

**ANNUAL REPORT - SHRUTHI-2018**

Respected Dr. V. Malakonda Reddy garu, President, CBIT.

Hon'ble Chief Guest of today's function: Dr. N. V. Ramana Rao garu, Director, National Institute of Technology, Warangal.

Guests of Honor for the day : Sri Yaram Nagi Reddy garu, Inspector General of Police, North Zone, Hyderabad and Sri Sekhar Kammula garu, Director, Film Industry and Alumnus of CBIT.

Respected Members of General Body of CBIT Sri D. Kamalakar Reddy garu and Madam Smt. D. Sandhya Sree, Chair Person, D&P Committee.

Dr. K. Jagannadha Rao, Professor, Dept. of Civil Engg. and Chairman, Shruthi – 2018.

Mr. Konatham Ravi Teja, 4/4 ECE-1, President, Students' Association.

Other dignitaries off the Dais, Special Invitees, Deans, Heads of the Departments, Staff, Parents, Electronic & Print Media and my dear students of CBIT, the future of the Nation.

A Very Good Evening & my heartfelt Greetings to you all.

With enormous gratification, I welcome you all for Shruthi-2018.

I congratulate the faculty, students and staff members of this great Institution for achieving milestones in 2016-2017.

As a Principal, it gives me immense pleasure to share a brief on the developments of CBIT over the last academic year.

It is a matter of great pride that CBIT has been ranked as top one Institution in the State of Telangana under Private Sector and 90<sup>th</sup> Position among all the engineering Institutions in the country, as per the National Institution for Ranking Frame work (NIRF), 2017 of the Ministry of Human Resource Development (MHRD), Government of India.

CBIT is ranked 24<sup>th</sup> among the top 100 Private Engineering Institutions as per the ranking survey conducted by EW India Private Higher Education Ranking Awards 2017. CBIT is ranked 32<sup>nd</sup> out of top 100 Engineering Colleges in the country and First in the State as per the survey conducted by the "OUT LOOK" Magazine in June 2017 edition.

**CBIT is ranked over all - 34<sup>th</sup> among the top 150 Engineering Institutions & 21<sup>st</sup> among the top Private Engineering Institutes which include IITs & NITs as per the survey conducted by i3RC Times Top 150 Engineering Institutions rankings, 2017.**

**CBIT is ranked 57<sup>th</sup> out of top 100 Engineering Colleges in the country and 1<sup>st</sup> in State and 15<sup>th</sup> among the Top Private Engineering colleges in India in the Survey "THE WEEK" Magazine June 2017 edition. CBIT ranked AAAA in the Survey conducted by Careers 360 magazine in the year 2017.**

### **Academics :**

With the objective of fulfilling the aspirations of the Society, the number of programmes in the Institute includes BE / B. Tech. in 9 branches of Engineering and Technology (Civil, Mechanical, Production, Chemical, Biotechnology, Electrical and Electronics Engineering, Electronics & Communication Engineering, Computer Science & Engineering and Information Technology), 9 ME / M. Tech. in specializations (Structural Engineering, Earthquake Engg., CAD/CAM, Thermal Engg., Power Systems & Power Electronics, Communication Engg., VLSI & Embedded Systems, IT (CNIS) and Computer Science) and MBA & MCA altogether 5000+ students on campus.

**Five Departments i.e., Mechanical, Civil, Electronics & Communication Engg., EEE and Computer Science are recognized as Research Centres by the Osmania University.**

**The institute has 309 well-qualified, highly committed and dedicated faculty out of which more than 100 are Ph.D. holders and 239 experienced and committed supporting & technical staff. In addition to this, around 12 faculty submitted their thesis and 21 members were awarded their Ph.D. degrees.**

All 9 UG Engineering and 5 PG Engineering Programmes are Accredited by NBA where as all the UG Engineering programmes are accredited for 5<sup>th</sup> time. CBIT is accredited by NAAC and secured A grade by UGC for five years.

We are doing well in Academics with flexible curriculum in place under Autonomous status of UGC, giving both faculty and students, the freedom to explore and experiment new teaching and learning methodologies.

**The overall pass percentage for the academic year 2016-17 is 94.57 which includes 482 distinctions and 482 1st Classes.**

We have awarded 11 Gold Medals for the 2016-17 passed out batch and also awarding 93 Silver Medals for the students who achieved highest marks in the previous Academic year.

## Research & Development Activities :

There has been considerable progress in Research and Development front a total of 22 sponsored and consultancy projects worth about 2.5 Crores have been sanctioned to the Institute from different funding agencies. Besides these sanctioned projects, 18 project proposals worth Rs.11.47 crores have been submitted to different funding agencies, which includes Atal Incubation Centre and TBI. The major funding agencies are MHRD, DST, CSIR, UGC, ISRO, DRDO, DAC, DBT, NSTL, BHEL and Telangana Government.

