





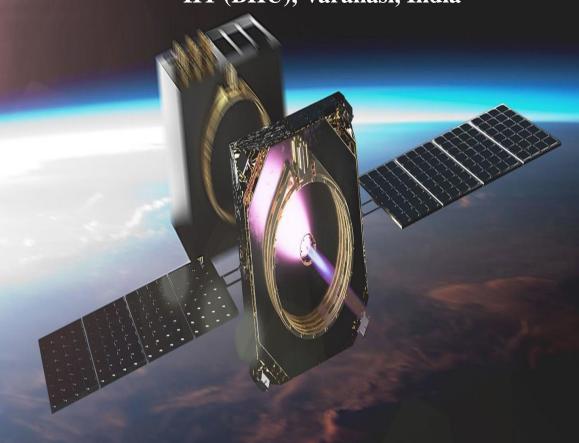






2020 URSI Regional Conference on Radio Science **(URSI-RCRS 2020)**

February 12-14, 2020 IIT (BHU), Varanasi, India



PROGRAM BOOK

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Dr. Kaushal Buch YSA & SPC Chair

PLENARY SPEAKERS



Prof. Yashwant Gupta Director, National Centre for Radio Astrophysics, TIFR



Prof. Debatosh Guha, University of Calcutta



Dr. Radhika Ramachandran Director, Space Physics Laboratory, ISRO





आचार्य प्रमोद कुमार जैन ^{निदेशक} Prof. Pramod Kumar Jain Director



Message

It is privilege to welcome you all to the prestigious 2020 URSI Regional Conference on Radio Science (URSI-RCRS 2020) organised by the Department of Electronics Engineering, IIT(BHU) Varanasi during 12-14 February, 2020. I am happy to know that the URSI-RCRS 2020 is the fourth edition of the series in which we are expecting to have more than 300 delegates and participants for the first time. I am sure that the participants will be immensely benefitted by acquiring new thoughts and ideas of research in the merging areas of radio science and engineering through their interactions with eminent academicians, scientists and researchers attending the conference. I wish you all a pleasant stay in the IIT(BHU) campus during the Conference period.

I congratulate the organizers of the **URSI-RCRS 2020** and wish a grand success to the Conference.

(Pramod Kumar Jain) Date: 04th February 2020





भौतिक अनुसंधान प्रयोगशाला (भारत सरकार, अंतरिक्ष विभाग की युनिट)

नवरंगप्रा, अहमदाबाद - 380009, भारत

Physical Research Laboratory

(A Unit of Dept. of Space, Govt. of India) Navrangpura, Ahmedabad 380009, India

डॉ. अनिल भारद्वाज, एफएनए, एफएएससी, एफएनएएससी **Dr. Anil Bhardwaj,** FNA, FASc, FNASc निदेशक/Director

अध्यक्ष, संयुक्त राष्ट्र URSI, COSPAR और SCOSTEP के लिए समिति Chairman, Joint National Committee for URSI, COSPAR & SCOSTEP 06 February, 2020



Message to the Participants of URSI-RCRS2020

Dear Participants,

I am pleased to know that URSI-RCRS 2020 is being organised at the IIT BHU during 12 - 14 February 2020. This is the Flagship event of the Indian Radio Science Society (InRaSS), being hosted by the IIT BHU and supported by the URSI, INSA and the ISRO.

It is very heartening to note that we have a very vibrant research community in India in the area of Radio Science, which is coming together in this conference to showcase their latest results, exchange ideas and network with each other. This meeting will be of particular importance to the students and young researchers who will get exposed to the frontline research being carried out in the country.

I have great pleasure in wishing the URSI-RCRS 2020 a great success and would like to congratulate the organisers of this Conference – IIT BHU and InRaSS.

आहित सारहाज डॉ. अनिल भारहाज Dr. Anil Bhardwaj निदेशक/Director

अध्यक्ष, संयुक्त राष्ट्र URSI, COSPAR और SCOSTEP के लिए समिति Chairman, Joint National Committee for URSI, COSPAR & SCOSTEP



Message from the Conference Chair

Dear Participants,

On behalf of Indian Radio Science Society (InRaSS), which is hosting this Radio Science conference along with IIT(BHU), I have great pleasure in welcoming you to this biennial Conference which is gaining an international flavor.

As most of you are aware, International Radio Science Union (URSI) is a global entity whose mission is to disseminate radio science in all its facets. URSI is celebrating its 100th year. URSI covers a wide range of topics, namely Electromagnetic Metrology (Commission A), Fields and Waves (Commission B), Radio Communication Systems and Signal Processing (Commission C), Electronics and Photonics (Commission D), Electromagnetic Environment and Interference(Commission E), Wave Propagation and Remote sensing(Commission F), Ionospheric Radio and Propagation (Commission G), Waves in Plasma(Commission H), Radio Astronomy (Commission J) and Electromagnetics in Biology and Medicine(Commission K) in its ten commissions. URSI is affiliated to ICSU (International Council of Science Unions) to which INSA is an adherent. INSA has constituted INC-URSI committee. INCURSI held the previous radio science conferences once in 18 months. These are called RCRS (Regional Conference on Radio Science). The Region connotes the entire Asia-Africa region and especially those with which INSA has signed a Memorandum of Understanding. These include many countries in Africa, Sri Lanka, Nepal, Pakistan, Bangladesh, etc.

Now that InRaSS is a registered society, it will be holding these radio science conferences henceforth. It has already very successfully hosted the Asia Pacific Radio Science Conference in New Delhi during March 2019. We had 750+ participants with more than 250 from outside India. Therefore, we are very happy to note that so many of you who have attended APRASC2019 are also participating in URSI-RCRS2020. Following the URSI motto, InRaSS too is especially interested in supporting young scientists and recognizing their contributions. The Student Paper Competition is also important. We have awards in both these categories. We are doubly happy holding this conference in the IIT-BHU campus this year, in which BHU is also celebrating its 100th year.

Once again, I would like to extend a warm welcome to all of you on behalf of the InRaSS board which consists of several distinguished persons. We hope you will have a very fruitful exchange of ideas and collaborations during the meeting and will take back happy memories.

S.Ananthakrishnan

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February 5, 2020













LOCAL ORGANISING COMMITTEE

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- 26. Mr. Utkarsh Gupta, Student Volunteer
- 27. Ms. Kritika Singh, Student Volunteer
- 28. Mr. Sanjeev Mani Yadav, Student Volunteer
- 29. Mr. Ansuman Shubham, Student Volunteer
- 30. Mr. Ananga Paul, Student Volunteer
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- 32. Ms. Pratibha Verma, Student Volunteer
- 33. Mr. Arjun Kumar, Student Volunteer
- 34. Mr. Jayesh Kumar, Student Volunteer
- 35. Mr. V. Veerababu, Student Volunteer

URSI-RCRS 2020

(12 - 14 February 2020)

Program Booklet

Program Summary of URSI-RCRS 2020

Day 1: 12 Febru	Day 1: 12 February, 2020				
08:30 onward	Registration				
09:00-10:00	Inauguration				
10:00-10:30	Tea Break				
10:30-11:15	Plenary Talk 1				
11:30-13:00	Oral Session 1 (4 Parallel Sessions)				
13:00-14:00	Lunch Break				
14:00-16:00	Oral Session 2 (4 parallel sessions) + SPC session				
16:00-16:30	Tea Break				
16:30-18:30	Oral Session 3				
19:00-21:30	Banquet Dinner (ABLT Premises)				

Day 2: 13 Febru	Day 2: 13 February, 2020				
08:00 onward	Registration				
08:30-10:30	Oral Session 4 (4 parallel sessions)				
10:30-10:45	Tea Break				
10:45-11:30	Plenary Talk 2				
11:30-13:00	Poster Session 1				
13:00-14:00	Lunch Break				
14:00-16:00	Oral Session 5 (4 parallel sessions)				
16:00-16:30	Tea Break				
16:30-18:30	Oral Session 6 (4 parallel sessions)				

Day 3: 14 Febru	Day 3: 14 February, 2020				
08:00 onward	Registration				
08:30-10:30	Oral Session 7 (4 parallel sessions)				
10:30-10:45	Tea Break				
10:45-11:30	Plenary Talk 3				
11:30-13:00	Poster Session 2				
13:00-14:00	Lunch Break				
14:00-16:00	Oral Session 8 (4 parallel sessions)				
16:00-16:30	Tea Break				
16:30-17:30	Valedictory Session				

Layout Details of the Sessions for URSI-RCRS 2020

Hall/Venue →					ABLT	G '44 B
Date/Time	ABLT1	ABLT2	ABLT3	ABLT4	Ground	Committee Room ECE Dept.
\						

Wednesday, 12 February, 2020

09:00 - 10:00				Inauguration	
10:15 – 11:00				Plenary 1	
11:30 – 13:10	AEK-1	H01	G01	B01	
14:00 – 16:00	F01	C01	GH02	B02	SPC Session
16:30 – 18:30	F02	D01	GH03	В03	

Thursday, 13 February, 2020

08:30 - 10:30	AEK-2	C02	GH04	B04		
10:45 – 11:30				Plenary 2		
11:30 – 13:10					Poster 1	
14:00 – 16:00	F03	D02	J01	B05		
16:30 – 18:30	F04	D03	J02	B06		

Friday, 14 February, 2020

08:30 - 10:30	AEK-3	F05	GH05	B07		
10:45 – 11:30				Plenary 3		
11:30 – 13:10		<u>, </u>			Poster 2	
14:00 – 16:00	F06	J03	GH06	B08		
16:30 – 17:30				Valedictory		

URSI-RCRS 2020

(12 - 14 February, 2020)

Details of the Sessions

Day 1: Wednesday, 12 February, 2020

	PLENARY SESSION-Wed-WP (10.30-11.15 hrs) Venue: ABLT4					
Plenary	Signal processing challenges en route to understanding the Universe	Prof Yashwant Gupta, National Centre for Radio Astrophysics				
	SESSION-Wed-AEKO1 (11.30-13	3.10 hrs) Venue: ARLT1				
	Single trapped ion based optical frequency	· T				
AEKO1.1	standard (Invited)	Dr. Subhasis Panja, Ms Lakhi Sharma, Dr. Atish Roy, Dr. Subhadeep De, CSIR- National Physical Laboratory				
AEKO1.2	NavIC: An efficient way to disseminate Indian Standard Time (Invited)	Mr Ganesh T Subramanya, ISRO Telemetry Tracking and Command Network				
AEKO1.3	Role of traceable time & frequency synchronisation in telecommunications, power grid and finance sector: Insight study in Indian scenario	Dr Bharath Vattikonda, CSIR- National Physical Laboratory, New Delhi.				
AEKO1.4	Update on the First Cesium Fountain Atomic Clock at NPLI	Ms Shalu Goel, Ms Suchi Yadav, Dr Ashish Agarwal, Dr Poonam Arora, Dr Amitava Sen Gupta, CSIR-National Physical Laboratory, The NorthCap University Gurugram.				
AEKO1.5	Performance Analysis of Real-time Power-line RFI Filtering System for uGMRT	Mr Kaushal Buch, Dr Ruta Kale, Ms Mekhala Muley, Mr Sanjay Kudale, Mr. Ajith Kumar B., Giant Metrewave Radio Telescope, NCRA- TIFR, GMRT, NCRA-TIFR				
AEKO1.6	Modeling and Simulation of Power-line RFI and its Effects on Radio Astronomical Data	Mr Jafar Habshee, Mr Kaushal Buch, Dr Divya Oberoi, Savitribai Phule Pune University, National Centre for Radio Astrophysics, TIFR Pune				
	SESSION-Wed-HO1 (11.30-13.1	10 hrs) Venue: ABLT2				
HO1.1	Nonlinear waves and Turbulence generation with implications to particle acceleration in radiation belt (Invited)	Prof R. P. Sharma, Dr. Ravinder Goyal, Dr. priyanka lathwal, Dr. Sanjay Kumar, Indian Institute of Technology Delhi				
НО1.2	ELECTROSTATIC SOLITARY WAVES IN THE LUNAR WAKE (Invited)	Prof. Satyavir Singh, Ms R Rubia, Prof. Gurbax Lakhina, Indian Institute Of Geomagnetism				
НО1.3	Velocity shear driven kinetic Alfvén waves in superthermal plasmas	Mr. KRUSHNA CHANDRA BARIK, Prof. Satyavir Singh, Prof. Gurbax Lakhina, Indian Institute of Geomagnetism				

