



## IEEE-INAE Workshop on Electromagnetics 2018 (IIWE 2018)

December 6-8'2018, Mascot Hotel, Trivandrum

<https://www.iiwe.in>

### Honorary Chairs

Dr. BN. Suresh  
Dr. VK Dadhwal

### General Chairs

Dr. KT Selvan  
Dr. CK Anandan

### Organizing Chairs

Dr. Chinmoy Saha  
Dr. Basudeb Ghosh

### Detailed Programme Schedule

#### Keynote Lectures

ID	Speaker	Date and Time
Keynote-1	Dr. V. K. Dadhwal, Director, IIST	Dec 06, 18:30-19:15
Keynote-2	Prof. Tapan K. Sarkar, Syracuse University, USA	Dec 06, 19:15-20:00

#### Invited Speakers

ID	Speaker	Date and Time	Session Chairs
Invited Talk-1	Prof. Basudeb Ghosh IIST Trivandrum, India	Dec 06 13:45-14:30	Prof. K. T. Selvan
Invited Talk-2	Prof. Uday Khankojje IIT Madras, India	Dec 06 16:30-17:15	Prof. Basudeb Ghosh
Invited Talk-3	Prof. Magdalena Salazar Palma Universidad Carlos III de Madrid, Madrid, Spain	Dec 07 09:00-09:45	Prof. C.K. Anandan
Invited Talk-4	Prof. K P Ray DIAT, Pune, India	Dec 07 09:45-10:30	Prof. Tapan K Sarkar
Invited Talk-5	Prof. Chinmoy Saha IIST Trivandrum, India	Dec 07 10:30-11:00	Prof. S. Raghavan
Invited Talk-6	Prof. Tapan K Sarkar Syracuse University, USA	Dec 08 08:30-09:15	Prof. Somak Bhattacharyya
Invited Talk-7	Dr. Chandrakanta Kumar, UR Rao Satellite Centre, ISRO, India	Dec 08 09:15-10:00	Prof. Chinmoy Saha
Invited Talk-8	Prof. Raghavan NIT Tiruchirappalli, India	Dec 08 10:00-10:30	Dr. Chandrakanta Kumar
Invited Talk-9	Dr. Shiv Narayan CSIR NAL, Bangalore	Dec 08 16:45-17:15	Prof. Soumava Mukherjee

### Young Scientist Speakers

ID	Speaker	Date and Time	Session Chairs
YS Talk-1	Dr. Debdeep Sarkar RMC, Canada, ON, Canada	Dec 07 14:00-14:30	Prof. Somak Bhattacharyya
YS Talk-2	Mr. Sandip Sankar Roy NRSC,ISRO, Hyderabad, India	Dec 07 14:30-15:00	
YS Talk-3	Dr. Hemant Kumar VJTIMumbai, India	Dec 07 15:00-15:30	Prof. Basudev Majumder
YS Talk-4	Dr. Pratigya Mathur VJTIMumbai, India	Dec 07 15:30-16:00	

### Contributory Session: 1

Dec 06'2018 08:30-10:30Hall Name: Harmony

Session Chair: Prof. S. Raghavan, NIT Tiruchirappalli

ID	Paper Title	Author & Affiliation
1	Compact Microstrip Lowpass Filter with Ultra-wide stop-band using newly Modified 'T' Resonators	Nisamol T A, Abdulla P, Raphika P M and Jasmine P M. <i>Cochin University of Science and Technology</i>
2	Dual Polarized High Gain Aperture Coupled Antenna for RF Energy Harvesting Applications	V. S. Sankar, Basudev Majumder and Runa Kumari <i>Birla Institute of Technology and Science-Pilani, Hyderabad Campus, IIST Trivandrum</i>
3	A Compact Hybrid Sierpinski Koch Fractal UWB MIMO Antenna with Pattern Diversity	Rajkumar S, AntoAmala A and Krishnasamy Selvan T. <i>SSN College of Engineering</i>
4	Diagnosis on Magnetic-Thermal Field Emission of 440 KV Busbar with Nano Coating	Victoria Mary S and Pugazhendhi Sugumaran C. <i>Anna University, TN</i>
5	Dual Feed Circularly Polarized Antenna for S-Band Applications	Elizabeth George, Vigneshram R, Satya Bhushan Shukla, K.K. Mukundan, Chinmoy Saha and Apren T J., <i>VSSC Trivandrum, Indian Institute of Space Science Technology, Trivandrum</i>
6	Development of Phase Matching Technique for LEO Satellite Tracking	Sandip Sankar Roy, Sandesh Mane, T Naga Sekhar, Padmavathy C S, Dr. Naresh Kumar Mallenahalli and Chinmoy Saha <i>NRSC Hyderabad, IIST Trivandrum</i>
7	Spur Line Loaded UWB Inserted DRA With Frequency Notched Characteristics	Divya Rao, Chittajit Sarkar, Chinmoy Saha and J Y Siddiqui <i>MAKAUT, Kolkata, IIST Trivandrum, University of Calcutta</i>
8	Design of DGS Based Triple-Band Band Pass Filter for Satellite Bands	S. Oudayacoumar. and Tamilselvan Sadasivam <i>Pondicherry Engineering College, Puducherry</i>

