribution System with Storage". A research collaboration agreement was made with the State Pollution Control Board (SPCB), Odisha for support in the activities planned under Bay of Bengal Coastal Observatory (BoBCO) in the area of Integrated Coastal Zone Management Project (ICZMP). A delegation of European Research & Innovation officials consisting of the Science, Technology & Innovation counsellors, attachés and Directors of institutes from European countries, visited our Institute during February 2018 to explore the opportunities for International collaboration/exchange of students and faculty.

Research Publications & Patents:

During the last one year (2017), the institute contributed to creating new knowledge by publishing more than 465 research articles including, 321 research papers in National and International Journals of repute and high impact factor, and 9 Book-chapters. Further, 135 papers were presented in various national and international conferences in India and abroad and 8 patents have been filed.

School-wise publication list during the last one year is as follows:

School	Book Chapter	Journal publications	Conference publications	Total Publications
Basic Sciences	1	116	9	126
Earth, Ocean & Climate Sciences	0	21	20	41
Electrical Sciences	2	75	57	134
Humanities, Social Sciences & Management	0	5	3	8
Infrastructure	5	37	29	71
Mechanical Sciences	1	53	14	68
Minerals, Metallurgical & Materials Engineering	0	14	3	17
Total	9	321	135	465



Infrastructure Creation:

During 2015-17, the institute was engaged in solving problems emerged due to earlier rescinding of works by the contractor and disputes with architect, getting the infrastructure building under Phase-1 speeded up, getting it completed and initiating operations in the permanent campus. Towards the end of financial year 2016-17, MHRD, Govt. of India sanctioned Rs 850 Crore to the institute for Phase-2 constructions to fully develop the institute in all respects for a student strength of 2500.

The institute went on a serious planning exercise, significantly improved the master plan and came out with outstanding planning and the architectural designs for Phase-2 buildings. In view of a serious shortage of student accommodation took up in Phase-1, construction of a new Boys' Hostel (800 Seater) and a Girls' Hostel (400 Seater) were initiated in May 2017 and the same are expected to be completed by end of this year.

The construction of following buildings have started from November 2017 by M/s. Simplex Infrastructures with scheduled date of completion in February 2019.

- Boys' Hostel (800 Seater) - 1 No,
- Type–A Faculty Qtrs - 44 Nos,
- Type–B Faculty Qtrs - 88 Nos,
- Type–C Faculty Qtrs - 66 Nos,
- Type–D Staff Qtrs - 44 Nos,
- Director's Bungalow,
- Student activity center,
- Dispensary,
- Auditorium (1500 Capacity),
- School of Minerals, Metallurgical and Materials, Engineering,
- School of Earth Ocean & Climate Sciences,
- School of Humanities, Social Sciences & Management,
- Central Workshop,
- Central Research and Instrumentation facility,
- Lecture Theater Complex (60 Seater Class room-48 Nos., 120 Seater Class room-22 Nos., 240 Seater Class room - 4 Nos.),
- Construction of following buildings have started in June 2018 by M/s. SNS Infracon Pvt. Limited which are planned to be completed in May 2019.
- Extension of SES building,
- Commercial complex (Academic),
- Commercial complex (Residential).

The above work apart, the following works have also been taken up to develop a full fledged campus :

- STP & Sewerage Network,
- Play fields, roads, footpaths, drains, open air theatre, parking and landscaping,
- Efficiency Hostel
- Extension of SIF Building



- Extension of SBS Building
- Extension of SMS Building

These works are to be tendered out during this week.

Construction of Kendriya Vidyalaya inside the Campus is now at the initial designing stage.

In addition, IIT Bhubaneswar has installed 490 kwp capacity Rooftop Solar PV system in 9 different buildings of the campus. The testing and commissioning work has been completed in all respects in the month of May 2018 and is in operation since then. Total solar power generation till Aug 2018 is 1, 22,000 units.

Green Campus Initiatives:

IIT Bhubaneswar adopted the following green campus initiatives to make the campus eco-friendly:

Plantation Initiative: IIT Bhubaneswar strongly believes that nurturing nature is the best way to promote sustainability. Therefore, we created a positive, wellness and creative environment by maintaining outstanding landscapes and greenery in the campus. More than 27000 trees have been planted during the last three years. The exotic and indigenous evergreen and deciduous flowering trees and plants were chosen to create the healthy echo-system for attracting the exotic and migratory birds. The massive teak plantation was completed along the boundary wall of our campus to help in maintaining the balance between the oxygen and carbon dioxide in the atmosphere.