НО1.4	Study of Ionospheric-Magnetospheric coupling during terrestrial events as observed from energetic particle bursts	Ms Swati Chowdhury, Mr Sudipta Sasmal, Dr Suman Chakraborty, Prof Sandip Kumar Chakrabarti, Indian Centre For Space Physics
НО1.5	In-situ observations of rocket burn induced modulations of the top side ionosphere using the IDEA payload on-board the unique orbiting experimental platform of PSLV	Dr Manju G, Dr Tarun Pant, Dr. Mridula N., Ms Aswathy R P, ISRO, Indian Space Research Organization, Vikram Sarabhai Space Centre, ISRO P.O
HO1.6	Wave breaking as a generation mechanism of series of coherent wave structures in the Earth Magnetosphere	Prof Amar Kakad, PROF BHARATI KAKAD, Navi Mumbai, Indian Institute Of Geomagnetism
	SESSION-Wed-GO1 (11.30-13	3.10 hrs) Venue: ABLT3
GO1.1	NaVIC/GNSS receiver network observations of low latitude Ionosphere (Invited)	Dr Nirvikar Dashora, National Atmospheric Research Laboratory
GO1.2	First Ionospheric signatures of Field Aligned Irregularities observed using University of Calcutta ST Radar (Invited)	Prof Ashik Paul, Dr Tanmay Das, Mr P Nandakumar, Institute of Radio Physics and Electronics, University of Calcutta
GO1.3	Estimation of Total Electron Content using NavIC Signals	Ms Anu Arora, Mr Suresh Dakkumalla, Mr Subramanya Ganesh T, Dr Sharda Vashisth, Dr Amitava Sen Gupta,ISRO Telemetry Tracking & Command Network Bangalore, ISTRA/ISRO Bangalore, The NorthCap University Gurugram, The NorthCap University Gurugram
GO1.4	Modeling the Ionosphere Using Extended Spherical Harmonics Approach for Generation of IRNSS/NavIC based Precise Ionospheric Maps/Products (NPIM) over Indian Region	Mrs Rethika T,U.R.Rao Satellite Centre, ISRO, Bengaluru
GO1.5	Dilatory and downward development of 3- meter scale irregularities in the Funnel-like region of Equatorial Plasma Bubble	Dr Tulasi Ram Sudarsanam, Dr. K. K. Ajith, Dr. Tatsuhiro Yokoyama,INDIAN INSTITUTE OF GEOMAGNETISM, IGGCAS
GO1.6	Using Synthetic Aperture Radar to Identify Ionospheric Irregularity Structures: A Case Study at High Latitudes	Ms. Shradha Mohanty, Prof. Gulab Singh, Dr. Charles Carrano, CSRE IIT Bombay
	SESSION-Wed-BO1 (11.30-13	3.10 hrs) Venue: ABLT4
BO1.1	On Nonpropagating Energy Around Antennas: Insights From the Theory of Radiation by Accelerated Charges (Invited)	Dr. Debdeep Sarkar, Dr. Said Mikki, Prof Yahia Antar, Royal Military College Canada, University of New Haven, CT
BO1.2	A wideband metamaterial absorber based on multiple interference model for mid- infrared applications	Mr Nilotpal ., Dr Somak Bhattacharyya, IIT (BHU) Varanasi
BO1.3	Design of a Compact SIW Diplexer with Square Cavities for C-Band Applications	Mr NRUSINGHA PRADHAN, Dr. Rusan Kumar Barik Rusan Barik, Prof. Karthikeyan Sholampettai Subramanian Karthikeyan Sholampettai Subramanian, Prof. Qingsha S Cheng Qingsha S Cheng, NIT Trichy, Southern University of Science and Technology

BO1.4	Prospective Design of Dual Band Graphene- Based Patch Antenna for Mid-THz Band	Mr Vinit Singh Yadav, Mr Anil Kumar Nayak, Mr. Sanjeev Kulshrestha, Prof. Brajesh Kumar Kaushik, Prof Amalendu Patnaik, IIT Roorkee
BO1.5	Substrate Integrated Waveguide Inspired Wideband Pyramidal Horn Antenna	Dr Suvadeep Choudhury, HCL Technologies Pvt. Ltd.
BO1.6	Circularly Polarized Monopole Antenna with Modified Ground structure	Mr. Yatendra Kumar, Dr Ravi kumar Gangwar, Prof. Binod kumar Kanaujia, M.J.P. Rohilkhand University, IIT(ISM), Dhanbad
	SESSION WJ SDC (14.00 17.00 hrs) Was	una Committee De em ECE Dent
	SESSION-Wed-SPC (14.00-16.00 hrs) Ver	nue: Committee Room ECE Dept
SPC1 (Com B)	Miniaturization and Enhancement of Out- coupled Power from a Waveguide filled with an Anisotropic Metamaterial	Mr Abhinav Bhardwaj, Indian Institute of Technology Kanpur, Kanpur
SPC2 (Com D)	Compact Stub Loaded Closed Loop Resonator for Band Stop/Band Pass Applications	Ms Aiswarya S., Sreedevi K Menon, Massimo Donelli, Amrita Vishwa Vidyapeetham, Kollam
SPC3 (Com F)	Spatio-temporal distribution of sulfur dioxide over South Asia combining observations and model simulations	Ms Lakhima Chutia, Narendra Ojha, Imran Girach, Binita Pathak, Lokesh K Sahu, Pradip Bhuyan, Dibrugarh University, Dibrugarh, PRL, Ahmedabad, SPL, VSSC, Thiruvananthapuram
SPC4 (Com J)	Revealing frequency dependent eclipsing of black widow millisecond pulsar J1544+4937 with upgraded GMRT observations	Mr Devojyoti Kansabanik, Bhaswati Bhattacharyya, National Center for Radio Astrophysics, TIFR, Pune
SPC5 (Com H)	Study of EMIC Waves in the Lunar Wake by the conjunction of ARTEMIS P1 and P2 simultaneous observations	Mr Biswajit Ojha, Satyavir Singh, G S Lakhina, Indian Institute of Geomagnetism, Colaba, Mumbai
	GEGGION W. 1 FO1 (14 00 16 0	ADVITA
	SESSION-Wed-FO1 (14.00-16.0	onrs) venue: ABL11
FO1.1	Atmospheric humidity studies over the tropical region using passive microwave measurements (Invited)	Dr Chellappan Pillai Suresh Raju, Indian Satellite Research Organisation
FO1.2	Characteristics of clouds and precipitation over Western Ghats as observed from Weather radars (Invited)	Dr GOVINDAN PANDITHURAI, Indain Institute of Tropical Meteorology
FO1.3	Cross-Polarisation Discrimination (XPD) Model due to rain at 20 and 30 GHz LOS link for Indian Tropical Climate	Dr arun verma, Dr Ranbir Nandan, Ms Aditi Verma, Vidyadaan Institute of Technology and Management, Patna
FO1.4	Seasonal variability of Deep Convective Clouds Over the Tropical Region using SAPHIR/Megha-Tropiques	Ms SISMA SAMUEL, Dr Nizy Mathew, VSSC,ISRO, VSSC,ISRO
FO1.5	System design of a low frequency polarimetric SAR for shallow-subsurface study of Mars	Mr GAURAV SETH, MR RAKESH BHAN, Mr RAJEEV JYOTI, SAC- ISRO, MRSA/SAC/ISRO
FO1.6	Long Term Variation of Rain Drop Size Distribution in Relation to Prevailing Atmospheric Parameters at a Tropical Location	Ms GARGI RAKSHIT, PROF Animesh Maitra, Institute of Radio Physics and Electronics, University of Calcutta, INSTITUTE OF RADIO PHYSICS AND ELECTRONICS, UNIVERSITY OF CALCUTTA

FO1.7	Influence of Aerosols on Atmospheric Gravity Waves and Mid-level Cloud coverage at an Urban Tropical Location	Mr Soumyajyoti Jana, PROF Animesh Maitra, University of Calcutta, INSTITUTE OF RADIO PHYSICS AND ELECTRONICS, UNIVERSITY OF CALCUTTA					
	SESSION-Wed-CO1 (14.00-16.00 hrs) Venue: ABLT2						
CO1.1	Radar Imaging by Frequency Modulated Continuous Waves (FMCW) – a New Paradigm (Invited)	Dr Chinmoy Bhattacharya, Defence Research and Development Organisation (DRDO)					
CO1.2	Challenges of Nosecone Radome design for Active Electronically Scanned Array (AESA) Radar Performance of Fighter Aircrafts (Invited)	Mr Lakshmaiah Akumalla, Dr Ray K P, Dr N S S R K Prasad Nalli, Aeronautical Development Agency, DIAT					
CO1.3	Challenges of Design, Development and Flight testing of Airborne RF & Microwave Sensors for Combat Aircrafts (Invited)	Dr N S S R K Prasad Nalli, Aeronautical Development Agency (ADA)					
CO1.4	Constraints on Line Parameter for the Practical Realization of DIFM	Mr Shailendra Singh, Mr. Sandesh N J, Mr. Niraj Srivastava, Mr. Manjunath R, Bharat Electronics Limited					
CO1.5	Design and Implementation of Novel Antenna beamforming Processing Algorithm for Search and track mode of Multi-Function	Mr Raveen Kumar, Mr. B. V. Subbarao, Dr R. V. S. Satyanarayana, ISRO, Satish Dhawan Space Centre, Sriharikota					
CO1.6	Design and Development of 445 MHz wind profiling radar at NARL	Ms Polisetti Yasodha, Ms A Thriveni, Dr T N Rao, Dr Amit P Kesarkar, Dr Amit Kumar Patra, National Atmospheric Research Laboratory					
CO1.7	Computation and Simulation of Cascaded Phase Noise for an FMCW Transmitter	Mr Abhishek dabi, Ms Aradhana Kaintura, Society for Applied Microwave Electronics Engineering and Research(SAMEER) Mumbai					
	SESSION-Wed-GHO2 (14.00-1	16.00 hrs) Venue: ABLT3					
GHO2.1	Ionospheric Irregularities and quiet time Trends in TEC during recent Solar Cycle-24 (Invited)	Prof. ABHAY KUMAR SINGH, Dr. Sardar Singh Rao, Dr. Sanjay Kumar, Dr. Vishnu Singh Rathore, Banaras hindu University					
GHO2.2	Radio occultation for the Moon and other planetary ionosphere (Invited)	Dr. Raj Kumar Choudhary,Space Physics Laboratory (SPL), VSSC					
GHO2.3	Active Radio Probing of the Martian ionosphere (Invited)	Dr Venkateswara Rao Narukull,National Atmospheric Research Laboratory					
GHO2.4	Oscillating equatorial vertical ExB drift and its dominance in low latitude TEC variations during geomagnetic storms	Ms Sunanda Suresh, Dr Nirvikar Dashora, Prof. Niranjan K,Andhra University, National Atmospheric Research Laboratory					
GHO2.5	Optical measurements of thermospheric winds and temperatures: First results from a dip equatorial station	Dr. Md. Mosarraf Hossain, Dr. C Vineeth, Dr Tarun Pant, Vikram Sarabhai Space Centre, Space Physics Laboratory, VSSC					
GHO2.6	A new global three-dimensional ionospheric model (ANNIM-3D) using climatological data and the artificial neural networks	Mr SAI GOWTAM VALLURI, Dr TULASI RAM SUDARSANAM,INDIAN INSTITUTE OF GEOMAGNETISM					

GHO2.7	Observations of Equatorial Lower Thermosphere-ionosphere - Overview of SOUREX Experiment	Dr Tarun Pant, Dr Manju G, Dr. C Vineeth, Dr. Md. Mosarraf Hossain,Indian Space Research Organization, Vikram Sarabhai Space Centre, ISRO P.O Space Physics Laboratory, VSSC				
	SESSION-Wed-BO2 (14.00-1	600 hrs) Venue: ABLT4				
BO2.1	Metal-depleted Microstrip Ground with Reduced 3D Cross-polarized Radiations	Ms DEBI DUTTA, Prof Debatosh Guha, Institute of Radio Physics and Electronics, University of Calcutta				
BO2.2	Integrated Circuit Compatible Design of Cylindrical Dielectric Resonator Antenna	Dr. Chandreyee Sarkar, Prof Debatosh Guha, Institute of Radio Physics and Electronics, University of Calcutta				
BO2.3	Substrate Integrated Coaxial Line Excited Wideband Millimeter Wave Bow-Tie Antenna	Mr Anchal Singh, Mr Naman Baghel, Mr Jitendra Meena, Dr Soumava Mukherjee, Indian Institute of Technology Jodhpur				
BO2.4	Circularly Polarized Metallic Post Integrated Patch Antenna for Road Transport and Traffic Telematics Application at 5.8 GHz DSRC Band	Mr Susamay Samanta, Dr Kaushik Mandal, Ms P Soni Reddy, Dr Nasimuddin Nasimuddin, Adamas University, Institute of Radio Physics and Electronics, University of Calcutta, Institute for Infocomm Research, A*STAR, Singapore				
BO2.5	Dipole Antenna Miniaturization Using Copper Disc and Wheel Loading Techniques	Mr. Khan Masood Parvez, Mr. Maniul Haque, Ms Jinia Aktar, Aliah University, Indian Institute of Technology Kharagpur				
BO2.6	Dielectric Resonator based Multiport Antenna System with Multi-diversity and Built-in Decoupling Mechanism	Mr Gourab Das, Mr Nikesh Kumar Sahu, Dr Ravi Kumar Gangwar, Indian Institute of Technology(ISM) Dhanbad, Indian Institute of Technology (ISM) Dhanbad				
BO2.7	High Gain Wideband Substrate Integrated (SIW) Slot Antenna with Horn Aperture for 5G	Mr Prashant Chaudhary, Dr Ashwani Kumar, Mr Avanish Yadav, University of Delhi South Campus, Sri Aurobindo College, University of Delhi				
BO2.8	Low Observable Conformal Patch Array with Hybrid HIS-based Ground Plane	Mr Avinash Singh, Dr Hema Singh, Centre for Electromagnetics, CSIR-NAL, Bangalore, CSIR- National Aerospace Laboratories, Bengaluru				
	SESSION-Wed-FO1 (16.30-18					
FO1.1	Potential Applications of the Versatile 205 MHz Stratosphere Troposphere Radar (Invited)	Prof Mohanakumar Kesavapillai, ADVANCED CENTRE FOR ATMOSPHERIC RADAR RESEARCH				
FO1.2	Advanced Indian MST Radar: Multi channel capabilities and initial results (Invited)	Mr Durga Rao, Mr Kamaraj P, Dr T N Rao, Dr Amit Kumar Patra, National atmospheric research laboratory(NARL), NARL, National Atmospheric Research Laboratory				

