

Dr. Vinod Kumar, Scientist-Engineer 'G', Division Head (GCDAD), Control Dynamics Design Group U. R. R. Satellite Centre, Bangalore-560017, India, connected with JUIT and delivered an Expert Lecture

“Intelligent Techniques for Autonomous Landing on Mars”

On

Oct 07, 2021

Jaypee University of Information Technology
Department of Electronics & Communication Engineering
6th International Conference on Signal Processing,
Computing and Control (ISPC 2k21)

Juit
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY
JUIT
JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY

Keynote Speaker

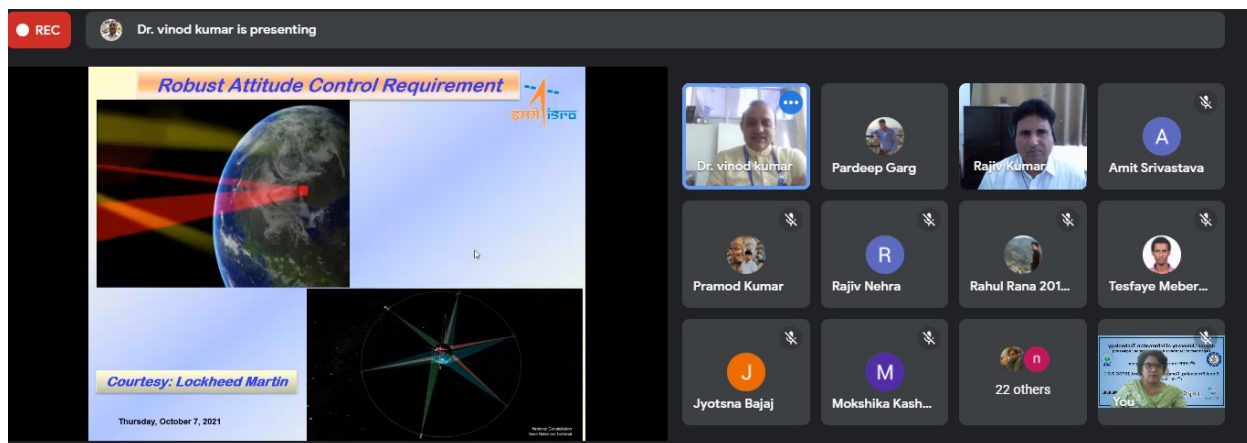


Dr. Vinod Kumar
Scientist-Engineer 'G'
Executive Secretary ASI, Division Head
U. R. R. Satellite Centre Bangalore, India

Date: 7th Oct, 2021, Time: 12:30 - 13:30 IST
Medium: GoogleMeet

Dr. Vinod Kumar is presently Division Head of GEO Control Dynamics Design Division. He is also working as Deputy Project Director, Attitude and Orbit Control System, U R Rao Satellite Centre (URSC), Bengaluru. He is fellow of the Institution of Engineers (IEI), India and The Institution of Electronics and Telecommunication Engineers (IETE). He joined URSC in 1997, where he has been involved with the design and development of Attitude and Orbit Control

Systems of over three dozen satellites in the last nearly 23 years. He has developed crucial technologies for satellites and a critical mirror motion compensation technique for ISRO's meteorological satellite series. He has also developed autonomy for GEO satellites which has become the backbone of ISRO's fleet of spacecraft including Mars Orbiter Mission. He has been awarded ISRO team excellence award in 2006 by His Excellency former President of India Dr. A.P.J. Abdul Kalam for in orbit management of spacecraft operations. He was again chosen for team excellence award in 2011 for GSAT-12 spacecraft AOCS design, development and realization. Dr. Vinod is alumnus of Indian Institute of Technology, Bombay. In his doctoral research, he developed autonomous navigation techniques for collocated geostationary satellites at a desired longitude using Indian Regional Navigation Satellites System (IRNSS/NavIC). He is a ISO 9001:2015 certified Lead Auditor from Indian Institute of Quality Management. He has over thirty publications in National and International reputed journals and conferences. His additional technical interests include "Missile detection, AI, Terrain navigation, Guidance, Pulsar navigation, Space reentry, Mars explorations and interplanetary missions". Before joining the URSC, he worked with Indian Air Force, on fighter aircraft control systems and also held Faculty position at Regional Engineering College, Haryana, India and SJPLM Institute of Technology, Radaur, Haryana.



He delivered his keynote address on the topic titled as "Intelligent Techniques for Autonomous Landing on Mars". He emphasized that Mars being the planet of interest to space agencies around the world is very important in the ISRO plans in the decades to come. He explained the problems and also the solutions he and his team came across while planning this mission from a theoretical perspective and he also motivated the young and experience researchers alike to work

on these problems and encouraged them to come up with new and novel solutions. He delivered his keynote address at 12:30pm on 7th October, 2021.

Coordinators: Dr. Rajiv Kumar, Dr. Shruti Jain, Dr. Harsh Sohal