## Contributory Session: 2

Dec 06'2018 11:00-13:00      Hall Name: Harmony  
Session Chair: Prof. KT Selvan, SSN College of Engineering

ID	Paper Title	Author & Affiliation
1	Compact Dual Band Dual Polarized Patch Antenna for Wireless Applications	Vikrant Bande, Puneeth Kumar T R and Krishnamoorthy Kandasamy, <i>NIT Surathkal</i>
2	A Copper Strip Array Loaded Multiband Square Slot Antenna	Princy Paul, Krishnamoorthy Kandasamy and Mohammad Sharawi, <i>NIT Surathkal, KFUPM</i>
3	Graphene Nano-Ribbon based Reconfigurable Terahertz Multi-Band Antenna	RameshreddyChirrayyagari and Vijay Kumar <i>Vellore Institute of Technology, Vellore</i>
4	Modified Fractal-shaped Slotted Patch Antenna with Defected Ground Structure for Multiband Applications	Diptiranjana Samantaray, Somak Bhattacharyya and K V Srinivas <i>Indian Institute of Technology (BHU), Varanasi</i>
5	A Cross Slot Linear to Circular Polarization Conversion Metasurface	Vinod Kumar P and Basudeb Ghosh <i>IIST Trivandrum</i>
6	Characteristic Mode Analysis of Linear to Circular Polarization Conversion Metasurface	Vinod Kumar P and Basudeb Ghosh <i>Indian Institute of Space Science Technology, Trivandrum</i>
7	Controlling the Bandwidth of FSS using Substrate Integrated Waveguide Cavity Technology	Krushna Kanth V and Raghavan S. <i>National Institute of Technology, Trichy</i>
8	Meander Line based Defected Ground Microstrip Antenna slotted with SRR for Terahertz range	Soham Ghosh, Sohom Das, Diptiranjana Samantaray and Somak Bhattacharyya, <i>Academy of Technology and Indian Institute of Technology (BHU), Varanasi</i>

## Contributory Session:3

Dec 06'2018 14:15-16:15 Hall Name: Harmony  
Session Chair: Prof. AprenTJ, STIST, (Ex. VSSC, Trivandrum) Trivandrum, India

ID	Paper Title	Author & Affiliation
1	LTCC Transition Structures for Millimeter-wave System-in-Package	Kishor Dalavi, UttamBombale, ChinmoySaha, Basudeb Ghosh, Apurba Bhattacharya and Ananat Sharma, <i>Shivaji University, Kolhapur</i>
2	Survey of Rectifier Circuits for RF Energy Harvesting	SleebeDivakaran, Laya Mary Joy, Deepti Das Krishna and Jobin Antony, <i>CUSAT</i>
3	Circularly Polarized inverted F-Shaped Antenna with asymmetrically F-Shape slotted Modified Ground Plane	Yatendra Kumar, Ravi Kumar Gangwar and Binod Kumar Kannaujia, <i>M.J.P. Rohilkhand University, Bareilly</i>
4	Improved FSS Structure based on SIW to Change the Polarization of Vivaldi antenna	Suveer G, Krushna Kanth V and Raghavan S. <i>National Institute of Technology, Trichy</i>
5	Antipodal Elliptical Tapered Slot Antenna for Millimeter Wave Communications	Syedakbar S, Ramesh S and Ramya Vijay <i>K. Ramakrishnan College of Technology, Trichy</i>
6	Ultra-wideband MIMO monopole antenna with WLAN band rejection	Chittajit Sarkar, Chinmoy Saha and J.Y Siddiqui <i>SVIST Kolkata, IIST Trivandrum, University of Kolkata</i>
7	A Broadband Polarization Insensitive Cross Polarization Converter using Metasurface for Long Wavelength Infrared Region	Rudranil Nandi, Nilotpal and Somak Bhattacharyya <i>Academy of Technology and Indian Institute of Technology (BHU), Varanasi</i>
8	Gain Enhancement of Dual Band Patch Antenna for Mobile Communication Systems	Prakash V R, Manikandan S. S. , Saravanan M and Kumaraguru Diderot, <i>Hindustan Institute of Technology and Science</i>