FO1.3	Technical Implementation of ARIES ST Radar (ASTRAD), Nainital (Invited)	Mr Samaresh Bhattacharjee, Dr Manish Naja, Mr Ashish Kumar, Dr Narendra Singh, Dr D V Phani Kumar, Mr P Jayasimha, Dr Wahab Uddin, Prof Subra Ananthakrishnan Aryabhatta Research Institute of Observational Sciences
FO1.4	Meteor Radar Measurements of Temperature in the Mesosphere Lower Thermosphere: Accomplishments and Challenges	Dr Karanam Kishore Kumar, Space Physics Laboratory
FO1.5	Convection Vertical Structure during dry and wet spells of Monsoon over the Western Ghats of India	Mr. Bhowmik Utsav, Dr Sachin Deshpande, Dr SUBRATA KUMAR DAS, Dr GOVINDAN PANDITHURAI, Dr Dev Niyogi, Indian Insitute of Tropical Meteorology, Purdue University
FO1.6	Inter-Comparison of satellite retrieved Aerosol Optical Depth (AOD) from geostationary and polar-orbiting platforms with ground-based measurements over a Semi-continental site of north-eastern India	Ms Parminder Kaur, Dr Pranab Dhar, Prof Barin Kumar De, Dr Anirban Guha, Tripura University
FO1.7	Distribution of aerosols at various scales with an emphasis to clouds and associated precipitation over North Indian Region	Mr Jaydeep Singh, Dr Narendra Singh, Mr Ashish Kumar, Aryabhatta Research Institute of Observational Sciences
	SESSION-Wed-GHO3 (16.30-1	8.30 hrs) Venue: ABLT2
GHO3.1	Zonal tidal structures in ionosphere	Dr Tarun Pant, Dr manju G, Indian Space Research Organization, Vikram Sarabhai Space Centre, ISRO P.O
GHO3.2	A Low-cost Approach towards Ionospheric Probing Using Compact GNSS Receivers	Mr Atanu Santra, Mr Sukabya Dan, Mr. Somnath Mahato, Dr Parameswar Banerjee, Dr Surajit Kundu, Dr Anindya Bose, The University of Burdwan, The University of Burdwan, National Physical Laboratory, National Institute of Technology, Sikkim Ravangla-737139, India, Burdwan University
GHO3.3	Application of Precise Point Positioning Techniques under Adverse Ionospheric Conditions	Ms Trisani Biswas, Dr Parameswar Banerjee, Prof Ashik Paul, Institute of Radio Physics and Electronics, University of Calcutta, National Physical Laboratory
GHO3.4	On the characteristics and origin of F region bottomside echoing layer	Dr Pavan Chaitanya Peddapati, Dr Amit Kumar Patra, National Atmospheric Research Laboratory, Gadanki, National Atmospheric Research Laboratory
GHO3.5	Ionospheric scintillation studies of GNSS systems by analysing data of high and low solar activity periods	Dr Arpita Guha (Bose), Asutosh College, Kolkata

GHO3.6	Detection of Travelling Ionospheric Disturbances using NavIC Signals	Ms Anu Arora, Mr Suresh Dakkumalla, Mr Subramanya Ganesh T, Dr Sharda Vashisth, Dr Amitava Sen Gupta, ISRO Telemetry Tracking & Command Network Bangalore, ISTRA/ISRO Bangalore, The NorthCap University Gurugram, The NorthCap University Gurugram
GHO3.7	Assessment of the Performance of Ionospheric Models with NavIC Observations during Geomagnetic Storms	Mr Sumanjit Chakraborty, Dr Abhirup Datta, IIT Indore, INDIAN INSTITUTE OF TECHNOLOGY INDORE
GHO3.8	Extreme Space Weather Impacts in the Low Latitude Ionosphere	Mr Debasis Jana, Dr. Shyamal Kumar Chakraborty, Maharaja Srischandra College
	SESSION-Wed-DO3 (16.30-18	3.30 hrs) Venue: ABLT3
DO3.1	Design of Front-End Modules for MM wave 5G Communication (Invited)	Prof K. J Vinoy, Indian Institute of Science, Bangalore
DO3.2	Review on Substrate Integrated Waveguide and Dielectric Image Line Based Circuit Components and Antennas (Invited)	Prof Animesh Biswas, NIT Rourkela/ IIT Kanpur
DO3.3	Optical asymmetric cryptosystems (Invited)	Dr Naveen Nishchal, Indian Institute of Technology Patna
DO3.4	Improved Design of Ka band Waveguide to Coaxial Right Angle Microwave Transition	Mr Rahul Gupta, Ms Punam Pradeep Kumar, Space Applications Centre, Indian Space Research Organization
DO3.5	Substrate Integrated Waveguide Cross-Coupled Bandpass Filter With Wide-Stopband	Dr Amit Ranjan Azad, Prof Akhilesh Mohan, BITS Pilani, Hyderabad Campus, IIT Kharagpur
DO3.6	NRD to Microstrip Transition Using PLA Dielectric Material	Mr. ARPIT KUMAR BARANWAL, Mr Budhaditya Bhowmick, Prof Nagendra Prasad Pathak, IIT Roorkee
DO3.7	Wideband terahertz cross polarization converter based on parallel strip metasurface	Mr Nilotpal ., Ms BHAVNA R NAIR, IIT (BHU) Varanasi, Government Engineering College Bartonhill, Trivandrum
	SESSION-Wed-BO3 (16.30-18	.30 hrs) Venue: ABLT4
BO3.1	Scenario of R&D in Microwave Tubes in India vis-à-vis Global Trends (Invited)	Prof BN Basu, J C Bose School of engineering, Mankundu
ВОЗ.2	Progress of High Power Gyrotrons Research and its Potential Applications (Invited)	Prof Kartikeyan Machavaram, Indian Institute of Technology Roorkee
воз.з	Thermal Analysis for Effective Cooling of a Millimeter-wave Mirror	Dr. Vishal Kesari, MTRDC-DRDO

воз.4	Compact High Efficiency X-band Pulsed Helix-TWT for Airborne Radar	Mr Chanakya Talur, Mr P Raja Ramana Rao, Mr Venkateswaran R, Mr UV Chandra Mouli, Mr Sriram VPN, Mr Senthil kumar S, Dr Subrata kumar datta, Microwave Tube Research and Development Centre, DRDO, Bharat Electronics Limited
воз.5	Passband Tailoring of RF window for Multi- Frequency Gyrotron Devices	Mr Anshu Singh, Dr Muthiah Thottappan, IIT BHU Varanasi
BO3.6	Dispersion Control of a Helix Slow-Wave Structure by I-shaped Metamaterial Loading for Wideband Traveling-Wave Tubes	Mr. Raktim Guha, Dr. Sanjay Kumar Ghosh, CSIR-CEERI
BO3.7	Human micro-Doppler intensity transformation for gait velocity estimation	Mr Vineet Singh, Dr Somak Bhattacharyya, Prof Pradip Kumar Jain, IIT BHU Varanasi

Day 2: Thursday, 13 February, 2020

SESSION -Thu-AEKO2, (08:30 to 10:30 hrs) Venue: ABLT1		
AEK02.1	Electromagnetic Radiation (EMR) Effects on Brain and Reproductive System of Male Rat (Invited)	Prof Paulraj Rajamani, Jawaharlal Nehru University
AEK02.2	Spectrum of electromagnetic fields produced by high voltage lines and natural lightning (invited)	Prof Udaya Kumar, Indian Institute of Science
AEK02.3	Interference Mitigation techniques for Communication Payloads (Invited)	Dr. Subhash Chandra Bera, Space Applications Centre, ISRO
AEK02.4	Precise Time Transfer Through Optical Fibre Utilizing White Rabbit Network	Ms Neelam Yadav, Mr. Mahavir Prasad Olaniya, Mr. Harish Rathore, Ms Lakhi Sharma, Dr. Atish Roy, Dr. Subhadeep De, Dr. Subhasis Panja, CSIR-National Physical Laboratory
AEK02.5	A Technique for G/T Degradation Estimation in MSS Uplinks due to LTE Interference	Mr Saket Buch, Mr Dhaval Upadhyay, Dr. Subhash Chandra Bera, Mr. Sumitesh Sarkar, Space Applications Centre, Indian Space Research Organization
AEK02.6	Scalp – Implantable Antenna for Biomedical Applications	Dr Ashok Kumar Srinivasan, Jyothishmathi Institute of Technological Sciences
AEK02.7	Reducing the Absorption of 2.45 GHz Wi-Fi Frequency using Planar Resonator– Studies Conducted in Vegetation	Ms Meenu L, Ms Aiswarya S, Dr Sreedevi K. Menon, Amrita Vishwa Vidyapeetham
	SESSION-Thu-CO2, (08:30-10:30	hrs) Venue: ABLT2
CO2.1	Low Cost GNSS Receiver RTK Performance in Forest Environment	Mr Somnath Mahato, Mr Gopal Shaw, Mr Atanu Santra, Mr Sukabya Dan, Dr Surajit Kundu, Dr Anindya Bose, National Institute of Technology Sikkim, The University of Burdwan
CO2.2	Compact, Low-cost, Single-frequency NavIC Receiver Development	Mr Partha Rakshit, Mr Sukabya Dan, Mr Basudeb Das, Mr. Somnath Mahato, Mr Atanu Santra, Dr Anindya Bose, The University of Burdwan, National Institute of Technology, Sikkim
CO2.3	A physically realized timescale combining five Cesium atomic clocks	Mr Suresh Dakkumalla, Ms Aakanksha Avnish Bhardwajan, Ms Anu Arora, Mr Rajath Sadasivan, Mr Subramanya Ganesh T, ISTRA/ISRO Bangalore
CO2.4	Comparison of Time & Frequency Sources using NavIC Signals	Ms Anu Arora, Mr Suresh Dakkumalla, Mr Subramanya Ganesh T, ISRO Telemetry Tracking & Command Network Bangalore, ISTRA/ISRO Bangalore
CO2.5	Multi-time Snapshot based Off-Grid DOA Estimation of Sparse Array Antennas using MFOCUSS Algorithm	Mr. Saurav Ganguly, Dr. Jaynta Ghosh, Dr, Mainak Mukhopadhyay, Dr. Puli Kishore Kumar, National Institute of Technology, Patna, National Institute of Technology, Andhra Pradesh

B04.1 B04.2	Metamaterial-based Vacuum Electronic Devices with Miniaturization (invited) Multifunctional Ultrawideband Antennas; Trends, Techniques and Applications (invited)	Prof. B. N. Basu (Prof. Zhaoyun Duan) Dr. Jawad Siddiqui, Dr Chinmoy Saha, Prof Yahia Antar, Institute of Radio Physics and Electronics, University of Calcutta, Indian Institute of Space Science & Technology, Trivandrum
	SESSION-Thu-BO4, (08:30-10:30	hrs) Venue: ABLT4
GH04.7	Surface Latent Heat Flux Anomaly: A thermal precursory effect of large Earthquake	Mr Soujan Ghosh, Mr Sudipta Sasmal, Ms Swati Chowdhury, Dr Suman Chakraborty, Dr Tamal Basak, Prof Sandip Kumar Chakrabarti, Indian Centre For Space Physics, Indian Centre For Space Physics, S. N. Bose National Centre for Basic Sciences, Amity University, Indian Centre For Space Physics
GH04.6	Ionospheric perturbations induced by Severe Weather System: Tropical Cyclone	Prof Rajesh Singh,Indian Institute of Geomagnetism
GH04.5	Equatorial Ionization Anomaly Trough variability: An analysis using Beacon TEC and CHAMP satellite observations	Dr Mridula N, Dr Tarun Pant, Dr manju G, Ms Aswathy R P, Space Physics Laboratory, VSSC, Indian Space Research Organization, Vikram Sarabhai Space Centre, ISRO P.O
GH04.4	Extraordinary transmission analog for enhancing radiation from an electrically small radiator	Dr Sarin V.P, Mr Vinesh P.V, Mr Manoj M, Dr Aanandan C.K, Dr Mohanan P, Dr Vasudevan K, Government College Chittur, Palakkad, Govt. College Chittur, CREAM Lab, Cochin University of Science and Technology
GH04.3	Plasma Waves in and around the Moon	Dr Vipin Kumar Yadav, SPL/VSSC
GH04.2	A Unified Framework for Analysis of Polarimetric SAR Data (invited)	Prof. Avik Bhattacharya, Mr. Debanshu Ratha, Prof. Alejandro C. Frery, IIT Bombay
GH04.1	Electromagnetic ion cyclotron waves in space plasmas (invited)	Prof Virupashi Reddy R, Dr Remya B, Indian Institute of Geomagnetism
	SESSION-Thu-GHO4, (08:30-10:3	0 hrs) Venue: ABLT3
CO2.8	V2X Communication Test Bed for Smart Electrical Vehicle with 5G IOV Technology	Mr Susovan Mondal, Dr Dalia Nandi, Dr Rabindra Nath Bera, Surendra Institute of Engineering & Management, Indian Institute of Information Technology Kalyani
CO2.7	Dual Band Energy Harvester Based on Metasurface Absorber	Mr Aneesh Kumar, Dr Chinmoy Saha, Dr Sethunadh R, Vikram Sarabhai Space Centre, Indian Space Research Organisation, IIST
CO2.6	An offline-display and data analysis package for ST Radar at 206.5 MHz	Mr Ashish Kumar, Dr Narendra Singh, Ms Akanksha Rajput, Dr Anshumali ., Mr Chandra Prakash, Aryabhatta Research Institute of Observational Sciences, Aryabhatta Research Institute of Observational Sciences, IIT(ISM), Dhanbad, ARIES