Various major areas covered by these projects are Advanced Materials, Solar and Wind Energy, Nano Technology, Defence, Chicken feather reinforced with FRP. Manufacturing and sustainable Urban Design, CS & ICT, Environmental Science, Water resources, Bio Science and Engineering, Implants, Microwaves & Antennas, GPS and GNSS, Image Processing, DSP, Embedded & VLSI, Power Systems & Power Electronics, Renewable and alternate Energy sources, Drives & Software Engineering, Cloud Computing, Adhoc Sensor Networks, Machine Learning and Data Mining, Solvent Recoveries, Heat Transfer efficiency, Particle analysis in process industries, Recycle aggregate in concrete, Thermal effects in bridges, Bio Reactors, Silver nano particles.

Some of the worth quoting recent Industry-Academic Collaborations and R&D initiatives as well as projects connected to the National / State Missions are as follows:

- An MoU signed with Pittsburgh University(USA), Share India, Medicity Hospitals, Apollo Hospitals, CBIT, BITS Hyderabad, SNIST, for R&D collaboration to develop a total Artificial Heart. In this regard, the department of Mechanical Engineering, CBIT has developed a Mechanical pump of Centrifugal and Axial for the pumping the blood with flow rate, 3 litres / Min to 13 litres / min. Once this pump is tested clinically, it can be used for patients (Heart Failure). The patient can be survived with this Mechanical Pump till he / she gets a donor for heart transplantation.
- Indo - US Smart-grid - 1.2 Crores in collaboration with University of Toledo (USA).
- Signed MoU with JNTU Kakinada for “Establishing Marine Navigation and Communication Research Centre (MNCRC) for Research and Development Activities”.
- M/s.Hexagon Capability Centre India Pvt. Ltd., has set up a 3D Innovation lab & inaugurated on 12.10.2017 in the R&D Block of CBIT in order to impart practical knowledge and technical training in the cutting-edge technologies to the students which would enable them to gain hands on experience in the latest technologies employed in the Industries. This Lab intends to impart the knowledge in software's such as GTStruDL, PV Elite, Tank and CAESAR-II to

prepare the students of Mechanical Engineering, Production Engineering, Civil Engineering and Chemical engineering for industry ready skilled personnel. Both BE and ME students get to work on live projects, product development which will lead to innovate and work on global technologies under the guidance of both CBIT and Hexagon Mentors. This course is intended to cover beyond the curriculum and industry relevant experience in complex multi disciplinary projects and its development. In this regard, Hexagon spent about 7.0Crores worth of hardware and software.

Very soon, we are going to inaugurate the R&D block, which will be used for research activities of all the departments in their respective fields.

**CBIT is planning to establish Centres of Excellence (COE) in different research domains namely,**

- Centre for Advanced Research in next generation networks
- Centre of Excellence in precision and Micro Manufacturing
- Centre of Excellence in Solar, wind and energy storage Technology
- Centre of Excellence in implanted materials and Bio-Engineering
- Centre of Excellence in Data Mining and Machine Learning.
- Centre of Excellence in Image Processing and GNSS

### **Research Publications & Patents :**

During the last one year, the Institute contributed to create new knowledge by publishing more than 140 Research papers in various National & International Journals, which includes peer reviewed and high impact factor. 8 books and book chapters includes Springer Edn, besides 93 papers were presented in various National & International conferences in India and abroad and 4 patents have been filed and published and one design patent is granted.

### **Awards won :**

In an endeavour to create an environment of teaching learning of high order, the Institute honoured its best teachers based on Teaching- Learning, Research and papers published, Ph. D guidance, Extracurricular activities and feedback. This apart several academic distinctions, honours, distinguished fellowships, Associate-ships and awards have been bestowed on our faculty and students in recognition of their academic achievement during the last year.

## Collaborative Research :

The Institute is very actively engaged in Collaborative research with many reputed universities and Research organisations across the world. Some of the collaborating Universities include Pittsburgh University (USA), University of Warwick (UK) and University of Toledo (USA).

Royal Academy of Engineering, UK, declared 2018 as Year of Engineering. Federation of Indian Chamber of Commerce and Industry (FICCI) has partnered with UK's Royal Academy of Engineering to promote the Industry Academia Partnership Programmes under the **NEWTON-BHABHA FUND** - an initiative of the UK and Indian Governments to enhance science, innovation and research co-operation between the two countries. **In this context, CBIT has submitted a project proposal entitled "Establishment of Collaborative Research, Training and Teaching on Location Based Services for Smart Cities" for the tune of £50,000 (Rs. 40 lakhs).**

About 4 faculty and 20 students visited foreign countries 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 & Achievements :

There are 18 clubs for all round development of students. The major clubs under student activities are Social & Cultural, Science & Technology, Sports & Games, which remain active throughout the year.

