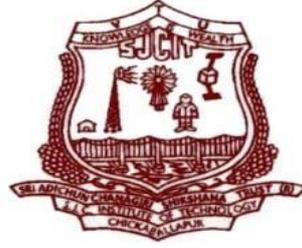


||Jai Sri Gurudev||



S J C Institute of Technology

Department of Aeronautical Engineering



SJCIT

Chickballapur

Report on Industrial visit

U R Rao Satellite Center (URSC) Bengaluru



Date: 02-12-2022

No of students: 25 students

S J C Institute of Technology
Department of Aeronautical Engineering

CHICKBALLAPUR-562101

During the year: 2022-2023



||JAI SRI GURUDEV||

S. J. C. INSTITUTE OF TECHNOLOGY

Department of Aeronautical Engineering

About the Industrial visit U R Rao Satellite Center (URSC) Bengaluru

The Indian Space Programme as enunciated by its founding father Dr. Vikram Sarabhai is application driven. "Benefit to common man and society is the fundamental tenet around which the Indian Space Programme revolves today". During the 70's and the 80's U R Rao Satellite Centre (URSC), the lead centre of ISRO was engaged in mastering the basic technologies and skills required for the specialized task of satellite building. Since the early 90's a host of contemporary and advanced communication, meteorological, remote sensing, navigation and space science were built and launched. The communication, meteorological, remote sensing and navigation satellites launched by URSC have continued to serve the key sectors of the Indian economy like communication, agriculture, water resources, urban planning, Land use, Fisheries, Oceanography, Weather forecasting, Disaster management, Search and Rescue and Navigation. The Space science missions like Chandrayaan-1, Mars Orbiter Mission and Astrosat have received World Wide acclaim and put India in the global map while at the same time inspiring the Gen next.

More than 100 state-of-the-art satellites built over four decades by URSC, the abode of Indian satellites, stand testimony to the technical excellence the centre has scaled. With about 2500 highly trained and skilled manpower, URSC today is home to a host of advanced, cutting edge satellite technologies that feeds into the Indian Space Programme. The centre also houses ultra modern design, development, fabrication and testing facilities for satellites.

U R Rao Satellite Centre is the lead centre of the Indian Space Research Organisation (ISRO) responsible for design, development, assembly & integration of communication, navigation, remote sensing, and scientific and small satellite missions.

The specialised teams of scientists, engineers and technicians of URSC have built more than 90 complex & advanced satellites for various applications in areas of Telecommunications, Television broadcasting, VSAT services, Tele-medicine, Tele-education, Navigation, Weather forecasting, Disaster warning, search and rescue operations, earth observations, natural resource management, scientific and space science etc.

With the objective of taking the benefits of space technology to the length & breadth of the society, URSC is actively involved in creating cost-effective space infrastructure for the country.

Formerly known as ISRO Satellite Centre (ISAC) is the lead centre for building satellites and developing associate satellite technologies. These spacecraft are used for providing application to

various users in the area of Communication, Navigation, Meteorology, Remote Sensing, Space Science and interplanetary explorations. The center is also pursuing advanced technologies for future mission. URSC is housed with the state-of-the-art facilities for building satellites on the end-to-end basis. ISRO Satellite Integration and Test Establishment (ISITE) is equipped with state-of-the-art clean room facilities for spacecraft integration and test facilities including a 6.5metre thermos vacuum chamber, 29 Ton vibration facility , Compact Antenna Test Facility and acoustic test facility under one roof. Assembly, Integration and Testing of all Communication and Navigation Spacecraft is carried out at ISITE. A dedicated facility for the production station of standardized subsystem is established at ISITE.

URSC has a unit called Laboratory for Electro Optics System (LEOS), which is situated in Peenya, Bengaluru and is mainly responsible for research, development and production station of Sensors for ISRO programmes. Since inception, URSC has the distinction of building more than 100 satellites for various application like scientific, communication, navigation and remote sensing. Many private and public sector industries are also supporting ISAC in realizing standard satellite hardware.



U R Rao Satellite Center (URSC), Bengaluru



U R Rao Satellite Center (URSC), Bengaluru



Inside view of U R Rao Satellite Center (URSC), Bengaluru