B04.3	Modal Behavior of Circular Sector Microstrip antenna: A Necessary Revisit (invited)	Dr Sudipta Chattopadhyay, Mr Subhradeep Chakraborty, Mizoram University, CSIR- CEERI
B04.4	Modified Clover Arranged Reactively Loaded Dual Band Polarization Agile Omnidirectional Wire Antenna	Dr Ayona Chakraborty, Mr Suman Dey, Dr Samik Chakraborty, Prof Prof Bhaskar Gupta, Jadavpur University, Dream Institute of Technology, Kolkata, Jadavpur University
B04.5	A Superstrate-based Metasurface Antenna for Dual Band Application	Mr DIPTIRANJAN SAMANTARAY, Dr Somak Bhattacharyya, IIT (BHU) Varanasi
B04.6	Asymmetric transmission and cross polarization conversion of linearly polarized wave through metasurface	Mr Sambit Kumar Ghosh, Ms Meghna Mishra, Mr Lavesh Nama, Dr Somak Bhattacharyya, IIT (BHU) Varanasi, Department of Electronics & Communication Engineering, Shri Mata Vaishno Devi University, J&K, India, IIT BHU Varanasi
B04.7	Aperiodic Metasurface for Broadband RCS Reduction	Ms Shraddha Choudhary, Dr Kirankumar R. Hiremath, Indian Institute of Technology Jodhpur
	PLENARY SESSION-Thu-TP (10.30-	11.15 hrs) Venue: ABLT4
Plenary	Impact of Radio Science in the Eye of an Antenna Engineer (A Tribute to Hans Ørsted in the Bicentenary Year of His Discovery)	Debatosh Guha, Institute of Radio Physics and Electronics, University of Calcutta
	POSTER SESSION-Thu-PO1 Thursday, (11:30	0-13:10 hrs) Venue: ABLT Ground
PO1.1	Design of Printed Dipole Antenna for Enhanced Coverage Efficiency	Mr Anchal Singh, Mr Naman Baghel, Mr Jitendra Meena, Dr Soumava Mukherjee, Indian Institute of Technology Jodhpur
PO1.2	High Gain and Wideband Antenna using Metasurface Horn and Metasurface Superstrate	Mr Prashant Chaudhary, Mr Avanish Yadav, Dr Ashwani Kumar, University of Delhi South Campus
PO1.3	Meander Line and Loop Resonator Loaded Dual Band Electrically Small Antenna	Mr Jyotibhusa Padhi, Mr. Awanish Kumar, Dr. G. Shrikanth Reddy, IIT Mandi
PO1.4	TRI-BAND E SHAPED PATCH ANTENNA FOR 5G RADIO COMMUNICATIONS	Dr Venkat Babu G, Mr RAJESH KUMAR D, Dr RAJU N, SASTRA Deemed to be University
PO1.5	A Cross-Dipole Shaped Patch-Slot-Patch Bandpass Frequency Selective Surface	Dr AYAN CHATTERJEE, Mr. Somnath Mahato, Ms Ambati Hemasree, Dr Surajit Kundu, Mr Raj Ratnam, National Institute of Technology, Sikkim
PO1.6	A Novel Configuration of Stepped Rectangular Printed Monopole Antenna for UWB	Mr Partha Shome, Mr Sumon Modak, Dr Taimoor Khan, Dr Rabul Hussain Laskar,

PO1.7	EM Performance Analysis of Dual-band FSS based on SIW Cavity Technology	Mr. KRUSHNA KANTH VARIKUNTLA, National Institute of Technology Tiruchirappalli
PO1.8	A Compact, T-Slotted Wide Band Microstrip Antenna with Defected Ground Structure for Future 5G Communications	Mr SURENDRA KUMAR GUPTA, Dr AMIT BAGE, NATIONAL INSTITUTE OF TECHNOLOGY HAMIRPUR
PO1.9	Y-Shaped Antenna for 5G Enabled Gadgets and its MIMO for Smartphone Applications	Mr ANAND KUMAR, Dr Santosh Kumar Mahto, Dr Rashmi Sinha, Indian Institute of Technology (ISM) Dhanbad, Indian Institute of Information Technology Ranchi
PO1.10	Slit Loaded E-Shaped Single Layer Broadband Rectangular Patch Antennas with High Gain and Low Cross Polarization	Dr Sudipta Chattopadhyay, Mr Tanmoy Sarkar, Mr Subhradeep Chakraborty, Dr Abhijyoti Ghosh, Dr L. Lolit Kumar Singh, Mizoram University
PO1.11	CPW fed Dual Sense Broadband Circularly Polarised Monopole Antenna for Wireless and Satellite Application	Mr. JAIVERDHAN BUDANIA, Ms Monika Jangid, Prof Mahendra Mohan Sharma, Prof Rajendra Parsad Yadav, Malaviya National Institute of Technology Jaipur
PO1.12	Design of Electronically Steerable Direction Shifting Microstrip Antenna Array using Beam Steering Technique	Dr. James Baskaradas, Mr Sujanth Narayan, Mr Velavikneshwaran V, SASTRA Deemed University, SASTRA Deemed University
PO1.13	Organic Dielectric Resonator Antenna for Wi Fi Applications	Dr Sreekala CO, Mr Ajaysankar R, Dr Sreedevi K. Menon, Amrita Vishwa Vidyapeetham, Amrita Vishwa Vidyapeetham
PO1.14	Mutual Coupling Reduction Between Dielectric Resonator Antennas Using Metasurface Layer with Split Ring Resonator Structure	Dr Nipun Kumar Mishra, Guru Ghasidas Vishwavidyalaya, Central University, Bilaspur
PO1.15	Parasitically coupled microstrip patch antenna for DCS and WLAN applications	Ms SOWMIYADEVI APPUSAMY, Ms. Phalguni Mathur Phalguni Mathur, Ms. Athira Raveendran Athira Raveendran, Dr. Sujith Raman Sujith Raman, Bharathiar University
PO1.16	Design and analysis of Wideband Stacked Isosceles Triangular DRA	Ms RINKI GHOSAL, Prof Prof Bhaskar Gupta, Jadavpur University
PO1.17	Dual-Band MIMO Antenna for WLAN and X-band with High Isolation using CRDN	Mr Harsh Singh, Dr Shrivishal Tripathi, Dr. Shyama Prasad Mukherjee International Institute of Information Technology, Naya Raipur
PO1.18	Dual band printed wide-slot antenna for Wi-Fi and WLAN applications	Dr Surajit Kundu, Mr. Yatish Pachigolla S S, National Institute of Technology, Sikkim
PO1.19	Design of Wideband Patch Antenna with Compact CPW Feeding Network for L-Band Applications	Dr ASHOK KUMAR SRINIVASAN, JYOTHISHMATHI INSTITUTE OF TECHNOLOGICAL SCIENCES
PO1.20	Design of High Gain Circularly Polarized 2×2 Single Feed Elliptical Patch Antenna Array	Mr Rabindra Kumar, Ms Neha Kumari, Dr Priyanka Mondal, National Institute of Technology Patna

PO1.21	A Pentagon-Shaped Microstrip Patch Antenna with Slotted Ground Plane for RF Energy Harvesting	Mr Partha Shome, Mr Daasari Surender, Dr Taimoor Khan, Prof Fazal Ahmed Talukdar, National Institute of Technology Silchar
PO1.22	CPW-Fed Pentagonal Superwideband Fractal Antenna	Dr. Sarthak Singhal, Ms Deepshikha Lodhi, Malaviya National Institute of Technology Jaipur
PO1.23	Multiple-frequency DRA based MIMO antenna for linear and circular polarizations	Ms PRIYANKA DEB SINHA, Prof BRATIN GHOSH, Indian Institute of Technology, Kharagpur
PO1.24	Design of Tri-Band Elliptical Patch Antenna for GPS and IRNSS Application	Mr RAVI MALI, Mr FATEH LAL LOHAR, GECJ
PO1.25	Analysis of thermal stress screening for RF system and measurement errors there off	Mr VIPIN KUMAR, Mr Sivakumar R, Bharat Electronics Limited
PO1.26	Planar Asymmetric Single Split Left Handed Metamaterial	Ms Anila P V, Ms Remsha M, Mr Manoj M, Dr Mohanan P, Cochin University of Science and Technology
PO1.27	Gain Enhancement of Dual-Band Triangular Patch with Hexagonal Mushroom EBG	Ms. Sravya R Venkata, Dr. Runa Kumari, BITS Pilani, Hyderabad Campus
PO1.28	PIC simulation study of dielectric-filled S-band magnetically insulated line oscillator (MILO)	Mr. ARJUN KUMAR, Mr. Prabhakar Tripathi, Dr. Smrity Dwivedi, Prof. P. K. Jain, IIT (BHU), Varanasi
PO1.29	Design of helix slow wave structure for X band helix TWT using multi-dispersion	Mr Subhradeep Chakraborty, Dr Mukesh Alaria, Dr SK Ghosh, CSIR-CEERI Pilani
PO1.30	Design and Simulation of Wide-Band Multi-Disc RF Window for Gyrotron Travelling Wave Amplifiers	Mr Anshu Singh, Dr Muthiah Thottappan, IIT BHU Varanasi
PO1.31	Design of Rectangular TE1,0 to Circular TE0,1 Mode Converter	Dr. Vishal Kesari, MTRDC-DRDO
PO1.32	Effect of Vibration on the Cathode Lead of Electron Gun Assembly of the Travelling Wave Tube	Mr Chirag Mistry, Dr SK Ghosh, CSIR- Central Electronics Engineering Research Institute, Pilani
PO1.33	DC Analysis of Space Traveling Wave Tube	Mr. Abhay Shankar, Mr. Atmakuru Nagaraju, Dr. Sanjay Kumar Ghosh, CSIR-CEERI
PO1.34	Brazing Failure Analysis in Single-Insulator Multi-stage Depressed Collector of TWTs	Dr Vishant Gahlaut, Banasthali University
PO1.35	3D Beam-wave interaction study of Ka-band Multi Cavity Gyro-twystron Amplifier	Mr Anshu Singh, IIT BHU Varanasi
PO1.36	Comparative analysis of planar and spherical cathodes in gridded electron guns for Inductive output tubes	Dr. Meenu Kaushik, Banasthali Vidyapith
PO1.37	RF Propagation Characteristics of Y-shaped Coupler for Millimeter-Wave Gyro-TWT	Mr AKASH ., Dr Muthiah Thottappan, IIT-BHU,Varanasi
PO1.38	Lattice Reduction Aided Receiver for mmWave Massive MIMO System	Dr SAMARENDRA NATH SUR, Dr Rabindranath Bera, Sikkim Manipal Institute of Technology

PO1.39	Design of a Printed Triangular Patch Antenna Loaded with Novel Trident-Shaped Metasurface and Defected Ground Plane	Mr DIPTIRANJAN SAMANTARAY, Mr Apratim Chatterjee, Mr Dweepayan Sen Sharma, Dr Chittajit Sarkar, Dr Chinmoy Saha, Dr Somak Bhattacharyya, IIT (BHU) Varanasi, Swami Vivekananda Institute of Science and Technology, Kolkata, Indian Institute of Space Science & Technology, Trivandrum
PO1.40	Gain Enhancement of Yagi Slot Antenna using AMC Substrate	Mr DIPTIRANJAN SAMANTARAY, Mr KRISHNA CHANDRAN P L, Mr ANU MOHAMED, Dr Chinmoy Saha, Dr Somak Bhattacharyya, IIT (BHU) Varanasi, Government Engineering College, Bartonhill, Trivandrum, Indian Institute of Space Science & Technology, Trivandrum
PO1.41	Gain Enhanced Quad-Band AMC Backed Printed Antenna with Fractal Geometry	Mr DIPTIRANJAN SAMANTARAY, Mr ANAND KRISHNAN M J, Mr ANU MOHAMED, Dr Chinmoy Saha, Dr Somak Bhattacharyya, IIT (BHU) Varanasi, Government Engineering College, Bartonhill, Trivandrum, Indian Institute of Space Science & Technology, Trivandrum
PO1.42	Graphene-based metasurface for wideband linear to circular polarization conversion	Mr Sambit Kumar Ghosh, Dr Somak Bhattacharyya, Dr Santanu Das, IIT (BHU) Varanasi
PO1.43	Optimal Design of Multi-layered Porous Radome for High Temperature Applications	Ms Teena A J, University
PO1.44	Four Channel Digital Receiver for Radio wave propagation experiment	Ms Parvathi P, NARL
	SESSION-Thu-FO3, (14:00-16:00	hrs) Venue: ABLT1
F03.1	Development of Novel Radar Polarimetry Techniques for Geo-Environment (invited)	Prof. Gulab Singh, CSRE, IIT Bombay
F03.2	Lower atmospheric turbulence measurements from University of Calcutta ST Radar (invited)	Prof Ashik Paul, Mr. Debyendu Jana, Mr P Nandakumar, Institute of Radio Physics and Electronics, University of Calcutta
F03.3	A comprehensive study on the dynamics and chemistry of the upper troposphere and lower stratosphere using ST/MST Radars along with balloon-borne and space-based measurements (invited)	Dr. Siddarth Sankar Das, Space Physics Laboratory, Vikram Sarabhai Space Centre
F03.4	Wintertime and Springtime Vertical Variability of Aerosols over Central IGP over the Last Decade	Dr Manu Mehta, Ms Richa Khushboo, Indian Institute of Remote Sensing , Dehradun, Kalyani University , Kalyani , WB
F03.5	Neurocomputing approach to the pre-monsoon ozone concentration over Gangetic West Bengal	Dr. Goutami Chattopadhyay, Dept of Atmospheric Science, University of Calcutta
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F03.6	Mapping and Prediction of Urban Area with Markov-CA Model using Landsat-8 Images for Effective Management of Urban Area in Prayagraj City	TRILOKI PANT, Indian Institute of Engineering and Thechnology, Allahabad
F03.7	Initial results from MCC captured images of limb viewing and Lee wave clouds from India's first Mars Orbiter Mission (MOM)	Mr Jyotirmoy Kalita, Dr Manoj Mishra, Dr Anirban Guha, Mr. Joydeb Saha, TRIPURA UNIVERSITY, Space Applications Centre, Indian Space Research Organization, Ahmedabad-380053, India, Department of Physics, Tripura University, Suryamaninagar, Tripura- 799022, India
	SESSION-Thu-DO2, (14:00-16:00	hrs) Venue: ABLT2
D02.1	Techniques for compact beam manipulation (Invited)	Prof Shanti Bhattacharya, IIT Madras
D02.2	Optimization of Ni/Au Schottky contacts on Al0.3Ga0.7N/AlN/GaN heterostructure for RF applications (invited)	Ms GUNJAN RASTOGI, SAC, ISRO
D02.3	Modeling of electrically tunable metamaterial embedded intersubband transitions in Gallium Nitride (GaN) High Electron Mobility Transistor (HEMT) for terahertz applications (Invited)	Mr Rakesh Kaneriya, Space Applications Centre, ISRO
D02.4	Understanding the Complex Dynamics of Photogenerated Charge Carriers in Nano-patterned Terahertz Photo-conductive Antennas	Prof Shriganesh Prabhu, Mr Ravikumar Jain, Tata Institute of Fundamental Research, DCMP&MS
D02.5	Single Chip Broadband Testset for Network Analyzers	Mr SHUBHAM TIRMANWAR, Dr DEBAPRATIM GHOSH, IIT BHUBANESWAR, IIT BHUBANESWAR
D02.6	Compact coupled-line microstrip bandpass filter with spurious passband suppression using Minkowski fractal	Mr TARUN DAS, Dr Sayan Chatterjee, Future Institute of Engineering and Management , Jadavpur University
D02.7	Millimeter-wave Narrowband Sharp Rejection Band Pass Filter in Substrate Integrated Waveguide (SIW) Technology	Mr. Mahadev Sarkar, Mr. Vipin Kumar, Mr. Sivakumar R, Product Development and Innovation Center, Bharat Electronics Ltd.
	SESSION-Thu-JO1, (14:00-16:00	hrs) Venue: ABLT3
JO1.1	SKA - Low-Frequency Aperture Array: An engineering overview (Invited)	Dr Prabu Thiagaraj, Raman Research Institute
JO1.2	Wide-band Back-end for the upgraded GMRT (Invited)	Mr Harshavardhan Reddy, Mr Sanjay Kudale, Mr. Ajith Kumar B., Mr Irappa Maleppa, Mr Nilesh Raskar, Mr Shelton Gnanaraj, Mr Kishalay De, Dr Yashwant Gupta, National Centre for Radio Astrophysics, TIFR, Pune, GMRT, NCRA-TIFR,
JO1.3	Space Electric and Magnetic Sensor (SEAMS) for very low frequency radio astronomy (invited)	Prof Damayanti Gharpure, Prof Subra Ananthakrishnan, Mr Atharva Kulkarni, Ms Aditi Nagulpelli, Ms Rasika Sali, Ms Rupali Borade, Mr George N George, Savitribai Phule Pune University