### Contributory Session: 4

Dec 07'2018 11:30-13:00

Hall Name: Harmony

Session Chair: Prof. Chittajit Sarkar, SVIST, Kolkata, India

ID	Paper Title	Author & Affiliation
1	Electrically Small Tri-Band Dual-Polarized ZOR Antenna using $\Omega$ -Shaped Capacitor and Single-SRR for GPS, WLAN, and WiMAX Applications	Mohammad Ameen, SachinKalraiya and Raghvendra Kumar Chaudhary <i>Indian Institute of Technology (ISM), Dhanbad</i>
2	2-D Circular Microstrip Patch Array Fed Offset Reflector Antenna for VSAT Application	Kaushik Debbarma and Ratnajit Bhattacharjee <i>Indian Institute of Technology, Guwahati</i>
3	Planar Goubau Line Based End-fire Antenna	Karthik Rudramuni, Puneeth Kumar T R, Krishnamoorthy K, Basudev Majumder and Qingfeng Zhang <i>National Institute of Technology, Karnataka</i>
4	Investigation on the Effect of Electrode Shape on the Performance Terahertz Photomixing Antenna Employing Graphene Electrodes	Mrinmoy Bharadwaj, Jitendra Prajapati and Ratnajit Bhattacharjee <i>Indian Institute of Technology, Guwahati</i>
5	Design of Elliptical SIW Cavity Backed High Gain Slot Antenna	Soumava Mukherjee and Animesh Biswas <i>IITJodhpur and IIT Kanpur</i>
6	Design & Analysis of MIMO antenna to reduce the mutual coupling	K. Vasu Babu and B Anuradha <i>S V University</i>

### Contributory Session:5

Dec 07'2018 16:30-18:00

Hall Name: Harmony

Session Chair: Prof.Soumava Mukherjee, IIT Jodhpur

ID	Paper Title	Author & Affiliation
1	Synthesis of Dipole Antenna Array for Performance Enhancement using Flower Pollination Algorithm	Hemant Patidar and Gautam Kumar Mahanti <i>National Institute of Technology, Durgapur</i>
2	Solid State X-band Doppler Radar Network for Rain Rate Estimation in India	Sharif Shaik and Swaroop Sahoo <i>IIT Madras and IIT Palakkad</i>
3	SIW Dual Frequency Dual Sense Circularly Polarized Cavity Backed Slot Antenna	Shruti Priya, Kundan Kumar and Santanu Dwari <i>Indian Institute of Technology (ISM), Dhanbad</i>
4	Periodic Spiral-Slot-Loaded Dual-Band Dual Polarized Half-Width Microstrip Leaky-Wave Antennas with Forward and Backward Beam Scanning Properties	Karthik Rudramuni, Krishnamoorthy K and Basudev Majumder <i>National Institute of Technology, Surathkal</i>
5	Triple-band Microstrip fed Slot antenna inspired with Metamaterials for wireless Applications	Swati Sharma and Rekha Mehra <i>Govt. Engineering College, Ajmer</i>
6	Compact Ring Shaped Monopole Microstrip Antenna with PGS for Multiband Wireless Communication	Ajay Dadhich, J. K. Deegwal and M. M. Sharma. <i>Govt. Engineering College, Ajmer</i>
7	Microstrip Patch Antenna with E-Shaped Structure for Ku-Band Applications	Kannadhasan Suriyan <i>Anna University, Tamilnadu</i>

