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Prof. Umakanta Chaudhury, Advisor, Innovation & Incubation

Prof. M.Sushanth Babu, Director, Academics

Faculty Coordinators

Dr D.Sony, Assistant Professor, Dept. of ECE. CBIT Dr.S.Radha, Associate Professor, Dept. of ECE.CBIT Dr.Rahul, Assistant Professor, Dept. of Mech. CBIT Sri.D.Ravi, Assistant Professor, Chaitanya ASTRA, CBIT Sri.A.Krishna Kumar, Assistant Professor, Dept. of ECE, CBIT

Student Coordinators

Chaitanya ASTRA: Vikranth Jonna, Dept. of Mech. Sreshta Vejju, Dept. of ECE.

HAM Radio Club: K Giridhar Reddy, Dept of ECE. Yeshwanth Reddy, Dept. of ECE.

Venue: N Block Seminar Hall **Time:** 10:00 AM to 4.00 PM





Flagship Seminar

On

National Space Day "ANTHARIKSHA PARISHODHANA"

23rd August, 2024



Organized by

Department of

Electronics and Communication Engineering and Mechanical Engineering, In Association with Chaitanya ASTRA and HAM Radio Club

About the Institute

CBIT is one of the premier Engineering Institutes in India, pioneer in Telangana State, which is at idyllic surroundings of Gandipet Lake, Hyderabad. The college offers twelve UG and ten PG programs. It has been standing as a temple of knowledge for the past 45 years by producing more than 25,000 Eminent and skillful Graduate Engineers, who are successful in their Careers, serving all over the Globe. The Institute has been accredited by NAAC – UGC with 'A++' Grade and various programs are accredited by NBA – AICTE. The institution is UGC autonomous since 2013-14. Stringent Academic Standards, Industry Compliant Teaching Methodology, Research Projects from Private and Public Sector organizations and Consultancy Practice enabled the Institute to establish its identity in the Technical Education and is ranked as one of the best amongst the Private Engineering Colleges.

About Department of ECE

The Department of Electronics and Communication Engineering at CBIT offers Two UG programs in ECE with an intake of 240 students and two PG programs in Communication Engineering and Embedded Systems & VLSI Design. The department boasts 48 faculty members, 35 of whom hold PhDs. It is rapidly advancing in R&D and consultancy, with ongoing sponsored research projects worth ₹245.01 lakhs funded by ISRO, DST, MietY, AICTE, UGC, DRDO, and others. To date, 19 patents have been published, and 6 have been granted. The department is equipped with state-of-the-art labs, including the Navigation & Communication Research Centre (NCRC) Lab, Green Opto Nano Energy (G-1)

About Department of MECH

Lab, and a VLSI lab sponsored by Meity under the C2S scheme, providing comprehensive facilities for students.

Established in the year of 1979, the Department of Mechanical Engineering has grown its expertise and competence in the core Mechanical Engineering curriculum and research. At present, 48 students are pursuing PhD under different faculty members. Besides, our department is recognized as a research center by the Osmania University. They have been conferred with prestigious awards at national level. Several faculty members serve on the editorial boards of National and International Journals, review technical articles for journals on a regular basis, and organize International Symposia and Conferences. The students work with various clubs/chapters like ASTRA, ASME, SAE, Robotics, ISTE, and IIC.

Intended Participants

Faculty and Students of ECE, Mechanical, Chaitanya ASTRA and HAM Radio enthusiasts.

About Chaitanya ASTRA Club

Chaitanya ASTRA (AeroSpace Technologies and Research Applications) is CBIT's aerospace focused club. Formed in September 2022, ASTRA coordinates student-led engineering projects in amateur rocketry, satellite communications, drones and robotics. ASTRA aspires to become the hub of learning and opportunities for those passionate about emerging aerospace and spaceflight technologies.

About HAM Radio Club

HAM Radio Club or Amateur Radio Club of CBIT is the latest addition to the Clubs of Department of ECE. The Club aims to foster and expand the amateur radio community, establish fully autonomous ground stations, Satellite tracking systems, communicating via LEO sats, antenna design & making and help members attain numerous HAM radio licenses. Currently the club has over 60 active hams.

Outcomes

After completing the workshop, participants will acquire knowledge of

- ✓ Enhanced Technical Skills: Participants will gain hands-on experience in tracking the International Space Station (ISS) and LoRa-based satellites using CBIT's equipment, including setting up, operating, and interpreting tracking systems.
- ✓ Understanding Ground stations: Attendees will understand setting up a very simple Ground station using ESP-32 module and learn designing and building efficient antennas for signal reception from various LEO satellites.
- Understanding CANSATs: Attendees will understand the design, functionality, and mission execution of CANSATs developed by CBIT, and their applications in space missions.
- Knowledge of ISRO's Impact: Participants will acquire detailed knowledge of ISRO's mission, significant achievements, and major projects, understanding its contributions to space exploration.
- ✓ Attendees will receive insights into career opportunities in space research and potential career paths within the space industry.

Resource Persons:



Jaya Saxena is currently working as a Scientist F and Head of Academia Collaboration at the Training, Education, and Outreach Group in the National Remote Sensing Center (NRSC), ISRO. She has approximately 23 years of experience in various core groups within the organization.



Mr. Radha Krishna Kavuluru is a Principal Engineer for Software & Firmware at Dhruva Space. He worked as a Scientist at Indian Space Research Organization, serving as a Project Manager for NASA - ISRO SAR, data dissemination, and Ground Segment workflows.