JO1.4	Broadband RF over fibre link backplane for phased array antennas	Mr SANJEET KUMAR RAI, Mr S. Sureshkumar, GMRT, NCRA-TIFR
JO1.5	Coherent radio emission from hot magnetic stars: what does it tell us?	Ms Barnali Das, Prof Poonam Chandra, NCRA-TIFR
JO1.6	Probing the origin of diffuse radio emission in the clusters of galaxies: A radio and X-ray investigation	Mr Ramij Raja, Mr Majidul Rahaman, Dr Abhirup Datta, Indian Institute of Technology Indore
JO1.7	Impact of Lyman-alpha Coupling and X-ray Heating on the Redshifted HI 21-cm Bispectrum from the Cosmic Dawn	Mr MOHD KAMRAN, Dr Raghunath Ghara, Dr Suman Majumdar, Prof Somnath Bharadwaj, prof Garrelt Mellema, Prof Ilian T. Iliev, Indian Institute of Technology Indore, Technion - Israel Institute of Technology, Haifa 3200003, Department of Physics and Centre for Theoretical Studies, Indian Institute of Technology Kharagpur, Department of Astronomy, Stockholm University, Stockholm, SE- 10691, Sweden, Department of Physics and Astronomy, University of Sussex, Brighton, BN1 9QH
JO1.8	Radio Frequency Interference and its mitigation at upgraded GMRT	Mr S. Sureshkumar, Mr. Ankur Prajapati, Mr Pravin Raybole, GMRT, NCRA-TIFR
	SESSION-Thu-BO5, (14:00-16:00	hrs) Venue: ABLT4
B05.1	Indian Initiatives towards Design and Development of Compact Travelling-Wave Tubes for Aerospace and Space Applications (invited)	Dr Subrata Kumar Datta, Microwave Tube Research & Development Centre, DRDO
B05.2	Challenges, Design and Realization of Photoconductive Antennas for THz Applications (invited)	Dr Chinmoy Saha, IIST Trivandrum
B05.3	Travelling-Wave Tubes for Space Application: Present and Future (invited)	Dr S. K. Ghosh, CSIR-CEERI
B05.4	Simulation Study of C-band Arletron with Extraction of Microwave Power in TE10-Mode	Mr. Prabhakar Tripathi, Mr Arjun Kumar, Mr Soumojit Shee, Dr Smrity dwivedi, Prof Pradip Kumar Jain, IIT (BHU), Varanasi
B05.5	Numerical Analysis of Inter-Electrode Capacitance of Vacuum Micro-Electronics Devices	Dr Ranjan Barik, Mr Asish Singh, Mr subhrajit Manna, Dr Sushil Shukla, Dr Rajendra Sharma, CSIR-CEERI
B05.6	Electromagnetic analysis of ohmic quality factor of corrugated coaxial cavity structure for MILO	Mr. ARJUN KUMAR, Mr. Prabhakar Tripathi, Dr. Smrity Dwivedi, Prof. P. K. Jain, IIT (BHU), Varanasi
B05.7	Performance Improvement of Double Side-cavity Gridless Reltron by Dual Extraction Sections	Mr. Soumojit Shee, Mr Prabhakar Tripathi, Dr Smrity dwivedi, IIT, BHU (on leave from Dept. of ECE, ITER, SOA University, Bhubaneswar, India), IIT, BHU

	SESSION-Thu-FO4 (16:30-18:30	hrs) Venue: ABLT1
FO4.1	The characteristic features of a Severe Dust Storm as observed by Radar and other surface-based Instruments over New Delhi	Dr. Kaustav Chakravarty, Indian Institute of Tropical Meterology
FO4.2	Radar characteristics of mesoscale convective storms of Pre-monsoon environment-Kal Baishakhi	Dr Subrata Kumar Das, Dr U. V. Murali Krishna, Mr Abhishek K. Jha, Dr Sachin M Deshpande, Indain Institute of Tropical Meteorology
FO4.3	System Optimization of Multiple frequency Pencil Beam Scatterometer	Mr. Anish Kumar Mishra, Ms. Priyanka Gupta, Mr. Rakesh Bhan, Mr. Rajeev Jyoti, SAC ISRO, SAC ISRO, SAC/MRSA/ ISRO
FO4.4	Validation of wind profiler radar and study of Refractivity turbulence structure constant using simultaneous observations of radar and GPS radiosonde: First results from Central Himalayan region	Mr. Aditya Jaiswal, Dr. Manish Naja, Mr. Samoresh Bhattacharjee, Mr. Ashish Kumar, Ms. Akanksha Rajput, Dr. Narendra Singh, Dr. Devulpalli Venkata Phanikumar, Aryabhatta Research Institute of Observational Sciences, Nainital.
FO4.5	Interannual variability of water vapour and tropical tropopause temperature: Zonal strucure	Mr. K. V. Suneeth, Dr. Siddarth Sahankar Das, Space Physics Laboratory, VSSC, ISRO
FO4.6	Understanding the distribution of atmospheric sulfur over the Indian region	Dr. Chinmay Mallik, Dr. Narendra Ojha, Dr. Subrata Kumar Panda, Central University of Rajasthan, Physical Research Laboratory.
FO4.7	Tropospheric Chemistry over the Indian Subcontinent: Space-based Observations and Modeling	Dr Narendra Ojha, Mr Imran Girach, Dr Lokesh Sahu, Physical Research Laboratory, Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram
	SESSION-Thu-DO3, (16:30-18:30	hrs) Venue: ABLT2
DO3.1	Analysis of some important parameters of Si-Ge- Sn RCE-HPT exploiting QCSE and FKE	Dr Bratati Mukhopadhyay, Prof Gopa Sen, Mr Soumava Ghosh, Prof Prasanta Basu, Institute of Radio Physics and Electronics, University of Calcutta
DO3.2	Dual-band Bandpass filter using SIW cavity with E-shaped DGS	Mr Sambaiah Pelluri, Mr Muhammed Fasil, Mr Debasish Mondal, Prof M. V Kartikeyan, Indian Institute of Technology Roorkee
DO3.3	Inverse circuit design using artificial intelligence	Mr Narendra Pratap, Mr. Amit Chandak, Prof Piyush Rai, Prof Purushottam Kar, Prof S. Anantha Ramakrishna, Indian Institute of Technology Kanpur
DO3.4	Broadband Substrate Integrated Coaxial Line Based 5th Order Bandpass Filter for Millimeter- wave Applications	Mr Satya Krishna Idury, Dr Soumava Mukherjee, Indian Institute of Technology Jodhpur

DO3.5	Study of Temperature Sensitivity on Linearity Figures of Merits of Ge/Si Hetero-Junction Gate- Drain Underlapped Vertical Tunnel FET with heterogeneous gate structure for Improved Device Reliability	Mr Manas Ranjan Tripathy, Mr Ashish Kumar Singh, Mr Kamalaksha Baral, Mr Prince Kumar Singh, Mr Ashwini Kumar Mishra, Mr Deepak Kumar Jarwal, Prof Satyabrata Jit, IIT BHU, Varanasi
DO3.6	Design and Investigation of Lateral HfO2/SiO2 Gate Stacked TFET on SELBOX Substrate for Low Power and High-Frequency Applications	Mr Ashish Kumar Singh, Mr Manas Ranjan Tripathy, Mr Kamalaksha Baral, Mr Prince Kumar Singh, Prof Satyabrata Jit, IIT BHU, VARANASI,
DO3.7	Quantum Correlation in photonic based hardware design	Mr Suresh Kumar, Ms Daraksha Shams, CSIR-CEERI, Ambedkr institute advance communication technology and research
DO3.8	Information Transfer by Surface-Plasmon-Polariton Wave Propagating on Silver/Silicon Interface	Mr. Rajan Agrahari, Professor Akhlesh Lakhtakia, Prof Pradip Kumar Jain, IIT (BHU) Varanasi, Pennsylvania State University, University Park, PA
	SESSION-Thu-JO2 (16:30-18:30	hrs) Venue: ABLT3
JO2.1	FPGA-based Aperture Array Beamformer for the Expanded GMRT	Mr Kaushal Buch, Mr. Ajith Kumar B., Ms Bela Dixit, Mr Atul Ghalame, Prof Jayaram Chengalur, Giant Metrewave Radio Telescope, GMRT-NCRA-TIFR
JO2.2	Design and Development of Low Noise Amplifier for Low Frequency Radio Astronomy Instrument SEAMS	Ms. Aditi Nagulpelli, Mr Atharva Kulkarni, Ms Rasika Sali, Savitribai Phule Pune University
JO2.3	Polarization calibration of uGMRT phased array	Mr Pavankumar Kadaladi, Mr Sanjay Kudale, Prof Yashwant Gupta, Prof Gangadhara R.T., Indian Institute of Astrophysics
JO2.4	Extracting the 21-cm Global Signal using Artificial Neural Networks	Ms. Madhurima Choudhury, Dr Abhirup Datta, INDIAN INSTITUTE OF TECHNOLOGY INDORE
JO2.5	Direction dependent calibration for the Upgraded GMRT	Dr. Ruta Kale, NCRA-TIFR
JO2.6	Prediction of Solar Wind speed from Coronal Hole images using Deep Learning	Ms Hemapriya Raju, Dr Saurabh Das, Dr Siddharth Malu, IIT Indore
JO2.7	Energetic Electron Flux Enhancements in the Earth's Radiation Belt associated with Corotating Interaction Region (CIR) events	Dr. Smitha Thampi, Mr C Krishnaprasad, Dr Tarun Kumar Pant, Vikram Sarabhai Space Center, Space Physics Laboratory
JO2.8	September 2017 Space Weather Events: Effects on the Plasma Environments of Earth and Mars	Mr. C Krishnaprasad, Dr Smitha V Thampi, Dr Tarun Pant, VSSC, Space Physics Laboratory
JO2.9	Power and Heat Management of new era Electronic Systems	Mr. Irappa Maleppa, Mr. Ajith Kumar B., Prof Yashwant Gupta, National Centre for Radio Astrophysics, TIFR, Pune, GMRT-NCRA-TIFR