Cycle Friendly Campus Initiative: IIT Bhubaneswar banned power vehicle use by students and incorporated the “Cycling Culture” for promoting the health benefits of students, faculty, staff and the community and for controlling environmental risk factors. The institute has initiated the Bicycle Infrastructure Development Plan for creating “Cycle Friendly Campus” by providing sustainable and convenient tree-lined cycle path for riding a bicycle between the schools and hostels, and for constructing cycle parking infrastructure in each of the buildings.

Energy-Harvesting Initiative: IIT Bhubaneswar installed and commissioned a solar power plant with the capacity of 0.49 MW of capacity on the existing building roof tops to reduce carbon footprint and dependency on conventional sources of energy.

Water-Harvesting Initiative: IIT Bhubaneswar has initiated building up of rooftop rainwater harvesting and surface rainwater harvesting infrastructure, and setting up a waste management system and wastewater recycling plant, to make the campus zero-discharge.

Green Buildings: The buildings are GRIHA (Green Rating for Integrated Habitat Assessment) 4 and 5 compliant. The building construction is done by using the fly ash bricks which are not only environment friendly, but also keep the building cool and clean.

Eco-friendly Waste Disposal: IIT Bhubaneswar deployed dustbins with biodegradable and non-biodegradable categories.

Faculty and Staff Matters:

International Faculty at IITBBS – A New Initiative: The Institute took up a new initiative to appoint faculty from other countries for a period of one semester to two years. This has expectedly infused new dimension in pedagogy, research collaboration and internationalizing education at IIT Bhubaneswar. A few notable names are Prof Luis Malera, USA; Prof Matjaz Kovse, Slovenia; Prof Scott Andrew Whattam, Canada and Prof Tian C. Zhang, USA. There are some more faculty of foreign origin selected and likely to join shortly at IIT Bhubaneswar.

Teaching Excellence and Outstanding Service Award Initiatives: In an endeavour to create an environment of teaching-learning of high order, faculty members who got highest rating in student feedback on courses and teaching, have been honoured with teaching excellence awards. In



addition, to recognize the outstanding contribution in other service areas, Faculty and staff members are honored. The list of faculty members and staff who were honoured includes the following:

- Dr. C Bhamidipati – Award for Teaching Excellence (Best Teacher)
- Dr. Kausik Samanta – Award for Teaching Excellence
- Dr. A. Venugopal - Award for Teaching Excellence
- Dr. K P N Murty - Award for Teaching Excellence
- Dr. S Manikandan – Outstanding contribution in services
- Mr. P K Sahoo – Outstanding contribution in services
- Mr. Sambit Ranjan Mohanty – Outstanding contribution in services
- Mr. K Saikiran – Outstanding contribution in services
- Mr. Ramesh Chandra Biswal - Outstanding contribution in services
- Mr. Biswajit Pegu – Best Male Athlete in Inter IIT Staff Sports
- Ms. Sunita Burma – Best Female Athlete in Inter IIT Staff Sports

Awards & Honours Received by Faculty: Several academic distinctions, honours, distinguished fellowships, associate ships, named lectureships, coveted medals and awards have been bestowed on our faculty, staff and students in recognition of their academic achievements, during the last year. Some of the distinctions include:

Prof. R. K. Panda	Fellow of Indian Society of Agricultural Engineers during 2017
Dr. Bankim Chandra Mandal	Best Paper Award in the 7th International Conference on Soft Computing for Problem Solving (SocProS 2017)
Dr. Rajan Jha	Senior Member, Optical Society of America (OSA), The Indian National Young Academy of Science (INyas), Member, Optical Society of America (OSA) Ambassador.
Dr. Tarakanta Nayak	Selected as a member of Indian National Young Academy of Science for five years, from January 2018
Dr. Srikanta Patra	Life membership from National Academy of Science Indian (NASI)
Dr. Shyamal Chatterjee	Recipient of prestigious Bhaskara Advanced Solar Energy (BASE) Fellowship from Indo-US Science and Technology Forum - 2018
Dr. Syed Hilal Farooq	United Nations University Fellowship
Prof. Uma Charan Mohanty	Biju Pattnaik award for scientific excellence- 2018 Faculty Research Awards for Outstanding Research Faculty from CAREERS 360- 2018
Dr. Sankarsan Mohapatro	International Travel Support from SERB, DST, for International Symposium on Non-Thermal/Thermal Plasma Pollution Control Technology & Sustainable Energy (ISNTP-11) Padova, Italy, 2018



