

BMS COLLEGE OF ENGINEERING
Bull temple Road, Bengaluru.

Department of Telecommunication Engineering

Workshop

on

HAM Workshop

By

B A Subramni

(Secretary and Satiton Director, ISRO's Upagrah Amateur Radio Club)

On

15th September 2018

Venue: EC209

A workshop on 'HAM – Amateur Radio' was organized by the department of Telecommunication of BMSCE for the students interested in the wireless communication and electronics.

Amateur radio, also known as ham radio, describes the use of radio frequency spectrum for purposes of non-commercial exchange of messages, wireless experimentation, self-training, private recreation, radio sport, contesting, and emergency communication. The term "amateur" is used to specify "a duly authorised person interested in radio electric practice with a purely personal aim and without pecuniary interest" and to differentiate it from commercial broadcasting, public safety (such as police and fire), or professional two-way radio services (such as maritime, aviation, taxis, etc.).



No of participants: 39

During the first session the resource person, Mr. B.A Subramani spoke about the various aspects of wireless communication and satellite communication. The various aspects included the advent and usage of satellite and wireless communication. The speaker also enlightened the participants about a satellite, the importance, classifications and the laws obeyed by the orbiting satellites. Mr. Subramani also spoke about satellites and their types and the speed required for a satellite to be launched and to orbit around a planet. He also provided a brief comparison of the various orbits.

The second session consisted of the introduction to Amateur HAM radio and its usefulness. The Speaker provided information on the satellite OSCAR, which is an orbiting satellite carrying Amateur radio wherein free launches are provided. Here, the activities are not only restricted to terrestrial communication. The speaker also spoke about the importance of being a HAM. For example, they always have bright ideas, they know everything about communication, and they cut

across boundaries to form groups. An OSCAR is essentially designed to carry Amateur Radio Transponders. The second sub-topic which was talked about was, AMSAT which is the Radio Amateur Satellite Cooperation.

The day's session ended on a high note as the participants gained knowledge on the various satellites required for HAM and the advantages/disadvantages of launching a satellite and the basic requirements for radio propagation to take place like; repeaters, transponders and the type of payload requirements

The objective of enlightening the students about the resourcefulness and usefulness about HAM and Satellites was attained.

The earnest and energetic participation by the students lived up to the mission of the workshop.

Faculty Coordinator: Archana K

Student Coordinators: Yashavi R Machani and Urvi Ajit Jere

Student Volunteers: Akshatha N and Mahima M P