2022 URSI Regional Conference on Radio Science (URSI-RCRS 2022)

December 01 - 04, 2022, IIT Indore, India

Website: (URSI-RCRS 2022**)**

Announcement of

Workshop on NavIC and Applications

(1st December, 2022)

Joint Conveners

T Subramanya Ganesh, ISTRAC, ISRO,

Anindya Bose, The University of Burdwan, West Bengal

Global satellite Navigation systems (GNSS) such as GPS, GLONASS, Galileo and Beidou are operational today. India has developed and realized its own regional navigation satellite system called NavIC with the mandate to provide independent satellite navigation services including position, velocity and time to the users over the Indian region and beyond. The NavIC constellation is designed with 7 satellites with 3 GEO and 4 GSO satellites. The navigation signals are broadcast in L5 band and S bands using right hand circular polarization. The intended service area for NavIC is primarily the Indian land mass, and a region extending to about 1500 km around it. As a regional system, NavIC has the unique advantages of continuous satellite visibility at sufficiently high elevation angles, unique S band transmission, dual frequency civilian navigation signals and alert message service transmission to the users. Various national and global efforts have been witnessed to exploit the full benefits of NavIC within the service region and more networked efforts are needed through synergy between research institutes, academic and Industry for the purpose. In order to highlight the PVT/ PNT, com-nav and science applications of NavIC and to promote the use of NavIC in other applications, a one-day workshop is planned during the URSI RCRS 2022. The workshop would also consist of hands-on experience with NavIC receivers and data. The target participants are students, researchers, and commercial application developers from various technical backgrounds of Radio Science to expose them to the potential, challenges, and future scope of NavIC as a possible topic of their future endeavors. All participants shall receive a participation certificate for the workshop.

All delegates registered for URSI-RCRS 2022 are free to attend the workshop

(Please see the Tentative Program Overleaf)

Workshop on NavIC and Applications 1st December, 2022 (Thursday)		
0930-1030	**Inauguration & Keynote Address:** An overview of the NavIC system	**B. N. Ramakrishna** ISTRAC, Bangalore
1030-1045	**Tea Break**	
1045-1130	Positioning using NavIC: Current Status, Challenges and Prospects	**Ashish K. Sukla** NTAG/SSSA, SAC, Ahmedabad
1130-1215	Atmospheric Probing using NavIC: Status and prospects	**Nirvikar Dashora** NARL, Gadanki
1215-1315	**Lunch**	
1315-1400	Time Transfer Applications of NavIC	**T. Subramanya Ganesh** ISTRAC, Bangalore
1400-1445	Continuously Operating Reference Stations- A NavIC perspective	**Manish Saxena** SSPO, ISRO HQ.
1445-1500	**Tea Break**	
1500-1545	NavIC Hardware and Data-Practical Aspects	**Anindya Bose** The Univ of Burdwan, WB
1545-1615	Panel Discussion	Panel: TBA Moderator: TBA
	NavIC receivers: hands on demonstrations	During Breaks and Post Workshop

- **End of workshop with a group photograph of the participants**
- **Participants shall receive a participation certificate for the workshop**