Dr. Subhransu Ranjan Samantaray	Outstanding Reviewer, IEEE Transactions on Power Systems-2017, IEEE India Council Outstanding Volunteer Award-2017, Exceptional Reviewer, IEEE Trans. On Power Delivery-2015, 2017, Editor, IEEE Transactions on Power Delivery.
Dr. Padmalochan Bera	Best paper & presentation award, IEEE International Conference on Software Defined Systems, Barcelona, Spain, 2018
Dr. Chandrashekhar Narayan Bhende	Bhaskara Advance Solar Energy (BASE) Fellowship
Prof. N. C. Sahoo	Professor Dr. Muhammad H Rashid Best Paper Award for the paper entitled "Implementation of Demand Side Management using Microcontroller and Wireless Communication" presented at 2017 IEEE ICECCT Conference
Dr. Sudipta Saha	The presentation of the paper titled "Design and application of a many-to-one communication protocol" received the best-in-session-presentation-award in IEEE INFOCOM 2017.
Dr. Chandrasekhar Perumalla	IEI Young Engineer Award 2017-2018 from The Institution of Engineers (India), Transnational Access Researcher of European Union's ERIGrid under H2020, Indo-US Postdoctoral Fellowship sponsored by SERB, DST, GoI and Indo-US Science & Technology Forum, 2017, SERB Overseas Postdoctoral Fellowship sponsored by SERB, DST, GoI, 2017.
Dr. Debapratim Ghosh	International Travel Support from SERB, DST, for Progress in Electromagnetics Research Symposium (PIERS) Singapore.
Dr. Sumanta Halder	Representing Indian Geotechnical Society on the International Technical Committee TC 209 on "Offshore Geotechnics" of the International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE)
Dr. Manaswini Behera	Best paper Award for the paper titled "Bio-electricity generation from kitchen waste in a low cost earthenware microbial fuel cell" presented in Recycle 2018, 2nd International Conference on Waste Management held at Indian Institute of Technology Guwahati from 22nd to 24th February 2018.
Dr. Shantanu Patra	Received IGS-Delhi Chapter YGE Award for the Best Paper on "Computational Geomechanics" (Dec, 2016), Received IGS-Baroda Chapter YGE Award for the best paper on "Ground Improvement" (Dec 18, 2014).
Dr. Ankur Gupta	BRICS Young Scientist award
Dr. Venugopal Arumuru	Young Scientist Award 2017
Prof. Brij Kumar Dhindaw	Outstanding reviewer citation for reviewing research papers in the following journals: 1. Material Science and Engineering A2. Material Science and Engineering B, 3. Journal of Alloy and Compounds and 4. Journal of Material Processing Technology. All high impact factor journals in the domain of metallurgical and materials engineering



Collaborative Research:

The Institute is very actively engaged in collaborative research with many reputed universities and research organizations across the world. Some of the collaborating universities include, Shanghai Jiaotong University, China, Warwick Manufacturing Group, University of Warwick, UK; Washington University in St. Louis, USA; University of Massachusetts Dartmouth USA; University of Southampton UK; National Oceanography Centre (NOC) UK; Woods Hole Oceanographic Institute USA; University of Concepcion, Chile; University of Surrey, London, UK; University of Manchester, UK; University of British Columbia; University of Quebec, Canada; University of Waterloo, Canada; York University, Canada, Texas A&M University, USA and many other reputed universities for joint research, student internship and faculty visits.

About 36 faculty members and 6 students visited foreign countries this year on various academic and research assignments and paper presentations. The institute also had an innumerable number of distinguished visitors for academic, research and other collaborative programmes.

