

SPECIAL LECTURES on

INTERNATIONAL SPACE STATION by Padma Shri Dr. M.Y.S. Prasad

VFSTR has conducted a talk on International Space Station (ISS) on 21st, 22nd and 23rd of December 2020 as a token of appreciation for the twenty years of continuous human presence in space. The ISS is an international program of NASA, ROSCOSMOS, ESA, CSA, and JAXA. Thousands of engineers and scientists from all these countries contributed to the design, manufacture of modules, assembly in orbit, and operations of ISS. This Space Station project is a remarkable technological achievement and best example of international cooperation. On this occasion, Our Vice Chancellor Dr. M. Y. S Prasad delivered lecture on the launch, placement and working of ISS. Dr.M.Y.S. Prasad has served various executive positions during his 40 years' tenure in ISRO. He was even honored with the govt. of India's Civilian award Padma Shri in 2014 for his glorious contribution to the Indian Space Research Organization. The Lectures covered various topics, right from fundamentals of manned missions to how life support is done in space. A live of this lecture was posted in the university's website for all those who couldn't attend in person. A total of about thousand students attended this fascinating lecture. Hundreds of scholars, industrialists and many other students around the globe attended the talk via online.

Day 1:

On 21st December, Our Vice Chancellor, Dr. M. Y. S Prasad delivered lecture covering the fundamentals of manned missions, configuration and system details of ISS, the assembly sequence and the general working of the crew in ISS. We were even explained about the NASA and its international partners who are constantly learning how to live and work in space and even how humans were able to survive and work continuously aboard space station for past 20 years. The fact that over 241 individuals from 19 different countries visited the International Space Station made everyone astonished. The fascinating visual lecture by Sunita Williams explaining about the life in the International space station encouraged us to see things from a different perspective.

Day 2:

On the Following day 22nd December, Padma Shri. Dr. M Y S Prasad delivered a talk that covered the heritage of earlier Space Stations, Launch Vehicles used for ISS assembly missions, details of access to the Space Station, and the activities of crew. We were explained regarding what the launch vehicle is, and details of various vehicles like soyuz launch vehicle, H-2 launch vehicle and proton launch vehicle. Next the lecture continued with the in-detail explanation of

how the ISS power system, solar array and its configuration and fascinating theory of rotations solar panels, soyuz MS-07 docking ISS was explained. At the end visuals of the exceptional life of the crew in the spaceship were shown. At the end of the lecture, students were given a chance to interact with the Vice chancellor and pose their questions and to which Dr. M.Y.S Prasad answered patiently and with enthusiasm.

Day 3:

On the Final day 23rd December, the concepts like ECLSS, the Environmental Control and Life Support Systems of ISS were discussed. The detailed explanation regarding the designing of the space suits to protect the astronaut from the harmful rays of the sun and about how much time and money was invested in this procedure left us spell bound. Facts like how the crew were trained on ground and how were they made ready for any kind of obstacles they may face and how were they trained to adapt themselves to the conditions in space was astounding. The astronauts were given a special training in training centers where they were exposed to a special type of environment that resembled space environment before the placement of ISS in space. The lecture was concluded with the display of research activities that were performed on board the ISS. The event marked an end with the felicitation of Our Vice Chancellor, Padma Shri. Dr. M Y S Prasad by our honorable chairman Dr.

LavuRathiah and other Dignitaries.

A special thanks was conveyed to the head of the departments of ECE and CSE and even the IT services for hosting such an amazing event and for making sure that this remarkable lecture was even streamed via online too, which in turn gave an opportunity to thousands of students and many scholars around the world to witness it. The students indulged themselves into this marvellous lecture and enthusiastically participated in the interaction session. Our Vice Chancellor,

Dr. M Y S Prasad cleared their minds and made sure everyone's doubts were answered. The online participants questions were also answered patiently by our vice chancellor proving him as an inspiration to all the upcoming engineers of the country once again.