SESSION-Thu-BO6 Thursday (16:30-18:30 hrs) Venue: ABLT4		
BO6.1	Design of Planar Slot Antenna-Triplexer using SIW	Ms Divya Chaturvedi, Mr Arvind Kumar, NIT Trichy
BO6.2	Minkowski Fractal Parasitic Slot Antenna for Wideband Applications	Mr Ayyappan M Nair, Dr Pragati Patel, National Institute of Technology, Goa
BO6.3	A Cavity-Backed Circular SIW Antenna for X-band Applications	Dr Sourav Nandi, Ms Battina Sindhu, BITS Pilani Hyderabad Campus
BO6.4	Gain Improvement of Ultra-Wideband antenna using compact Frequency Selective Surface	Dr Surajit Kundu, National Institute of Technology, Sikkim
BO6.5	Design of a Compact Half Mode SIW Based Power Divider for Ku-Band Application	Ms Priyanka Bhardwaj, Prof. S Deivalakshmi S Deivalakshmi, Prof. R Pandeeswari R Pandeeswari, NIT Trichy, NIT, Trichy
BO6.6	CRLH Transmission Line Based Compact Metamaterial Inspired Antenna for Wi-MAX Applications	Mr Raghvenda Kumar Singh, Dr Ashish Gupta, Jaypee Institute of Information Technology, Noida
BO6.7	Stacked Pyramidal Shaped Half Cylindrical Dielectric Resonator Antenna for Wideband Wireless Applications	Ms Monika Chauhan, Mr. Anil Rajput, Dr Biswajeet Mukherjee, PDPM IIITDM
BO6.8	A Compact Four-port CRLH-TL MIMO Antenna Loaded with Dielectric Resonator for Midband 5G and C-band Applications	Mr. MOHAMMAD AMEEN, Dr Raghvendra Kumar Chaudhary, Indian Institute of Technology (Indian School of Mines), Dhanbad

Day 3: Friday, 14 February, 2020

SESSION-Fri-AEKO3 (08.30 to 10.30 hrs) Venue: ABLT1		
AEKO3.1	Practical aspects of interference in communication satellites (Invited)	Mr Shivanand Khuba, Indian Space Research Organization
AEKO3.2	Inertial Sensors Based on Sagnac Effect (Invited)	Dr Sree Ramana Mukkamala, Research Center Imarat, DRDO
AEKO3.3	RASCAL: Reflector Antenna Efficiency, System Temperature, Sensitivity Computation purpose	Mr Sougata Chatterjee, GMRT-NCRA-TIFR
AEKO3.4	Intrasystem and Intersystem Interference in Future IRNSS L1 Band Open Service Signal	Mr Dhaval Upadhyay, Mr. Parimal Majithiya, Mr. Vijay Singh Bhadouria, Dr. Subhash Chandra Bera, Mr. Sumitesh Sarkar, Space Applications Centre, Indian Space Research Organization
AEKO3.5	Effect of 3G Radio Frequency Radiation on male reproductive parameters	Dr Rohit Gautam, Ms Kumari Vandana Singh, Mr Jayprakash Nirala, Ms Nina nancy Murmu, Dr. Ramovatar Meena, Prof Paulraj Rajamani, Jawaharlal Nehru University
AEKO3.6	Experimental SAR Evaluation of various frequency of Mobile Phones	Mr Jayprakash Nirala, Prof Jitendra Behari, Prof Paulraj Rajamani, Jawaharlal Nehru University
AEKO3.7	Isolation Enhancement of Antenna Pair for Implantable Application	Mr Santoshkumar Singh Moirangthem, Mr Abhishek Sarkhel, National Institute of Technology Meghalaya
	SESSION-Fri-BO7 (08.30-	10 30) Venue: ARI T4
B07.1	Symmetric Defected Ground Structure (DGS) for Dual-Polarized Patch Antenna with Suppressed Cross-polarized fields	Mr Sk Rafidul, Prof Debatosh Guha, Institute of Radio Physics and Electronics, University of Calcutta
B07.2	Structurally Integrated Antennas for Airborne Platform	MS NIKHILA T, Ms Laya Varghese, Dr Balamati Choudhury, CUSAT, CSIR-NAL
B07.3	Enhanced Gain Substrate Integrated Waveguide H Plane Horn Antenna for 5G Applications	Mr. Abhay Kumar, Prof Shweta Srivastava, Jaypee Institute of Information Technology Noida
B07.4	Gain Enhanced Dual-Band Differential Fractal Slot Antenna for RF Energy Harvesting Applications	Mr Geriki Polaiah, Dr Krishnamoorthy K, Prof Muralidhar Kulkarni, National Institute of Technology Karnataka Surathkal
B07.5	Asymmetric Coplanar Stripline fed Dual Band Monopole as Radiolytic Sensor	Ms Bhuvana Nair S, Ms Shilpa P S, Dr Sreedevi K. Menon, Dr Massimo Donelli, Amrita Center for Wireless Networks and Applications, Amrita Vishwa Vidyapeetham
B07.6	Systematic Investigation of Silicon Micromachined Waveguide Structure & Designing Passive Components out of it for THz Application	MR VAIBHAV ADHIKAR, Mr AYAN KARMAKAR, Dr Chinmoy Saha, Indian Institute of Space Science & Technology, Trivandrum, Semiconductor Laboratory - ISRO
B07.7	Extreme High-Q Resonant Transmission through Aperture Cavity Array	Dr Arnab Pattanayak, Mr DHRUVAL SHAH, Prof Shriganesh Prabhu, TIFR, IIT Gandhinagar

B07.8	Modelling and Simulation study for varying Refractive index of a cavity in a Dielectric Whispering Gallery Mode Resonator in THz regime	Ms Anushree Singh, Mr Himanshu Gohil, Prof Shriganesh Prabhu, Tata Institute of Fundamental Research
	SESSION- Fri-GHO5 (08.30-	10.30 hrs) Venue: ABLT3
GHO5.1	LithosphA100:B106eric Electromagnetic Emissions And Ionospheric perturbation Associated With Some Major Earthquakes Occurred in Indian Subcontinent (Invited)	Prof. Birbal Singh, Dr. Yasuhide Hobara, Ms Sarita Sharma, Ms Swati Swati, Dr. Devbrat Pundhir, Prof. Raj Pal Singh, Raja Balwant Singh Engineering Technical Campus University of Electro- Communication, Department of Physics, GLA Univ.
GHO5.2	Solar Activity, Lightning and Climate (Invited)	Dr Devendraa Siingh,Indian Institute of Tropical Meteorology, Pune
GHO5.3	Remote Sensing of Upper Atmosphere using VLF Waves: recent advances (Invited)	Prof Ashok Kumar Singh,University of Lucknow
GHO5.4	A sudden disturbance of the lower ionosphere due to the launch of satellite	Mr Kumarjit Saha, Dr Anirban Guha, Tripura University, Tripura University
GHO5.5	On the similarities and discrepancies of the magnetospheric and ionospheric response to solar events: A multi-instrument multi-scale comparative study	Mr Sritam Hajra, Dr Nirvikar Dashora, Prof Soloman Ivan, Gadanki, National Atmospheric Research Laboratory
GHO5.6	Characteristics of gravity waves in the equatorial ionosphere due to passage of Annular Solar Eclipse on 15 January 2010 studied using high resolution ionosonde observations	Prof S Sripathi, Mr RAJESH KUMAR BARAD, Indian Institute of Geomagnetism
GHO5.7	Comparison of GPS Vertical Total Electron Content and GIM TEC assimilation of the IRI-Plas model at two Low Latitude Indian regions during the Storm Condition	Ms Devireddy Kavitha, Ms K Sreeteja, Ms Yaseen Yaseen, Dr P Naveen Kumar, Osmania University
	SESSION-Fri-FO5 (08.30-10	0.30 hrs) Venue: ABLT2
FO5.1	Remote Sensing of Atmospheric Aerosols: Variability and Change in their Trends over Asia	Dr Madineni Venkat Ratnam, National Atmospheric Research Laboratory, Gadanki
FO5.2	Remote sensing of trace gases in the atmosphere over South Asia: SOLAR Activity Challenges and opportunities	Dr Lokesh Sahu, Physical Research Laboratory, Ahmedabad
FO5.3	Effect of biomass burning on ozone mixing ratios in tropical rural environment	Dr Harish Gadhavi, Dr K Renuka, Prof A. Jayaraman, Prof S V B Rao, Physical Research Laboratory, Ahmedabad, Physical Research Laboratory, Ahmedabad, Sri Venkateswara University, Tirupati
FO5.4	Seasonal and Interannual Variability of O3, NO2 and CO over Indian region inferred from space based measurements	Mr. Yesobu Yarragumta, Dr. Shuchita Srivastava, Dr. D. Mitra, Prof. H.C. Chandola, IIRS,IIRS, Kumaun University

FO5.5	Impacts of a pre-monsoon dust storm on the Himalayan snow cover using satellite-based observations	Mr. Jaydeep Singh, Dr Narendra Singh, Mr Ashish Kumar, Aryabhatta Research Institute of Observational Sciences Manora Peak Nanital
FO5.6	Diurnal and seasonal behavior in stratosphere and lower mesospheric water vapour and ozone over the equatorial Indian region : Observations inferred from TIMED/SABER, MLS, Megha-Tropiques, Day-Glow Photometer and Meteor wind Radar	Dr. Siddarth Shankar Das, Mr KV Suneeth, Dr. KN Uma, Dr. C Vineeth, Dr. Geetha Ramkumar, Space Physics Laboratory, Vikram Sarabhai Space Centre, Space Physics Laboratory, VSSC, Space Physics Laboratory, VSSC, Space Physics Laboratory, VSSC
FO5.7	Simultaneous observations of nitrogen dioxide and formaldehyde using MAX-DOAS technique at Mirzapur (25.06° N, 82.59° E), India	Mr Mriganka Sekhar Biswas, Dr Sachin Ghude, Mr Dinesh Gumale, Dr Thara Prabhakaran, Dr Anoop Mahajan, Indian Institute of Tropical Meteorology, Pune
	PLENARY SESSION-Fri-FP (10.	45-11.30 hrs) Venue: ABLT4
Plenary	Estimation of the atmospheric carbon dioxide emission over the Indian region for Scientists and Policy makers	Dr. Radhika Ramachandran, ISRO
	SESSION- Fri-PO2 (11.30-13.10	hrs) Venue: ABLT2 Ground
PO2.1	Development of SDR receiver for atmospheric radars	Ms Polisetti Yasodha, Dr Amit Kumar Patra, National Atmospheric Research Laboratory
PO2.2	Level Estimation with Radar Level Probe using Multipath Reduction Technique	Mr. Arunkumar Heddallikar, Mr Akshay Rathod, Mr. Hitendra Pethkar, SAMEER
PO2.3	Study of Weather Signal Characteristics using Higher Order Spectral Analysis	Ms Ramyakrishna Enugonda, Prof Dr. Anandan VK, ISTRAC-ISRO
PO2.4	Steering of an Active Hydrogen Maser to NavIC system time using Linear Quadratic Gaussian	Mr Suresh Dakkumalla, Mr Rajath Sadasivan, Ms Anu Arora, Ms Aakanksha Avnish Bhardwajan, Mr Subramanya Ganesh T, ISTRA/ISRO Bangalore
PO2.5	A Novel Approach of Texture Description using DWT and GLCM on Digital Images	Mr Jitendra Shastri, Dr. TRILOKI PANT, Indian Institute of Information Technology Allahabad
PO2.6	Detection of Coronal Holes Using Hough Simulated Parameterized Online Region- Based Active Contour Method	Mr Sanmoy Bandyopadhyay, Dr Saurabh Das, Dr Abhirup Datta, Indian Institute of Technology, Indore
PO2.7	A Comparative Study of Position Uncertainty in NavIC and GPS	Dr Sharda Vashisth, Mr Kartikay Saini, Ms Raisy CD, Prof Amitava Sen Gupta, Ms Preeti ., The NorthCap University Gurugram
PO2.8	Study on Multiple Target resolving with in beam width using super resolution algorithmic approach in phased array radar	Ms Ariya Krishnan, Prof Dr. Anandan VK, ISTRAC-ISRO
PO2.9	A Compact Multiband RF-Energy Harvesting System using Mutual Coupling Exploitation	Mr Shantanu Singh, Mr Harsh Singh, Dr Shrivishal Tripathi, Dr. SPM International Institue of Information Technology

PO2.10	GNSS-Reflectometry receiver architectures for measuring surface soil moisture	Dr T V C Sarma, Dr G. Naga Sai Madhavi, Mr. Pulluru Sharath Kumar, Ms Radhika Chipade, National Atmospheric Research Laboratory
PO2.11	Development of a VLF based Lightning Detection Network in India	Mr Ajay Khandare, Society for Applied Microwave Electronics Enginnering and research(SAMEER),Mumbai
PO2.12	Design and Performance Comparison of Printed Monopole Antennas with Elliptical Radiator for UWB Applications	Mr Partha Shome, Dr Taimoor Khan, Dr Rabul Hussain Laskar, National Institute of Technology Silchar
PO2.13	Design and Analysis of Front-End Circuits at 47 GHz using Additive Printing Technology	Mr. Arpit Kumar Baranwal, Mr Budhaditya Bhowmick, Prof Nagendra Prasad Pathak, IIT Roorkee
PO2.14	Compact microstrip Wideband Band Stop Filter with folded stubs to increase coupling	Mr. Anil Rajput, Ms Monika Chauhan, Dr Biswajeet Mukherjee, PDPM IIITDM
PO2.15	Miniature Elliptical Waveguide Antenna Design Using Square Split Ring Resonator	Mr Sougata Chatterjee, Mr S Sureshkumar, GMRT-NCRA-TIFR
PO2.16	4K UHD Video Streaming and Gigabit Data to an Unreachable Smart Home Using Millimeter Wave Radio	Dr Rabindranath Bera, Mr. Ardhendhu Shekhar Biswas, Dr. Samarendra Nath Sur, Prof. Monojit Mitra, Sikkim Manipal Institute of technology, Department of Electronics and Communication Engineering Techno International New Town, Kolkata, India, Department of Electronics and Telecommunication Engineering IIEST, Shibpur, Howrah, India
PO2.17	Numerical Analysis of protectively coated ITO-PET based Microwave Metamaterial Absorber	Ms Kajal Chaudhary, IIT Kanpur
PO2.18	Moon-shaped Metasurface based, Reflective Quarter Wave Plate in THz Frequency	Ms Devanshi Merchant, Prof Shriganesh Prabhu, Tata Institute of Fundamental Research
PO2.19	Photonics-based radar hardware circuit analysis of 1300nm and 1550nm multiplexing "4 channel" optical fiber link using WDM techniques	Mr Suresh Kumar, Ms Daraksha Shams, CSIR-CEERI, Ambedkr institute advance communication technology and research
PO2.20	Meta-lens using Metal-Dielectric-Metal Plasmonic Waveguide at Optical Frequency	Mr Boopalan Ganapathy, Dr Subramaniam Chittur K, Vellore Institute of Technology, Vellore Institute of Technology
PO2.21	RF Energy Harvesting for GSM and Wi-Fi Band	Ms Gargi Shukla, Ms Sakshi Verma, Mr Abhay Sao, Ms Sriyuta Srivastava, Dr Shrivishal Tripathi, Dr. Shyama Prasad Mukherjee International Institute of Information Technology, Naya Raipur, Dr. Shyama Prasad Mukherjee International Institute of Information Technology, Naya Raipur