Student Activities:

The Students' Gymkhana at IIT Bhubaneswar is a central hub for all round development of students. The major councils under Students' Gymkhana are Social & Cultural, Science & Technology and Sports & Games, which are active throughout the year. 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. For the very first time, our own sports fest, Ashvamedha was conducted which received great response from our neighbouring institutes. Other notable events include a children Fest "Bachpan Ka Rangmanch", newspaper donation drive, tree plantation drive, clothes donation drive, NAI DISHAYEN – interaction and teaching program for students in villages adjoining the campus.

Societies of Technical and Socio-cultural Councils participated and won in competitions in and around Bhubaneswar and brought glory to the institute. There has been tremendous improvement in the results of Inter IIT Sports Meet, Inter IIT Cultural Meet and Inter IIT Tech Meet. Some notable results include: the football team reached the knockout stages, the Music Society secured 1st position among new IITs in Pair on Stage competition, Clix secured 3rd position in Online Photography Competition, the Dance Society secured 4th position in Dance Battle Competition and Fine Arts Society won 5th position in Doodling and Painting competitions.

Awards and Prizes Won by Students: Students and student groups also won several awards at conferences and inter institutional competitions including the following:

- Ms. Amita Rani Sahoo won the Best Poster Award at CCBM 2017.
- Ms. Madhukrishna Priyadarshini (Ph.D Scholar, SES) - Best paper award in IEEE SDS 2018 held in Barcelona during 23-26 April 2018
- Ms. Nibedita Behera, Mr. Debadatta Swain (PhD Students - SEOCS) secured the 2nd runners up position at the Oral Presentation in International Conference, RAROM, IIT Kharagpur.
- Ms. Shreyasi Som has been selected for the prestigious POSOCO Power Systems award (Masters Category)-2018.
- Ms. Shreyasi Som won "Innovative Student Projects Award 2017" from Indian National Academy of Engineering (INAE).
- Mr. Ajaya Kumar Dash (PhD Scholar, SES) - Won United by HCL Hackathon held in UK, Prize Money USD 5000
- Mr. Aman Pratap Singh was selected for Google Summer of Code 2018.
- Mr. P Abhishek (M.Tech) and Mr. Saikat Pramanik (Ph.D. student) participated in Ocean



research cruise program in the Bay of Bengal Organized by Ministry of Earth Sciences (MoES) under the collaboration of Indian National Centre for Ocean Information Services (INCOIS), Physical Research Laboratory (PRL) and Indian Space Research Organization (ISRO) during 03 July – 05 August 2018 onboard Sagar Nidhi.

- Mr. Prangya R Rout was selected for Young Scientist Award 2018 by Odisha Vigyan Academy.
- Mr. Pranjal Bangani and Mr. Siddhant Kerhalkar were selected under SRFP 2018.
- Mr. Debiprasanna Sahoo (Ph.D Scholar, SES) - Most popular poster award, 2018.
- Mr. Manikanta Varma won the first prize in the National Competition of Stock Mind organised by ICICI Securities.
- Mr. Niranjan Dehuri won the Best Presentation Award at the 31st Annual Conference by Orissa Chemical Society.
- Mr. P Nitheesh Kumar and Mr. Vikas Sharma received the NRDC National Budding Innovators Award in the presence of Hon'ble President of India, Shri Ram Nath Kovind at Vigyan Bhavan, New Delhi.
- Mr. Rishi Gurjar won the best paper award at RECYCLE 2018.
- Mr. Samiran Mandal (PhD Student - SEOCS) was awarded the Young Researcher Award at OSICON (Ocean Science Conference 2017) by the Ocean Society of India.

Alumni Activities:

The alumni affairs and international office at the institute serves as outward-facing window from the Institute to the Alumni by extending several facilities and services to the alumni. IIT Bhubaneswar has created an Alumni database to connect with its alumni.

Within a short span of the Institute's existence, it has successfully conducted its first Alumni Meet during 14th April to 16th April, 2017 at its new permanent campus.

The second Alumni meet has been planned to be held during January-2019, to celebrate 10 years of a glorious Inception of IIT Bhubaneswar. Alumni have brought out its 1st Newsletter 'Spaghetti' in Feb-2018, to bind all in unique ways and to spread the Institute news. Alumni have arranged series of didactic lectures for coming days for the students. Alumni Association is launching an online platform for structured mentoring.