### Contributory Session:6

Dec 08'2018 11:00-13:00

Hall Name: Harmony

Session Chair: Dr. Chandrakanta Kumar, URSC, Bangalore, India

ID	Paper Title	Author & Affiliation
1	A Novel Tri-band Patch Antenna for Wireless Communications	Manavalan Saravanan and Anumuthu Priya <i>HITS Chennai, BSARCIIST Chennai</i>
2	Shape Reconstruction of Conducting Objects Using Linear Sampling Method in a Limited Aperture Measurements	Mallikarjun Erramshetty and Pragati Patel <i>National Institute of Technology, Goa</i>
3	Dual Circularly Polarized Quarter-Mode SIW Antenna with New Approaches of Enhancement of Bandwidth and Isolation	Kundan Kumar, Shruti Priya and Santanu Dwari <i>Indian Institute of Technology (ISM), Dhanbad</i>
4	Space-borne Ocean Monitors: Radar Imaging of Illicit Oil-Spills	Aditi Bhatt, Aakash and Krishnaswamy Sankaran <i>Radical Innovations Group – RIG</i>
5	Expression for Quality factor of TM <sub>10δ</sub> mode in Equilateral Triangular DRA	Anoop P and Ratnajit Bhattacharjee <i>Indian Institute of Technology, Guwahati</i>
6	Compact Dual Band Ultra-thin Conformal Absorber for C-band Application	Sachin Kalraiya, Mohammad Ameen, Raghvendra Kumar Chaudhary and Ravi Kumar Gangwar <i>Indian Institute of Technology (ISM), Dhanbad</i>
7	Compact Dual Band Circularly Polarized Planar Slot Antenna loaded with a Rotated SRR	Puneeth Kumar T R, Karthik Rudramuni and Krishnamoorthy Kandasamy, <i>National Institute of Technology, Surathkal</i>
8	A Compact Reconfigurable Penta-Band Artificial Magnetic Conductor for Wi-Fi Applications	Naveen Jacob, Prabhanjan Mannari, Krishnamoorthy K and Muralidhar Kulkarni <i>National Institute of Technology, Surathkal</i>

### Contributory Session: 7

Dec 08'2018 14:00-15:30

Hall Name: Harmony

Session Chair: Prof. T. J. Apren, STIST Trivandrum and Prof. Somak Bhattacharyya, IIT (BHU), Varanasi

ID	Paper Title	Author & Affiliation
1	Design of modified L-shaped slot loaded substrate integrated waveguide wearable antenna for body-centric wireless communication	Muthu Krishnan and Kannan G <i>B.S.A. Crescent Institute of Science and Technology</i>
2	Transcending Limits: Recent Trends & Challenges in Computational Electromagnetics	Aakash, Aditi Bhatt and Krishnaswamy Sankaran <i>Radical Innovations Group - RIG</i>
3	A GSM1800 MHz Monopole Antenna with Inverted L-Stub on Ground Plane for RF Energy Harvesting	Geriki Polaiah, Krishnamoorthy K and Muralidhar Kulkarni <i>National Institute of Technology, Surathkal</i>
4	Metamaterial Inspired Octa-band Rectangular Monopole Antenna	Prasad Jones Christydas S and Gunavathi N. <i>K. Ramakrishnan College of Technology</i>
5	Dielectric Resonator based 2-port dual band Antenna for MIMO Applications	Tripta Kumari, Gourab Das, Ravi Gangwar and Kundan Kumar Suman. <i>Indian Institute of Technology (ISM), Dhanbad</i>

6	Rectangular Waveguide – An Overview of Substrate Integrated Waveguide and Comparison	Praveena N. and Raghavan S. <i>National Institute of Technology, Trichy</i>
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**Industry Session**

Dec 08'2018 15:30-16:30

Hall Name: Harmony

Session Chair: **Dr. Chandrakanta Kumar, URSC, Bangalore, India and Prof. Apren T. J, STIST, Trivandrum, India**

ID	Title	Affiliations
1	Industry Talk-1	CST MWS
2	Industry Talk-2	Entuple Technologies