PO2.22	SO2 measurements over Bhubaneswar, an eastern coastal city in downwind of the Indian SO2 hotspot	Ms Subhasmita Panda, Dr Trupti Das, Dr R Boopathy, Dr Chinmaya Mallik, Dr Parth Sarthi Mahapatra, Dr Prashant Kumar, Dr Shyam Lal, CSIR-Institue of Minerals and Materials Technology, CSIR-IMMT, Central University Rajasthan, ICIMOD, ISRO, Ahmedabad, PRL
PO2.23	A Convolutional Neural Network Approach of Prediction of Atmospheric Water Vapour from Indian Navigation System NavIC	Ms. Chandrani Chatterjee, Dr Saurabh Das, Indian Institute of Technology, Indore, IIT Indore
PO2.24	Impacts of a pre-monsoon dust storm on the Himalayan snow cover using satellite-based observations	Mr Jaydeep Singh, Dr Narendra Singh, Mr Ashish Kumar, Prof Ravi Shankar Singh, Aryabhatta Research Institute of Observational Sciences Manora Peak Nainital, Aryabhatta Research Institute of Observational Sciences, Department of Physics, DDU Gorakhpur
PO2.25	Soil moisture estimation through copolarization ratio along specular direction at L-band using grid partition-based neuro- fuzzy inference system	Mr Ajeet Kumar Vishwakarma, Prof Rajendra Prasad, Mr Vijay Paratap Yadav, Mr Suraj Amarbahadur Yadav, Indian Institute of Technology (BHU) Varanasi,
PO2.26	Radiative heating due to elevated aerosols across the Indo-Gangetic Plain	Prof Aditya Vaishya, Dr Suresh Babu, Ms N. B. Lakshmi, Dr Mukunda Gogoi, Mr V. Jayachandran, Ahmedabad University, Vikram Sarabhai Space Centre, Vikram Sarabhai Space Centre, Indian Institute of Tropical Meteorology
PO2.27	Rain attenuation studies using SDR over Central part of India- An cost-effective way for channel modeling at high frequencies	Dr Saurabh Das, Dr Siddharth Malu, IIT Indore, IIT Indore
PO2.28	Characterization of attenuation studies over the tropical coastal station	Dr Renju R, Indian Space Research Organisation, VSSC
PO2.29	Frequency distribution of Aerosol Optical depth over Varanasi during 2011	Mr Akhilesh Kumar, Mr. Vineet Pratap, Dr. Pradeep Kumar, Prof. Abhay Kumar Singh, BHU Varanasi,
PO2.30	Investigation of physical and optical properties of atmospheric aerosol along the sub-Himalayan region of North-Eastern India	Mr Nilamoni Barman, Dr Arup Borgohain, Dr S.S. Kundu, Mr Ajay P., Mr P.L.N. Raju, North Eastern Space Applications Centre, Shillong, Meghalaya, North Eastern Space Applications Centre, Shillong, Meghalaya, Dibrugarh Universisty, NESAC, shillong
PO2.31	Effect on Aerosol Optical Depth during Diwali Festival in Varanasi, India	Mr Akhilesh Kumar, Mr. Vineet Pratap, Dr. Pradeep Kumar, Prof. Abhay Kumar Singh, BHU Varanasi,
PO2.32	Do Lunar Semidiurnal Oscillations enhance in the Low-Latitude Mesosphere Lower Thermosphere during Sudden Stratospheric Warming Events?	Mr Koushik N, Dr Karanam Kishore Kumar, Dr C Vineeth, Space Physics Laboratory, Vikram Sarabhai Space Centre, Space Physics Laboratory
PO2.33	Seasonal Variability of Atmospheric Aerosols over Varanasi Region during 2010- 2016	Mr. Vineet Pratap, Mr Akhilesh Kumar, Dr. Pradeep Kumar, Prof. Abhay Kumar Singh, Banaras Hindu University, BHU Varanasi, Banaras Hindu University

PO2.34	Pre-monsoon Study of Aerosol Parameters and Particulate Matters over Varanasi for 2017	Mr. Vineet Pratap, Mr Akhilesh Kumar, Dr. Pradeep Kumar, Prof. Abhay Kumar Singh, Banaras Hindu University, BHU Varanasi, Banaras Hindu University
PO2.35	Abnormality in atmospheric aerosol parameters during large (M>7) earthquakes	Mr Soujan Ghosh, Mr Sudipta Sasmal, Mr Sagardweep Biswas, Prof Sandip Kumar Chakrabarti, Indian Centre For Space Physics, Indian Centre For Space Physics, Indian Centre For Space Physics
PO2.36	Assessment of impacts of coal mining induced subsidence on growth pattern of native flora in coal field areas: a case study of Singareni Collieries Company Limited, India	Mr Ashish Kumar Vishwakarma, Dr Rajesh Rai, Prof. B.K. Shrivastva, IIT (BHU), Varanasi
PO2.37	Disaggregation of global Leaf Area Index (LAI) satellite products using semi-empirical algorithm	Mr Vijay Paratap Yadav, Ms Ruchi Bala, Prof Rajendra Prasad, Mr Ajeet Kumar Vishwakarma, Indian Institute of Technology (BHU) Varanasi
PO2.38	Seasonal Variation of Day and Night Land Surface Temperature with Normalized Difference Vegetation Index using MODIS Satellite Imagery	Ms Ruchi Bala, Mr Vijay Paratap Yadav, Prof Rajendra Prasad, Indian Institute of Technology (BHU) ,Varanasi
PO2.39	Performance Estimation of ARIMA Model for Orographic Rainfall Region	Ms Pooja Verma, Dr Swastika Chakraborty, Sikkim Manipal Institute of Technology
PO2.40	Radar characteristics of mesoscale convective storms of Pre-monsoon environment-Kal Baishakhi	Dr Subrata Kumar Das, Dr U. V. Murali Krishna, Mr Abhishek K. Jha, Dr Sachin M Deshpande, Indain Institute of Tropical Meteorology, Indain Institute of Tropical Meteorology, Indain Institute of Tropical Meteorology
PO2.41	FMCW Radars for Volume Scattering from Precipitation	Mr Supantha Sen, Mr Anand Kalwar, Prof K. J Vinoy, Indian Institute of Science, Bangalore,
PO2.42	Now casting of Orographic Rain Rate Using ARIMA and ANN Model	Ms Pooja Verma, Dr Swastika Chakraborty, Sikkim Manipal Institute of Technology, SMU, Sikkim Manipal Institute of Technology, Sikkim
PO2.43	Preliminary estimation of SNR threshold for 206.5 MHz ST Radar at ARIES, Nainital	Ms Akanksha Rajput, Aryabhatt Research Institute of observational sciencES(ARIES)
PO2.44	Wind Profile Recovery in MST Radar Exploiting the Sparse Signal Structure	Ms Akankshya Bhatta, Prof Sibi Raj B Pillai, Dr T V C Sarma, Indian Institute of Technology Bombay
PO2.45	Application of VHF Doppler Radar of University of Calcutta for characterizing lower atmospheric dynamics	Mr Debyendu Jana, Dr Tanmay Das, Institute of Radio Physics and Electronics, University of Calcutta, Institute of Radio Physics and Electronics, University of Calcutta
PO2.46	Comprehensive overview of the investigations on vertical distribution of aerosols, boundary layer dynamics and radiative effect over an Indian coastal location based on multiyear lidar remote sensing and radiative flux observations.	Dr. Manoj Kumar Mishra, Dr. Rajeev K., Space Physics Laboratory, Vikram Sarabhai Space Centre, ISRO, Space Physics Laboratory, VSSC, Thiruvananthapuram

PO2.47	An Approach To Estimate Wall Parameters Using Genetic Algorithm And Time-domain Reflection Method For Through-Wall Imaging	Mr Akhilendra Singh, Dr Smrity dwivedi, Prof Pradip Kumar Jain, Indian Institute of Technology (BHU), Varanasi
PO2.48	On the propagation of seimogenic ELF-VLF emissions in the middle layer of earth's crust	Prof. Raj Pal Singh, Ms Sarita Sharma, Department of Physics, GLA University, Department of Physics, GLA University
PO2.49	Martian Lee-Wave clouds observed over Ascraeus Mon during Martian Year 33: A study based on the images capture by Mars Color Camera onboard India's first Mars mission to Mars.	Mr Jyotirmoy Kalita, Dr Manoj Mishra, Dr Anirban Guha, Space Applications Centre, Indian Space Research Organization, Ahmedabad-380053, India
PO2.50	Studies of IRNSS Signal Scintillation near the Northern EIA crest of the Indian zone	Mr Debasis Jana, Dr. Shyamal Kumar Chakraborty, Maharaja Srischandra College
PO2.51	Modeling of prompt response of radio signals over several signals propagation paths due to solar flare effects on D-region ionosphere	Dr Tamal Basak, Mr Sudipta Sasmal, Dr Suman Chakraborty, Prof Sandip Kumar Chakrabarti, Amity University, Indian Centre For Space Physics
PO2.52	Studies of thunderstorm induced ionospheric irregularity over Kolkata using NavIC observations	Mr Soumen Datta, Dr Saurabh Das, IIT Indore
PO2.53	First results of Thanjavur GPS station (10.72° N, 70.01° E), Tamil Nadu, India: Anomalies of VTEC during the Vernal Equinox and Summer Solstice days of the minimum solar cycle year of 2019	Dr. James Baskaradas, Mr. Veera Kumar Maheswaran, Dr. Rupesh Das, SASTRA Deemed University
PO2.54	Quantification of precise point positioning accuracy using GipsyX during Ionospheric Scintillation and its solar activity dependency over Indian low latitude region	Mr Mohammed Yousuf, Dr Nirvikar Dashora, Dr Gopa Dutta, Dr Miriyala Sridhar, Vignana Bharathi Institute of Technology, National Atmospheric Research Laboratory, K L University
PO2.55	Time of evening zonal drift reversal in F- region and its implications for post sunset ionosphere	Ms Aswathy R P, Dr manju G, Vikram Sarabhai Space Centre, ISRO P.O
PO2.56	On the occurrence of loss of lock of GNSS signals over Waltair under the effect of equatorial plasma bubbles during declining solar activity	Dr VADLAMURI K D SRINIVASU, Dr Nirvikar Dashora, Prof D S V V D Prasad, National Atmospheric Research Laboratory
PO2.57	Study of NmF2 and hmF2 parameters as measured by COSMIC satellite and Assessment with IRI-2016 during solar minimum period	Dr. Anshuman Sahai, Dr. Ananna Bardhan,Manav Rachna University
PO2.58	Characteristics of equatorial plasma irregularities during recent high and low solar activity periods as studied using ground based radio experiments	Prof S Sripathi, Indian Institute of Geomagnetism