Within a short span of the Institute's existence, few Alumni have been selected and joined in Indian Administrative Services and Indian Engineering Services. Almost 15-20 of our Alumni have already started their own start-ups. A good number of the Alumni took up higher studies in reputed foreign Universities like Stanford University, the Ohio State University, University of California, University of Texas, University of Minnesota, University of British Columbia, University of Colorado and many more.

Entrepreneurship & Startup Activity:

E-Cell Activity: IIT Bhubaneswar drafted a vision paper for encouraging entrepreneurship at the institute, put Entrepreneurship Cell (E-Cell) in place and took very ambitious steps in the last two years. To motivate the students to take up Entrepreneurship, E-Cell started E-Day culture. The E-Cell organized two E-Days during this year – First E-Day was on 18th August 2017 with a talk by young Entrepreneur Mr. Srikumar Mishra, and the second E- Day on 6th October 2017 with an interactive talk by successful entrepreneur Mr. Subroto Bagchi.

Technology Incubator: The Institute has established a Technology Incubation Centre to facilitate incubation of ideas of its students, alumni and faculty members for conversion into successful prototypes. The Centre provides up to Rs. 2 lakh grant to the selected teams towards consumables and allows use of its workshops and laboratories for their use. Three teams of incubatees have been successfully graduated from the centre and five teams are currently working in the centre.



Startup Centre: A Startup Centre has been established at IIT Bhubaneswar with an overall objective of the Centre to inculcate a culture of innovation-driven entrepreneurship in and around IIT Bhubaneswar. As many as 10 startups are operating in this centre now. IIT Bhubaneswar has also been nominated as a nodal agency by MSME Department, Government of Odisha, to promote the Startup Odisha initiatives.

Research and Entrepreneurship Park:

IIT Bhubaneswar received license and incorporation certificate from Registrar of companies (RoC) to run IIT Bhubaneswar Research and Entrepreneurship Park, a section-8 (not for profit) company in October 2017 for promoting entrepreneurship, research, and startup activities.

In November 2017, Smt. Susmita Bagchi and Shri. Subroto Bagchi provided a philanthropic support of Rs 2.50 crore for establishing a Center of Excellence in Augmented Reality and Virtual Reality (VARCoE) which was followed by matching grants from Startup Odisha and Software Technology Parks of India (STPI). At present a group of faculty members from various disciplines is actively pursuing research on numerous projects in the area of Augmented Reality and Virtual Reality.

Continuing Education Programme (CEP):

Continuing Education is part of the IIT Bhubaneswar's outreach programmes created to extend its arm for the promotion and extension of the science and technology benefits to the society, besides teaching and research.

As many as fourteen conferences and workshops have been organized by the institute to foster scholarly exchange of ideas and research collaboration during the last year. A few notable ones are listed below.

- An International conference on “SOCPROS 2017 (Soft Computing for Problem Solving)” coordinator, Dr. A. K. Ojha, held during 23-24 December 2017
- A Workshop on “Electricity Market Based Control of Microgrids” in Collaboration with Lappeenranta University of Technology (LUT), Finland, at SES Coordinator by Dr. C. N. Bhende held during 13 to 15 December 2017.

IIT Bhubaneswar has been inducted as a new Quality Improvement Programme (QIP) Centre for providing opportunities to faculty members of the degree-level engineering institutions to improve their qualification by offering admissions to Ph.D. research Programme. The program is now being implemented and 26 fellowships have been granted for the doctoral research program. Initiatives have already been undertaken for admission under this program.

Under the aegis of the Flagship programs of the Ministry of Human Resource Development Government of India “GIAN (Global Initiative of Academic Networks)” short term courses inviting Guest Faculty from abroad and currently 29 short term courses have already been conducted with the support of fourteen eminent professors of foreign origin and fifteen renowned Indian Professors working in foreign Universities.

IIT Bhubaneswar is acting as Nodal E-Hub for implementing the PMYUVA (Pradhan Mantri Yuva Udyamita Vikas Abhiyan) program of Ministry of Skill Development and Entrepreneurship, Govt. of India. IIT Bhubaneswar has started the program in a proactive manner so that the friendly and creative ambience of IIT Bhubaneswar will instill confidence in the young minds to become job creators rather than job seekers.

