



VARDHAMAN COLLEGE OF ENGINEERING, HYDERABAD

Autonomous institute affiliated to JNTUH



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



Academic Year: 2019-20

REPORT ON IEEE MTT-S SOCIETY



Event name: MTT VCE SB Annual meet

Conducted on: 20/12/2019

Agenda:

IEEE MTT-S Vardhaman Student Chapter conducted its fifth event ***“MTT VCE SB Annual Meet”*** for the year 2019. It is conducted on 20/12/2019 at 1.20pm in 1009 Main Seminar Hall.

The chief guest and guest of honor attended to the event were Mr. Arun Kumar Mahodaya, Scientist E, Directorate of Space Systems and Technologies, Research Centre Imarat, Hyderabad. Prof. Krishnaswamy, Retired Outstanding ISRO scientist, Former Program Director, IRS & SSS, ISRO, Bangalore. Dr. K. Mallikharjuna Babu, CEO, Prof. P. Nageshwar Rao, Head IQAC and RF & MWE Domain Head, ECE, Dr. G.A.E. Sateesh Kumar, HoD ECE and IEEE Advisor Prof. M.A. Jabbar were the other professors who graced the event. CEO, Vardhaman, and IEEE advisor addressed the students and gave the importance of joining IEEE and the benefits of joining as members in the organization. RF & MWE Domain head, MTT-S faculty advisor motivated the students about the field of Microwaves, antennas and their applications in present wireless field. Discussed about society's wide range of publications, conferences, about importance of research and networking opportunities to the students. Later the dignitaries released technical magazine of the MTT-S student chapter **“TARANG”** Vol. 1 Issue 3.

Brief Bio Data of the Chief Guest

Graduation: National Institute of Technology MANIT, Bhopal 2000-2004, Electronics and Communication Engineering. Joined DRDO, RCI in 2004 through campus recruitment. Worked on design and development of MEMS based inertial sensors: accelerometers and rate sensors. Post Graduation: Indian Institute of Science, Bangalore 2009-2011: Microelectronics. Since 2011 involved in the design and development of Control Systems for Satellites, realization of actuation systems and sensors for space applications

Mr. Arun Kumar Mahodaya delivered talk on **“Spacecraft Control Systems”**. He discussed in detail the control engineering involved in Attitude and Orbital Control Subsystems, Telemetry and Tele

command, Tracking subsystem, Communications Subsystem, Spin stabilization, 3 axis stabilization, antennas and its requirements etc.



Dr. Sulakshana Chilukuri, MTT-S Student Chapter Faculty advisor, Associate Professor, Dept. of ECE, presented annual report, discussed the events conducted in the year 2019 and showed the students the present work that has been running in RF and MWE domain, discussed importance of technical writing and encouraged the students to contribute to the technical magazine Tarang. Advised final year students to contribute to paper publications from their final year projects. Also discussed future plan for MTT VCE Student Chapter for the year 2020.



Total activities in 2019	Technical events conducted (within campus)	Technical events attended (outside campus)	Paper presentations and Journal publications
7	4	3	9

The following points were discussed in Future plan of action.

- 2-Day Flagship event (Microwave Symposium) Recent Trends in RF and Microwave Engineering (in the month of Jan/Feb) intended to give training to the students on the above said theme by inviting academicians, industrialists, company resource persons, modern tools, job opportunities in RF communications field etc.

Other events on the list are

- Industrial visits
- Lectures on how to do research
- Training on how to write papers and get published
- Expert Lectures by eminent Professor from National Institutes
- Expert Lectures by industry experts
- Workshops – Faculty Development Programme on Hands on design of Microwave devices and components using various CAD tools.
- Hands on training on various CAD tool for antenna and microwave components design
- Participation in workshops & conferences outside college
- Intra and Inter college technical competitions
- Annual society meet - achievements and recognitions

Cash awards and Certificates are distributed to the students who has published papers in Scopus indexed journals and conferences. The list of student paper contributions are