Some of them are : ASME, CBCC, Communicando, CBIT-MUN (Model United Nations), Entrepreneurship Development Cell, Google Students Club, IEEE, ISTE, NSS Unit, Robotics & Innovations, SAE, Street Cause, Toastmasters, Engineer Without Borders, Parivrita, Energy Savers Club, Digital Transactions Competency Centre etc.

Students and Student groups also won several Awards including Best Paper awards at Conferences and Inter Institutional competitions.

1. Around 20 students of Mechanical Engineering designed and developed a Race car and participated in the Race Car event organised by ATA Formula Society for Mechanical Engineering (FSAE) London during 13<sup>th</sup> to 19<sup>th</sup> July, 2017 at Silverstone Circuit, UK.
2. The students of IT & CSE secured 5<sup>th</sup> & 8<sup>th</sup> positions respectively in all India level Smart India Hackathon competition organised by the AICTE on 1<sup>st</sup> & 2<sup>nd</sup> April, 2017 at Bhuvaneshwar & Pune.

3. [Ms.Supriya Sanum , ME \(CAD/CAM\)-2015 Passed out student was the FIRST LADY LOCO PILOT](#) in Hyderabad METRO who steered the inaugural Metro Rail train that drove Hon'ble Prime Minister Sri Narendra Modi, Hon'ble Governor Sri E.S.L. Narsimhan, Hon'ble Chief Minister, Sri K. Chandra Sekhar Rao and Sri K. Taraka Rama Rao, Minister for IT, and other dignitaries on 28<sup>th</sup> November 2017.

### Sports :

Our students won Badminton cup, Gold medal in Athletics, Chess Championship, Gold medal in State level wrestling, Gold medal in Chess tournaments.

### NSS UNIT

NSS is organising various Community development activities in and around the College campus. NSS unit organized the following activities:

- An Awareness Programme was on the eve of Anti Drugs Day.
- A session by Sri Naresh Raghvan, Alumnus of CBIT on "Safe Driving Habits".
- Organised Two Gynaecological Health Camps, two Blood Donation camps and an "ORTHOPAEDIC HEALTH CAMP" in association with Rudhira Health Organisation.
- An outreach campaign programme for the students and visited the Artillery Centre, Training Regiment, Hyderabad.
- An Awareness Programme on Road Safety as part of Road Safety Week Celebrations.

### Other events for students :

- Orientation Program, Awareness programme on Anti Ragging and Drug Abuse, Aadhar Campaign by UDDI, Accenture Innovation Challenge Branding event, Orientation programme on Data Analytics and its Applications, a two day boot camp/ talks /workshop on Django by CBIT Open Source Community, Art Contest in support of Rally for Rivers in association with ISHA foundation and Seminar on Internships were organised.
- Senior Scientist Dr. A.L.N. Kumar Reddy of NFC addressed on Career opportunities in the department of Atomic Energy.
- **Engineers Without Borders (EWB)** organised a Seminar on "Personality Development through Social Engineering" & Gnanotsav-2018.

- **Entrepreneurship Development Cell (EDC) of CBIT conducted :**
  - ✓ A Workshop on "The Key role and importance of Entrepreneurship for a successful career in the present era".
  - ✓ An awareness programme on "National Entrepreneurship Network"
  - ✓ Nation's biggest Quiz Challenge "CL - InQuizitive Minds-2017".
  - ✓ A Seminar on "Manufacturing, Supply Chains - Trends and Research Scope" & "Scope for Graduate studies & Research studies at Binghamton University".
  - ✓ A one day Workshop on "Jobs Vs. Higher Studies Vs. Entrepreneurship".
  
- **Chaitanya Bharathi Cultural Club (CBCC) organised :**
  - ✓ Dance competitions viz., "Step on D Dance Floor", Singing competitions viz., "Fresh Voice of CBIT" and Voice Hunt programme in association with Radio Mirchi and "RENAISSANCE - Cultural Day" as a mark of 10 years of formation of CBCC on 11<sup>th</sup> January, 2018.

### **Alumni Activities :**

The Institute is very keen to maintain a strong bond with its alumni and started extending several facilities and services including start up to the Alumni. CBIT has created an Alumni Database to serve as a hall mark to remain connected with its alumni. The following are some of the activities of Alumni Association.