Outreach Programmes:

IIT Bhubaneswar considers itself as privileged to reach out to the society besides engineering education and research of societal relevance for educating and inspiring the young and under-



privileged of the country, through its outreach programmes. Some of the major ones are highlighted below.

Vigyan Jyoti Programme: An initiative of Department of Science and Technology, Govt. of India aimed to inspire girl students to pursue higher education in the field of Science and Technology, was held during June 04 – 24, 2018, with the participation of 35 students across the Odisha including from the adopted village of IIT Bhubaneswar under Unnat Bharat Abhiyan Program.

Open House Day and Interactive Session with IIT Rankers and Aspirants: IIT Bhubaneswar successfully organised Open House Day and interactive session for JEE Advanced 2018 rankers and prospective JEE Students for the year 2019, on 17th June 2018 to enlighten them on the IIT education and process of admissions. About 125 participants were welcomed by Prof. V. R. Pedireddi, Dean-Student Affairs, the live counselling session was started with in-depth details of IIT education in general by Prof. R. V. Rajakumar, Director, IIT Bhubaneswar, followed by introduction of programs of study by Prof. N. C. Sahoo and presentation on general procedures to be followed for admission into IITs by Dr. C. Bhamidipati, Chairman JEE at IITBBS. SBI Regional Manager, Mr S. Panigrahi appraised the audience about various possible loan schemes available and the Vidyalakshmi Scheme.

Open House and S&T Exhibition on 10th Foundation Day: 100 Science and Technology exhibits of the IIT campus attracted as many as 1000 high school and junior college students, from across the city and the state. The exhibits showcased and presented students with various recent innovative advancements in technology.

UBA activities: The UBA organized several meetings with the villagers residing in Khudupur and Kansapada. UBA Co-coordinator Dr. T. Nayak attended the Gramasabha on 15th Aug 2018 at Haripur Panchayat office on behalf of UBA. The Gramasabha resolution on Ghagudibandha check dam and plantation programmes has been submitted by the Panchayat office to UBA.

A B.Tech project was carried out in School of Infrastructure during 2017-18 to assess the quality of available water resources in the villages adopted under UBA.

Another B.Tech project was carried out in School of Infrastructure during 2017-18 to assess the quantity and characteristics of waste generated from the adopted villages.

Five female students from the adopted villages, including Sunduria, were given an opportunity to participate in the Vigyan Jyoti program, held during June 4-24, 2018 at School of Basic Sciences, on supernumerary basis.

Career Development Cell (CDC):

IIT Bhubaneswar has been performing outstandingly well on placement front and the highlights of placement season 2017-18 are as follows:

- A total of 207 students have been placed from all the disciplines. 20 % rise in no of students placed this year as compared to last year. Total 130 students from UG discipline received offers.
- Undergraduate placement is about 87%.
- Highest domestic CTC offered was 39 Lakhs per annum.
- Almost 100% placements achieved for the 3 M.Sc. programs (Mathematics, Physics and Chemistry).
- Highest number of job offers have been received from core industries.
- 53 companies had participated in this year placement season.
- Average salary is 11.15 Lakh per Annum for UG.
- PSU's like ISRO, IOCL, HPCL, NCCBM participated in the campus placements.



- MNC companies like Goldman Sachs, Renault Nissan, Samsung R & D, Oracle, Infosys, TCS R & D, and Adobe have participated in this year of placements.
- 3rd year students have received internship offers from reputed industries like Amazon, Goldman Sachs, Go Jek, Microsoft, MAQ Software, MathWorks, Ittiam, Jindal Stainless, Tata Steel, Wipro. Many of them are engaged in Internships in R & D organisations like ATREE, BARC, TCS, and foreign universities like IOWA State University, Singapore University, Shanghai Jiao Tong University.