1. Shrinidhi Gogikar, Sulakshana Chilukuri, “A CPW-Fed Denim Based Wearable Antenna with Dual Band-Notched Characteristics for UWB Applications,” Progress in Electromagnetics Research C, Vol. 94, pp. 233–245, Aug 2019. (SCI) <http://www.jpier.org/PIERC/pierc94/17.19052101.pdf>
2. Sri Vidya Gundappagari, Sulakshana Chilukuri, “Design of wideband antenna with Metamaterial loading for Wireless Applications”, Journal of Electromagnetic Engineering and Science. (E-SCI)
3. Madhu Nakerikanti, Raja Murali Prasad, Sriram Srujan, Musthyala Saikrishna, Sekhar M "Sharp Rejection Microstrip Ultra Wide Bandstop Filter “, International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, Volume-7, Issue-5S4, February 2019.

4. T. Thanmai, Ch. Nandini, N. Pooja and JVR Ravindra "LI-PAMB: Low Complexity Implementation of Power and Area-efficient Modified Baugh Wooley Multiplier using Exact Computing", in International Journal of Simulation Systems, Science & Technology, Vol. 20, December 2019. (Scopus Indexed Journal)



Presented in International Conferences:

1. Shrinidhi Gogikar, Sulakshana Chilukuri, "A Compact Wearable Textile Antenna with Dual Band-Notched Characteristics for UWB Applications", **IEEE APS Topical Conference on Antennas and Propagation in Wireless Communications, Granada, Spain**, Sept 9-13, 2019. <https://ieeexplore.ieee.org/abstract/document/8870381>
2. Venkateshwara Sai Boddu, Sulakshana Chilukuri, "A Multi Band Planar Inverted-F Antenna with Meandered Slots for Mobile Applications", **IEEE APS Topical Conference on Antennas and Propagation in Wireless Communications, Granada, Spain**, Sept 9-13, 2019. <https://ieeexplore.ieee.org/document/8870466>
3. Akshitha Vuppala, R Sai Roshan, Shaik Nawaz, JVR Ravindra "An Efficient Optimization and Secured Triple Data Encryption Standard Using Enhanced Key Scheduling Algorithm"

in Third International Conference on Computing and Network Communications (CoCoNet'19), Dec 2019, **Trivandrum, India**. Will be indexed in Scopus, published by Elsevier.

4. Srinath Singh, G. Ujjwal, Mohd. Hashmath, Sulakshana Chilukuri, "A CPW-fed Monopole Antenna with U-slots for Triple Band Application", IEEE 9th International Conference on Computing, Communication and Networking Technologies, **IISc Bangalore**, July 10-12, 2018. <https://ieeexplore.ieee.org/document/8494156>
5. Sai Sampreeth Indharapu, Abhishikth M B, Sulakshana Chilukuri, "A Multiband Slot Antenna for Wireless Communication Applications", IEEE 9th International Conference on Computing, Communication and Networking Technologies, **IISc Bangalore**, July 10-12, 2018. <https://ieeexplore.ieee.org/document/8493996>
6. Sri Vidya Gundappagari, Shanoor Shaik, Sulakshana Chilukuri, "A Wideband Dual-Band Metamaterial loaded antenna for Wireless Applications", IEEE **Indian Conference on Antennas and Propagation** 2018, Hyderabad, Dec 16-19, 2018. <https://ieeexplore.ieee.org/abstract/document/8770898>
7. Swathi K, Ujjwal G, Sulakshana Chilukuri, "A multiband frequency reconfigurable antenna with slotted ground plane for Wireless Applications", IEEE **Indian Conference on Antennas and Propagation** 2018, Hyderabad, Dec 16-19, 2018. <https://ieeexplore.ieee.org/document/8770900>





A total of 230 students, 25 IEEE student members and 7 faculties have attended the event.

Outcomes:

1. Students were able to understand the subsystems engineering involved in Satellite Communication
2. Students came to know RF & MWE domain and the type of technical work happening currently
3. Understood the value of IEEE membership and came out to take up the membership
4. Understood the value of core companies and higher studies