



OU CENTENARY CELEBRATIONS (1917-2017)

One Day Symposium on

Opportunities, Challenges and Trends in Navigational Technologies

(Course Code: NERTU/SC/66)

Tuesday, 5th September 2017

RESEARCH AND TRAINING UNIT FOR NAVIGATIONAL ELECTONICS

OSMANIA UNIVERSITY. HYDERABAD



Location : NERTU Auditorium, OU

Dates : Tuesday, 5th September 2017

Time : 09.30AM – 05.30PM

SPEAKERS

1. Dr.Rajesh Tiwari, Newcastle University, UK
2. Prof.G.Sasibhushana Rao, Andhra University
3. Dr.Anindya Bose, Burdwan University
4. Dr.Nirvikar Dashora, NARL
5. Prof.P.Laxminarayana, NERTU, OU

Awaiting for acceptance from some more scientists and professors from research and academic institutions.

REGISTRATION FEE : Rs. 500/-

DD/Cheque should be drawn in favor

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

State Bank of India

Last Date for Registration:

4th September 2017

For Schedule, other Details, please

contact [Coordinator, NAV-17](#)

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SYMPOSIUM OVERVIEW

The demand for development of navigation technologies with new features like high accuracy, robustness, and suitable for indoor and outdoor environments. This demand is coming from autonomous and manually guided terrestrial, aquatic and aerial vehicles. Serious research efforts are going on around the globe to meet these demands. Very few dedicated research groups from academic institutions are working in India in this area. Whereas some of them are working to address the challenges in developing navigational technologies, some of them are working to apply these technologies for various applications.

Today, development of new technologies or its applications require expertise and infrastructure related to multidisciplinary and collaborative efforts. The main objective of this symposium is to explore the possibility of collaboration between different groups working in this area. So the symposium will have presentation by the invited speakers about their group's present research work, expertise and available infrastructure and equipments. There will be a session for other participants to share their expertise and present their work for about ten minutes. Finally, there will be a panel discussion to take it forward for collaborative research to utilize the opportunities by addressing the challenges in development of modern navigation technologies and its applications.

Some of the topics of the symposium are: *Space Weather and its impact on infrastructure, *Next Generation Vehicle to Vehicle Communication, *Kalman filter for GNSS signal processing algorithm, *GNSS Software Receivers, *Challenges and Opportunities for autonomous navigation for UAVs and Mavs, *Multi-GNSS from India: experience, prospects and challenges, *Ionospheric research and GNSS/IRNSS- a positive feed-back loop, *Indian-UK Education Systems, and gateway to UK's University

CALL FOR PARTICIPATION

People interested or already working in the area of navigation for development of technology or its applications, are invited to participate in this symposium by registering before 4th September 2017, by sending an email to plaxminarayana@yahoo.com or laxminarayana@osmania.ac.in with details like Name, designation, experience, Organization and if interested to present their research in the symposium in 10-minutes. Registration fee for participation is Rs.500/- (includes for Lunch and Snacks) and can be paid on the day of symposium.

ABOUT NERTU

The Department of Electronics (DoE), Government of India, recognizing the importance of Navigational Electronics to the country and the specific needs of the Department of Civil Aviation and the Indian Air Force, decided to create a national centre for expertise in this area. Proposals were invited, and the one submitted by the Department of Electronics and Communication Engineering, Osmania University was selected. Thus the Research and Training Unit for Navigational Electronics (in brief NERTU) came into being on 1st April, 1982 as a sponsored project of the DoE. It continued to enjoy this status until September 1992. In recognition of the excellent services rendered by it to the user organizations, then the Government of Andhra Pradesh has made it as permanent establishment, a research centre of Osmania University by funding its recurring expenditure.

Today, NERTU is the focal point for research and training, in the frontier areas of Navigational Electronics 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. NERTU has been conducting almost one or two short term courses per year in the area of GNSS, since 1992. Scientists, engineers, academicians and research scholars from many organisations have participated and benefited from these courses. NERTU has successfully **executed 60 sponsored and consultancy projects** funded by DRDO, ISRO, DST, MIT, ECIL, HAL, BEL, AICTE and ASL. It has also conducted **61 short term courses/workshops/conferences** on various topics of signal processing, communications and navigation.