Distinguished Visitors:

A large number of distinguished personalities visited the Institute on different occasions, addressed the faculty, students and staff. The visitors include, Prof. Prahlad Rao (Former Joint Director, CDAC, currently IIIT-Bengaluru); Prof. Ramji Prasad (Aalborg University, Denmark); Prof. D. Manjunath (IIT Bombay); Prof. Sheshadri Mohan (University of Arkansas); Prof. Laxmidher Behera (IIT Kanpur); Dr. Ranjan Pradhan (University of Michigan, Ann Arbor); Prof. Vishwanath Sinha (formerly IIT Kanpur); Prof. Vikram M. Gadre (IIT Bombay); Prof. Viktor Prasanna (University of Southern California); Prof. Saraju Mohanty (University of North Texas); Prof. Tangali Sudarshan (University of South Carolina); Prof. T. V. Srinivas (Indian Institute of Science Bengaluru); Prof. Anjan K. Ghosh (Vice Chancellor, Tripura University); Prof. Purusottam Jena, Physics Department, Virginia Commonwealth University, USA; Prof. Manas K. Mandal, Distinguished Visiting Professor, IIT Kharagpur; Prof. Amitabha Ghosh, formerly Director IIT Kharagpur, Honorary Scientist of Indian National Science Academy; Mr. Harun Rashid Khan, Retd. Deputy Governor of the Reserve Bank of India; Prof. S. C. Dutta Roy, (Retired Professor of Electrical Engineering, IIT Delhi); Prof. Kanchan Chowdhury, IIT Kharagpur; Prof. Parlapalli V. Satyam, Institute of Physics, Bhubaneswar; Dr. BVR Mohan Reddy, Executive Chairman, Cyient; Lt. Gen. P R Kumar, Retd. Director General Military Operations; Anindya Maitra, Associate Vice President, Mindtree; Prof. Avijit Gangopadhyaya, University Massachusetts Dartmouth, USA; Mr. Biranch Panda, NTU, Singapore; Mr. Biswaranjan Mohanty, University of Minnesota, USA; Prof. P. M. Pandey, IFB, Kolkata; Dr. Sofen Jena, Faurecia Clean Mobility, Bengaluru; Prof. Y. Joshi, Georgia Institute of Tech, USA; Mr. S. Mohapatra, SABIC Technology Centre, Bengaluru; Dr. Sampreeti Jena, University of Minnesota, USA; Dr. Sujit Bidhar, Fermilab, USA; Dr. Lucy Nandi, University of Minnesota, USA; Prof. Sumon Sinha, Sinhatech; Dr. P. M. Pandey, IIT Delhi; Dr. Partha Saha, IIT Kharagpur; Dr. C. S. Kumar, IIT Kharagpur; Prof. Suvrat Raju, ICTS Bangalore; Prof. Kajari Majumdar, TIFR Mumbai; Prof. Sachindeo Vaidya, CHEP, IISc Bangalore; Prof. Utpal Sarkar, (Former Director PRL, Ahmedabad), IIT Kharagpur; Dr. Sudesna Basu, George Washington University; Prof. B. V. Rathish Kumar, IIT Kanpur; Prof. P. V. S. N. Murthy, IIT Kharagpur; Prof. Tian C. Zhang from University of Nebraska, Lincoln, USA; Dr. Ashok Mishra, Clemson University, USA; Prof. Kollure VL Subramaniam, IIT Hyderabad; Prof. Ravindra Gettu, IIT Madras; Dr. Nilanjan Mitra, IIT Kharagpur; Dr. Devendra Narain Singh, IIT Bombay; Dr. Radhakrishna Pillai, IIT Madras; Ms. Pavitra Parthasarathy, Hong Kong University of Science and Technology, Hong Kong; Dr. Piyush Ghaunsali, IIT Madras; Mr. Yu Jing, Hong Kong University of Science and Technology, Hong Kong; Prof. Dhanada Kanta Mishra, Hong Kong University of Science and Technology, Hong Kong.

Women's Grievance Redressal Committee (WGRC):

WGRC, IIT Bhubaneswar organized a three day programme as a part of International women's day celebration - 2018. The programme included (i) theme based competitions along with health awareness workshop and (ii) a session on Women's Issues and Rights at Workplace. Dr. Ashima Sarkhel, Medical Officer, and Smt. Namrata Chadha, Social Activist, were respectively the resource persons for the event. Dr. Gitanjali Batmanabe, Director of AIIMS Bhubaneswar and Dr. Nandini Harinath, the Deputy Operations Director for the Mars Orbiter Mission (MOM) addressed the



women's day evening function as the chief guest and guest of honor. The workshop was well attended by Students, and members of Faculty and Staffs from the institute.