- Home Coming (Alumni Meet) on 25th December every year.
- Silver Jubilee Celebrations for every batch.
- Osmania Engineers Global Alumni Meet in association with Alumni of OU and its affiliated colleges.
- Scholarships to the economically poor & academically excellent students of CBIT.
- Organising Workshops / Seminars & Conference.
- Organising Guest Lectures by eminent alumni in various fields.
- Bi-ennial Techno-Cultural event viz., Carpediem.

### **Workshops / Conferences & Continuing Education Programmes :**

Continuing Education is part of the CBIT's Outreach programmes created to extend its arm for the promotion and extension of the Science and Technology benefits to the Society, apart from its main focus of teaching and research.

During the last academic year 49 Conference / Workshops & FDPs have been organised by the Institute and conducted as many as 24 short courses under the flagship programmes of MHRD, AICTE and others. Our faculty attended for 91

seminars / conference & workshops conducted by various institutions. 21 faculty were delivered Guest Lectures in other Institutions. 12 faculty were chaired different sessions.

## **LIBRARY & INFORMATION CENTRE**

- 1) No. Books Received During Jul.17 to Dec.17 : 1,936 Volumes / Books  
 2) Total No. of Books as on 31.12.2017 : 1, 13, 275 Volumes  
 3) Total No. of Journals subscribed :  
     a. National : 135  
     b. International : 5500+  
         (Print & Online E-Journals )  
 4) Subscribed the following new **E-Journal Packages** for the Year 2017

1. IEEE ASPP	6. ASTM Digital Library
2. ASCE Digital Library	7. JGATE – Engg. & Technology (JET)
3. ASME Digital Library	8. JGATE – Management Science (JSMS)
4. Elsevier - Science Direct	9. EBSCO – Business Source Elite
5. McGraw Access Engineering	

5) Purchased the following **E-Books** from various Publishes on **Perpetual Access** Method:

- ✓ 724 Titles of E-Books from Springer
- ✓ 188 Titles of E-Books from Pearson Think Tank
- ✓ 122 Titles of E-Books from McGraw Hill

## **PLACEMENTS :**

Total Placements for the Academic Year 2017-18	:	914
Total Companies offered placements	:	81
Highest CTC offered	:	10.9 lakhs / annum
Average CTC	:	4.31 lakhs / annum
Lowest CTC	:	3.5 lakhs / annum
No. FDPs conducted	:	18
No. of SDPs conducted	:	30

## **Other Activities :**

The Institute observed several events like Institute Day, International Yoga Day, Haritha Haaram, Independence Day, Engineers Day, Teachers Day,



Vigilance Awareness Week, T-Summit & Republic Day etc., besides the regular National events and a large number of students, faculty and staff members were participated in the events.

I thank all the Deans, Heads of the Departments / Sections, IQAC Co-ordinator, Administrative Officer, Project Engineer, Controller of Examinations, Incharge-Academic & Examination Cell, Librarian, Training & Placement Officer, Incharge-Maintenance and Health Centre staff for extending their support for smooth conduct of Shruthi-2K18.

I congratulate Dr. G. Laxmaiah, Professor, Dept. of Mech. Engg. & Dr.R. P. Chowdary, Assoc. Professor, Dept. of Mech. Engg., for effectively and smoothly organizing the Staff and students' transport facility.

I congratulate Dr. G. Shyam Mohan Reddy, Physical Director & I/c- Maintenance & Dr. R. Rajeswari, Asst. Physical Director and their team for successfully conducting sports and games on the eve of Shruthi-2018.

I congratulate all the students, who have brought glory to the Institute in academic sphere, co-curricular and extra-curricular activities.

Last but not the least, I extend my greetings to all the staff members (both Teaching and Non-Teaching) of various departments who have worked very hard in shaping the young minds and guiding them in the right direction at various stages. I also appreciate the staff of Administration, Academic Examination Cell, Controller of Examination and Library for the timely execution of their assigned works.

I thank all the Organising Committee members of Shruthi, 2018 and Chairmen, Co-chairmen, Conveners, Co-conveners and student volunteers of various committees of "Shruthi-2018" for their strenuous work in organizing the function. Without their cooperation and hard work, the function would not have become a magnificent accomplishment.

I thank the management of CBIT Dr. V. Malakonda Reddy garu, President, Sri P. Prabhakar Reddy garu, Sri N. M. Chowdary garu, Sri D. Kamalakar Reddy garu, Sri V.V. Narayana garu, Members, General Body, Smt. D.Sandhya Sree garu, Chairperson, D&P Committee and Sri N. Subash garu, Member, General Body and all the other members of the General Body of the CBIT Society for their guidance and encouragement extended from time to time for conducting various academic and non-academic activities in the college.

Finally, I thank one and all for making Shruthi-2018 a grand success. Thank U...