



RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTRONICS OSMANIA UNIVERSITY, HYDERABAD



One Day Workshop on DESIGN AND DEVELOPMENT OF GNSS RECEIVERS (GNSSR-21)

Course Code: NERTU/SC/79
TUESDAY, 12TH JANUARY 2021

Location : NERTU Auditorium, Osmania University
Mode : Both through offline and online
Time : 10.00AM – 05.00PM

Programme:

- 10.00-11.00: Inauguration & Introduction to GNSS Receivers
– Shri. Atul P Shukla, SAC-ISRO, Ahmedabad
- 11.00-11.30: High Tea and Networking
- 11.30-12.30: Antennas and RF Front End Design
– Dr.K.S. Parikh, SAC-ISRO, Ahmedabad
- 12.30-13.30: Baseband Signal Processing
– Smt. Saume De, SAC-ISRO, Ahmedabad
- 13.30-14.15: Lunch
- 14.15-15.15: Navigation Processor
– Dr.P. Laxminarayana, NERTU, Osmania University
- 15.15-15.45: Tea & Networking
- 15.45-17.00: Panel Discussion on Making GNSS Chipsets
– Dr.K.S. Parikh, SAC-ISRO, Ahmedabad
– Shri Atul P Shukla, SAC-ISRO, Ahmedabad
– Shri Parimal Majithiya, SAC-ISRO, Ahmedabad
– Shri Anil Terker, DRDO, Hyderabad
– Shri Anil A Kulkarni, SAMEER, Mumbai
– Shri Gopa Kumar, CDAC, Trivandrum
– Awaiting Confirmation from SCL

Registration Fee (Including GST of 18%)

Rs. 5000/- for Scientists and Engineers from Industry and R&D

Rs. 1000/- for Academicians

Last Date for Registration: 11th JANUARY 2021

DD/Cheque should be drawn in favour of

“The Director, NERTU, OU” or

Online payment through NEFT to

The Director, Eqpt. Maint., NERTU, OU,

A/C No. : 52198270713 IFSC Code: SBIN0020071
Osmania University Branch, Hyderabad,
State Bank of India

Coordinator, GNSSR-21

Prof.P.Laxminarayana, Director, NERTU, OU

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Introduction

GNSS has become ubiquitous technology, including the sectors related to surveying, defence, unmanned vehicles, agriculture, timing & synchronization, aviation, road, rail and sea transport. GNSS chips are also proposed to use in the Applications of Internet of Things in the Industry and other organizations to know the location of sensors and devices. The demand for precise location information with the ongoing evolution of GNSS technology, is expected to grow from 5 billion to 8 billion Euros by 2020. The business can be divided into Development of GNSS chipsets and the Integration of GNSS chipsets with different applications. This is the high time in India to develop GNSS chipsets and also applications with GNSS chipsets.

Recently, the Ministry of Electronics and Information Technology (MEITY), Government of India Invited to bid for design, development and supply of GPS/IRNSS chipsets. Many companies or start-ups are interested to design and develop the chips, but it is observed that many of them are belong to designing Semiconductor Chipsets and don't have experience in the area of GNSS. Research and Training Unit for Navigational Electronics (NERTU) is the first institution to work in the area of GNSS, since 1985. NERTU is having the complete software solution for GPS/GLONASS and IRNSS receivers. This workshop will be forum to interact with other industries, start-ups and experts in the area of GNSS to form a consortium, design and develop the GNSS chipsets including NavIC. **Expected participants for the workshop are senior managers and decision-makers of the established companies and start-ups, and exploring the possibility of design and development of indigenous GNSS chipsets.** In this workshop, there will be four talks by experts working in the area of GNSS, with question-answers and a panel discussion on the development of GNSS chipsets.

Interested candidates can register by filling the Google registration form available at <https://forms.gle/6m4BEknEo7Ja3aSQ7>

ABOUT NERTU: The Research and Training Unit for Navigational Electronics (NERTU) is established in 1982. It is the focal point for research and training in the areas of Electronic Navigation in India. It is the first University centre to work in the area of Global Positioning System (GPS) and GPS Aided Geo Augmented Navigation (GAGAN) System. Since its inception, NERTU has successfully **executed 61 sponsored and consultancy projects and Two Projects are ongoing**, funded by DRDO, ISRO, DST, MIT, ECIL, HAL, BEL, AICTE and ASL. It has also conducted **78 short term courses/workshops/conferences** on various topics of signal processing, communications and navigation. NERTU has been conducting almost one or two short term courses per year in the area of GNSS Applications and Signal Processing, since 1992. Scientists, engineers, academicians and research scholars from many organisations have participated and benefited from these courses. There was very good participation, from many Industry, R&D academic institutes spread throughout India for the short courses in the area of GNSS Signal Processing and Receivers, conducted by NERTU in the years 2014, 2015, 2016, 2017, 2018 and 2019.