Dr. Remya Neelancherry and Dr. Meenu Ramadas attended the National Conference on Technological Empowerment of Women organized by the National Academy of Sciences, India (NASI) on March 8 - 9, 2018 at Vigyan Bhavan, New Delhi.

Computer and IT services Cell (CITSC):

CITSC implemented Biometric Attendance System for taking attendance of students in the classrooms for all programmes/courses at IIT Bhubaneswar. Extended Unified Communication System (Telephone Exchange) facilities are provided to residential areas (faculty quarters) in IIT Bhubaneswar permanent campus at Argul. CITSC has also planned, designed and will implement the 2nd phase of Campus Area Network in IIT Bhubaneswar permanent campus. The CITSC in-house team has developed and implemented additional Enterprise Resource Planning modules for IIT Bhubaneswar.

Graduates of the Year:

In this convocation 162 B.Tech., 91 M.Tech., 69 M.Sc., and 10 Ph.D. students will be receiving their degrees, totaling 332.

Mr. NANDURI DIVAKAR, Mechanical Engineering won the coveted President of India Gold Medal for topping all B. Tech. branches.

Ms. DEBALEENA MUKHERJEE, School of Infrastructure won the coveted Director's Gold Medal for topping all M. Tech. specializations.

Mr. SAYAN RAY, Chemistry (School of Basic Sciences) won the coveted Director's Gold Medal for topping all M. Sc. branches

The following students won the Institute Silver medals for topping in their respective branches/specializations as shown below:

Institute Silver Medal for topping in B.Tech. branches:

Nanduri Divakar	Mechanical Engineering
Ramreddygari Rahulreddy	Computer Science and Engineering
Kola Lakshmi Sai Sri	Civil Engineering
Sneha Susan George	Electrical Engineering
Sudhansu Srivastava	Metallurgical and Materials Engineering

Institute Silver Medal for topping in M. Tech specializations:

Debaleena Mukherjee	School of Infrastructure
Vikas Sharma B S	School of Mechanical Sciences
Barik Anasuya Anupam Swati	School of Earth, Ocean and Climate Sciences
Palash Swarnakar	Materials Science and Engineering
Kuppili Raviteja	Power System Engineering
Nazneen Nighar Sultana	Electronics and Communication Engineering



Institute Silver Medal for topping in M.Sc. branches:

Sayan Ray	Chemistry
Asmita Singha Roy	Geology
Rahul Rana	Mathematics
Dipanjali Halder	Physics

The other endowment awards won by the students are shown below:

Dinesh Memorial Award (Best B. Tech Thesis – Mechanical Sciences)	Battula Venkata Sai Dinesh
Tejaswi Memorial Award (Best B. Tech Thesis – Electrical Sciences)	Ramreddygari Rahulreddy
Prof. P. Rama Rao Award (Best Lady Graduate)	Kola Lakshmi Sai Sri
Dr. K. Kasturirangan Award (Best Male Graduate)	Nanduri Divakar

Other Activities:

The Institute observed and celebrated several events like the International Yoga Day, 10th Institute day, 72nd Independence Day, Engineer's Day, Vigilance Awareness Week 2017, Rashtriya Ekta Saptah, Unity Run, Alma Fiesta, E-Summit '18, Ashvamedha 18, 69th Republic Day, Matribhasa Diwas, International Women's Day, National Science Day, 10th Foundation Day, Unnat Bharat Abhiyan (UBA), Ek Bharat Shreshtha Bharat, Vigyan Jyoti Programme, National Technology Day 2018, Yeh India Ka Time Hai: Celebration of 70 years of Independence and 75th year of Quit India Movement, Heritage Trip organized for the First Year B.Tech Students, Teacher's day besides, the regular national events and a large number of students, faculty and staff members participated in the events.

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.

Before I conclude, I congratulate all the graduating students, awardees and medal winners and wish all happiness, professional success and fulfillment in their lives.

Jai Hind!

Professor R. V. Raja Kumar
September 22nd, 2018