

2024 URSI Regional Conference on Radio Science (URSI-RCRS 2024)

Organized by ARIES & GEHU, Venue, GEHU, Bhimtal

October 22 - 25, 2022

Website: (<https://www.aries.res.in/ursi.rcrs2024/>)



Announcement of Workshop on Ionospheric Measurement Techniques and Instrumentation

(22nd October, 2024)

Joint Conveners

**S. Gurubaran, IIG, Navi Mumbai,
Duggirala Pallamraju, PRL, Ahmedabad**

This one-day workshop will focus on the latest measurement techniques and state-of-the-art instrumentation adopted for ionospheric studies. The ionosphere, a critical layer of the Earth's atmosphere, plays a significant role in radio communication, satellite navigation, and space weather phenomena. Understanding its complex dynamics requires precise measurement techniques and advanced instruments. This workshop will provide a platform for researchers, scientists, and students to gain comprehensive knowledge about various ionospheric measurement techniques, including ground-based and space-based methods. It will cover both passive and active techniques that include spaced receiver experiments, differential GNSS technique, ionosondes, coherent scatter radars and in-situ probing using satellite-based techniques. This workshop will also explore the latest advancements in instrumentation used for ionospheric studies. Participants will have the opportunity to interact with experts in the field, discuss challenges and explore future prospects. The workshop aims to foster collaboration and inspire innovative ideas for future research in ionospheric studies.

**All delegates registered for URSI-RCRS 2024 are free to attend
the workshop**

(Please see the detailed program overleaf)

**Workshop on Ionospheric Measurement Techniques and Instrumentation
(22 October 2024)**

09:30-09:35	Welcome and Introductory Remarks	S. Gurubaran IIG, Navi Mumbai
09:35-10:05	Incoherent Scatter Radar and its technical capabilities	A K Patra NARL, Gadanki
10:05-10:35	Ionospheric Probing using VHF Radars	Ashik Paul University of Calcutta, Kolkata
10:35-11:00	Tea Break	
11:00-11:30	Ionosondes	S. Sripathi IIG, Navi Mumbai
11:30-12:15	VLF Remote Sensing of Ionospheric Regions	Abhay Kumar Singh BHU, Varanasi
12:15-12:45	Radio Occultation Technique	Rajkumar Choudhary SPL-VSSC, Trivandrum
12:45-13:15	Ionospheric Monitoring using GNSS receivers	Nirvikar Dashora NARL, Gadanki
13:15-14:00	Lunch	
14:00-14:30	Ionospheric Modeling and Radio Wave Propagation	S. Tulasiram IIG, Navi Mumbai
14:30-15:00	Topside Ionospheric Modeling	K. Venkatesh PRL, Ahmedabad
15:00-15:30	Tea Break	
15:30-16:00	In-situ techniques for Ionospheric Probing: Plasma density, temperature, and neutral composition	Tarun K. Pant SPL-VSSC, Trivandrum
16:00-16:30	In-situ techniques for Plasma Motion and Introduction to DISHA Mission	D. Pallamraju PRL, Ahmedabad
16:30-17:00	Discussion and Conclusion	
<div>➤ End of the Workshop with a Group Photograph of the participants</div> <div>➤ Participants of the workshop shall receive a participation certificate</div>		