PO2.59	Application of GNSS based Ionospheric Reconstruction for understanding day-to-day variabilities of irregularity dynamics	Ms Antara Chaudhuri, Ms Samidhha Goswami, Trisani Biswas and Prof Ashik Paul,Institue of Radio Physics and Electronics, University of Calcutta
PO2.60	A multi-instrument analysis of unusual ionospheric responses during St. Patrick's Day storm of March 2015 over African, Indian and Indonesian sectors	Mr SK Samin Kader, Dr Nirvikar Dashora, Prof. Niranjan K, Gadanki, National Atmospheric Research Laboratory
PO2.61	Study the Ionospheric Total Electron Content (TEC) variation during Geomagnetic Storm in 24th Solar Cycle	Mr SUBRATA KUNDU, Mr Sudipta Sasmal, Dr Suman Chakraborty, Prof Sandip Kumar Chakrabarti, Indian Centre For Space Physics
PO2.62	Combined effect of solar flare and geomagnetic storm on the propagation of subionospheric VLF signal and hence D-Region Ionosphere	Dr Ashutosh K. Singh, Prof Abhay Kumar Singh,Faculty of Physical Sciences, Shri Ramswaroop Memorial University Lucknow-Dewa Road India-225003, Department of Physics, Banaras Hindu University Varanasi, India-221005
PO2.63	Ionospheric change signature by Tsunami propagation associated with 2014 Pisagua and 2015 Illapel Earthquake, Chile	Dr. Mahesh Shrivastava, Dr. Ajeet Maurya, Prof. Gabriel Gonzalez, Dr. Juan Gonzalez, Universidad Católica del Norte, Antofagasta, Chile, The Next University, Neverland, National Research Center for Integrated Natural Disaster Management
PO2.64	Ionospheric perturbations observed due to Indonesian earthquake of 02 August 2019	Mr Gaurish Tripathi, Dr. Sanjay Kumar, Dr. Pradeep Kumar, Prof. ABHAY KUMAR SINGH, Banaras Hindu University
PO2.65	On the movement of the Equatorial Ionization Anomaly trough away from geomagnetic equator during extreme low solar activity conditions	Dr Manju G, Ms Aswathy R P, Dr. Mridula N., ISRO, Vikram Sarabhai Space Centre, ISRO P.O
PO2.66	Characteristics of the peak of the F - layer derived from thermospheric nightglow observations over Prayagraj (25.5° N, 81.9° E), India	Ms SARANYA P, Dr Navin Parihar, Mr Sarvesh Chandra, Indian Institute of Geomagnetism
PO2.67	IRI-2016 model results during solar cycle-24 at low latitude station Dhanbad using TEC and foF2	Dr. Sardar Singh Rao, Ms Stuti Bharti, Prof Abhay Kumar Singh,Banaras hindu University, IIT (ISM), Dhanbad
PO2.68	Contaminated effect of Geomagnetic storm on pre-seismic atmospheric and ionospheric anomalies during Imphal earthquake.	Mr Sagardweep Biswas, Mr Subrata Kundu, Mr Soujan Ghosh, Mr Sudipta Sasmal, Prof Sandip Kumar Chakrabarti, Indian Centre For Space Physics, Indian Centre For Space Physics
PO2.69	Study the Atmospheric Gravity wave variation during Imphal Earthquake 2016 using SABER data	Mr SUBRATA KUNDU, Ms Swati Chowdhury, Mr Sudipta Sasmal, Dr Suman Chakraborty, Prof Sandip Kumar Chakrabarti, INDIAN CENTRE FOR SPACE PHYSICS, INDIAN CENTRE FOR SPACE PHYSICS, S. N. Bose National Centre for Basic Sciences, Indian Centre For Space Physics

PO2.74	Short and Long periodicities in the EMIC waves observed at the Indian Antarctic station Maitri	Ms ADITI UPADHYAY, PROF AMAR KAKAD, PROF ASHWININ KUMAR SINHA, Prof. Yoshiharu Omura, PROF BHARATI KAKAD, Indian Institute of Geomagnetism, INDIAN INSTITUTE OF GEOMAGNETISM, Research Institute for Sustainable Humanosphere, Kyoto University, Japan
PO2.74	waves observed at the Indian Antarctic station Maitri	Indian Institute of Geomagnetism, INDIAN INSTITUTE OF GEOMAGNETISM, Research
PO2.75	Turbulent magnetic field amplification by nonlinear interaction of high power Laser and Kinetic Alfvén wave in Laboratory and Astrophysical Plasmas.	Ms Himani Dewan, dr neha pathak, Prof R Uma, IIT Delhi
PO2.76	SAMEERDU-digital ionosonde: Brief system description and initial results from a low latitude location Dibrugarh	Dr Bitap Kalita, Dibrugarh Univrsity
PO2.77	Modeling & Simulation of 2-D Metamaterial Reflector Lens Antenna for Radio Astronomy	Dr Asit Panda, National Institute of Science & Technology (NIST)
PO2.78	MeerKAT observation of A2384 bimodal merging galaxy cluster	Dr Viral Parekh, South African Radio Astronomy Observatory
PO2.79	Structure of the cold neutral medium of ISM through observation of neutral hydrogen against Galactic supernova remnants.	Mr Pavan Kumar Vishwakarma, IIT(BHU)
PO2.80	X-shaped Radio Galaxies: Theory verification through simulation	Mr GOURAB GIRI, Mr. Bhargav Vaidya, Indian Institute of Technology Indore
PO2.81	Observing the EoR: Telescope response to Modelling Errors	Ms Aishrila Mazumder, Dr Abhirup Datta, Indian Institute of Technology Indore
PO2.82	A Dark Energy Model to Unify Late Time Acceleration with the Early Inflationary Expansion of The Universe	Ms Gargee Chakraborty, Dr Surajit Chattopadhyay, Amity University, Kolkata
PO2.83	The Complex Space Weather Events of September 2017	Dr Rajkumar Hajra, IIT Indore

PO2.84	Equatorial and low latitude Ionospheric Response to the Space weather event of 19- 21 December 2015	Mr Ram Singh, Prof S Sripathi, Indian Institute of Geomagnetism
PO2.85	Unusual electrodynamical coupling during Solar Energetic Particle Events over Antarctica.	Dr Jeni Victor Nepolian, Dr Devendraa Siingh, Indian Institute of Tropical Meteorology
PO2.86	Catalogue Analysis for a Radio Deep Field	Mr INDRENDRA SISODIYA, Ms Akriti Sinha, Mr Arnab Chakraborty, Dr Abhirup Datta, IIT Indore
PO2.87	Neutral hydrogen distribution in the post reionization era through gravitational lenses	Ms Urvashi Arora, Dr Prasun Dutta, IIT (BHU), Varanasi
	SESSION-Fri-JO3 (14.00-10	6.00 hrs) Venue: ABLT2
JO3.1	A compact dual polarized dipole antenna feed for a parabolic reflector	Mr Hanumanth Rao Bandari, TATA INSTITUTE OF FUNDAMENTAL RESEARCH
JO3.2	Simulating a Minimal Space Interferometric Configuration for Low Frequency Radio Imaging	Mr Akhil Jaini, Raman Research Institute
JO3.3	Reliability performance study of GMRT Analog Backend receiver	Mr Sudhir Phakatkar, Giant Metrewave Radio Telescope -NCRA-TIFR
JO3.4	Large scale coherent density and velocity structure measurement in the Interstellar medium of NGC 5236	Ms Meera Nandakumar, Dr Prasun Dutta, IIT (BHU), Varanasi
JO3.5	Instrumental calibration for observations of redshifted 21-cm signal from neutral hydrogen	Mr Jais Kumar, Dr Prasun Dutta, IIT (BHU), Varanasi
JO3.6	A detailed study of foregrounds in ELAIS N1 field using uGMRT 300-500 MHz observation	Mr Arnab Chakraborty, Dr Abhirup Datta, IIT Indore
JO3.7	Calibration Techniques for Large-N Radio Interferometers targeting EoR and BAO power spectra	Ms Deepthi Gorthi, Dr Aaron Parsons, Dr Joshua Dillon, Dr Jack Hickish, University of California, Berkeley
JO3.8	Towards Low Frequency Observation of Radio Sky using Earth-based Setup	Mr Pavan Uttarkar, Prof Avinash Deshpande, Mrs Vinutha Chandrashekar, Mr Aswathappa H A, Raman Research Institute
	SESSION- Fri-FO6 (14.00-10	6.00 hrs) Venue: ABLT1
FO6.1	Validation of Satellite retrieved Tropospheric CO and CH4	Mr Imran Girach, Dr Narendra Ojha, Dr Prabha Nair, Space Physics Laboratory, Vikram Sarabhai Space Centre, Thiruvananthapuram, Physical Research Laboratory
FO6.2	Utilization of INSAT-3D data for fog estimation over Indian Region	Ms. Pooja Jindal, Indian Institute of Remote Sensing

F06.3	Effect of stratospheric intrusion on ozone concentration over Northeast India	Dr Chandrakala Bharali, Ms Arshini Saikia, Dr Binita Pathak, Dr Pradip Kumar Bhuyan, Dibrugarh University, Dibrugarh university , Dibrugarh university
FO6.4	WRF-Chem model simulations of trace gas concentrations over Hyderabad: Comparison with surface and satellite based observations	Dr MADHAV HARIDAS, Mrs Jaya Thakur, Mr Biswadip Gharai, NRSC Hyderabad, NRSC Hyderabad
FO6.5	Global Assessment of space-borne and ground based CO2 measurements	Dr. KN Uma, Dr. Radhika Ramachandran, Dr. Yogesh Tiwari, Space Physics Laboratory, VSSC, Space Physics Laboratory, Vikram Sarabhai Space Centre
FO6.6	Ground Level Monitoring and Prediction of Ozone and its precursor concentrations to study the Diurnal and Seasonal Variations of atmospheric pollutants at an Urban Location in Hyderabad	Mr Sarat Kumar Allu, CSIR-IICT
FO6.7	Raindrop Size Distribution Integral parameters Characteristics of Pre-monsoon and Monsoon Rainfall over Kolkata	Ms Tanu Priya Singh, PROF ARIJIT DE, PROF Animesh Maitra, Netaji Subhash Engineering College
	SESSION-Fri-BO8 (14.00-10	6.00 hrs) Venue: ABLT4
BO8.1	Deceiving Doppler RADAR using Time modulated Frequency Selective Surfaces (Invited)	Prof. Kumar Vaibhav Srivastava, Mr. Mondeep Saikia, Prof S. Anantha Ramakrishna, Indian Institute of Technology, Kanpur
BO8.2	Emerging Trends in High Power Microwave Sources (Invited)	Mr Akhilendra Singh, Dr Smrity dwivedi, Prof Pradip Kumar Jain, Indian Institute of Technology (BHU), Varanasi
BO8.3	Metamaterial-Inspired Cavity backed CPW fed Dipole Slot Rectenna for UMTS and WiFi Applications	Dr Basudev Majumder, Mr Sarath Sankar Vinnakota, Mr Dinesh Kumar Gupta, Indian Institute of Space Science and Technology, Thiruvananthapuram, Birla Institute of Technology and Science - Pilani, Hyderabad Campus
BO8.4	Design of a High Performance Reflective Linear to Circular Polarization Converter with Wide Axial Ratio Bandwidth	Dr Debidas Kundu, Prof Akhilesh Mohan, Prof Ajay Chakrabarty, Indian Institute of Technology Roorkee, IIT Kharagpur
BO8.5	Shape Identification of Target Behind Wall Using Fourier Descriptor and Morphology	Mr Akhilendra Singh, Dr Smrity dwivedi, Prof Pradip Kumar Jain, Indian Institute of Technology (BHU), Varanasi
BO8.6	On the Design of Four-Element Pattern Diversity MIMO Antennas for Mutual Coupling Reduction	Dr. Debdeep Sarkar, Dr. Said Mikki, Prof Yahia Antar, Royal Military College Canada, University of New Haven, CT
BO8.7	Time Domain Characterization of Various Genres of Ultrawideband (UWB) Monopoles by Suitable Estimation of Input Pulsewidth	Dr Debarati Ganguly, Prof Debatosh Guha, Kerala Technological University, Lourdes Matha College of Science and Technology, Trivandrum, Institute of Radio Physics and Electronics, University of Calcutta, Kolkata
BO8.8	Dynamic Graph, Network Slicing and Resource Allocation for Distributed Antenna Systems	Prof Malay Tripathy, Prof. Priya Ranjan, Amity University, Noida, Uttar Pradesh

BO8.9	A Wideband Dual-Resonance SIW Cavity- Backed Slot Antenna for 5G Applications	Mr Amit Kumar, Mr Sudhir Bhaskar, Dr Amit Kumar Singh, Mr Amit Kumar Singh, Mr Azharuddin Khan, IIT(BHU) Varanasi	
	SESSION- Fri-GHO6 (14.00-16.00 hrs) Venue: ABLT3		
GHO6.1	Classification of very low frequency emission by means of dynamic neural network	Dr Shivali Verma,Oriental Collge of technology	
GHO6.2	Study of July 2, 2019 South American Total Solar Eclipse effect on the ionosphere using GPS signal	Dr. Ajeet Maurya, Dr. Mahesh Shrivastava, The Next University, Neverland, Universidad Católica del Norte, Antofagasta, Chile	
GHO6.3	Numerical modeling of seasonal and diurnal variations of lower ionospheric reflection parameters based on IRI model	Ms Swati Chowdhury, Mr SUBRATA KUNDU, Mr Sudipta Sasmal, Dr Tamal Basak, Dr Suman Chakraborty, Mr Soujan Ghosh, Prof Sandip Kumar Chakrabarti, INDIAN CENTRE FOR SPACE PHYSICS, INDIAN CENTRE FOR SPACE PHYSICS, Amity University, S. N. Bose National Centre for Basic Sciences, Indian Centre For Space Physics, Indian Centre For Space Physics,	
GHO6.4	Variations in the peak electron density of the Venus ionosphere: some new insights using Akatsuki Radio Science measurements.	Mr. Keshav Ram Tripathi, Dr. Raj Kumar Choudhary, Dr. K.M. Ambili, Prof. Takeshi Imamura, Dr. Hiroki Ando, Space Physics Laboratory (SPL), VSSC, Space Physics Laboratory (SPL), VSSC, The University of Tokyo, Kyoto Sangyo University	
GHO6.5	First results of F3-layer using incoherent scatter radar observations	Dr. VENKATESH KAVUTARAPU, Dr Amit Kumar Patra, Gadanki, National Atmospheric Research Laboratory	
GHO6.6	Short period ionospheric variations with high-resolution experiments using DPS-4D digisonde at Gadanki	Mr Janardana Reddy G, Dr Amit Kumar Patra, National Atmospheric Research Laboratory	
GHO6.7	Storm time PP fields effects and TADs modulations in TEC	Dr. Sardar Singh Rao, Prof Abhay Kumar Singh, Dr. Rajesh Pandey, Department of Physics, Banaras Hindu University Varanasi, India-221005	
GHO6.8	A preliminary study of Amplitude and Phase scintillation over the Indian permanent scientific GPS station to understand L1 signal propagation through the ionosphere	Dr. James Baskaradas, Mr. Veera Kumar Maheswaran, SASTRA Deemed University	



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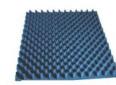




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