

WAMS 2024

Raghu Engineering College (A), Visakhapatnam

PROGRAM SCHEDULE

Preconference Workshop Schedule		
WAMS 2024 : Day-0 : 28 Feb 2024		
Lecture #	Time Slot	Speaker & Title
	09.00-09.30	Workshop & WAMS 2024 Registrations
	09.30-09.35	Opening Remarks
1	09:35- 10:20	Dr Sudhakar Rao (President & CEO, RaoS Consultants LLC, USA) Title: "Advanced Antenna Designs for Space, Air & Ground Communications: An Industry Perspective"
2	10:20-11:05	Dr Clency Lee- Yow (CTO, Vitesse/ Custom Microwave Inc., USA) Title: "Vitesse Systems Antenna Technologies and Capabilities"
	11.05-11.20	Tea Break
3	11.20-12.05	Dr Nacer Chahat (IEEE Fellow, System Engineer, NASA/JPL, USA) Title: "Antenna Designs Shaping the Future of Space Exploration"
4	12.05-12.50	Dr Paolo Focardi (IEEE Senior Member, Senior RF Microwave Engineer, NASA/JPL, USA) Title: "Antenna Systems for Space Applications at NASA Jet Propulsion Laboratory"
	12.50-13.30	Lunch
5	13.30-14.15	Dr Gaurangi Gupta (IEEE APS YP Ambassador, Antenna Engineer, NASA/JPL, USA) Title: "Innovative Antennas for Satellite Telecom, Radar Systems and Radio Telescope"
6	14.15-15.00	Abhishek Tiwari (Product Manager for Antenna, RF and Radar applications at MathWorks) Title: "RF Design of Wide band mmWave Beamforming Systems"
7	15.00-15.45	Dr Shiv Narayan (CSIR-National Aerospace Laboratories (CSIR-NAL), Bangalore) Title: "Fundamentals of FSS structures and its Applications"
	15.45-16:00	Tea Break
8	16.00-16.45	Dr. Jonathan Sauder (NASA Jet Propulsion Laboratory, USA) Title: "Deployable Antenna Mechanism and Structural Design: Design Principles and Lessons Learned"
9	16.45-17.30	Dr. Ch Anil Kumar (Scientist-E, Naval Science and Technological Laboratory (NSTL), Visakhapatnam) Title: "Multimode Antenna Arrays : Beamforming under hardware constraints."
	17.30-18.15	Closing Remarks, Q&A and Interaction with Speakers

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WAMS 2024 : Day-1 : 29 Feb 2024				
Time	Room 1	Room 2	Room 3	
FN	From 8.00 Registration			
	9.30-10.30 Inauguration, General Chair's Welcome Address & Dignitaries' Speeches			
	10.30-11.10 Keynote 1: Dr. Nacer Chahat (NASA/JPL)			
	11.10-11.40 Opening of Exhibition by Chief Guest & Tea Break			
	11.40-12.20 Keynote 2: Dr. C.S. Rao (QuadGen Wireless)			
	12.20-13.00 Keynote 3: Dr. Clency Lee-Yow (Custom Microwave Inc.)			
AN	13.00 to 14.00 Lunch Break			
	14.00 to 14.40 Keynote 4: Mr. Rajeev Jyoti (In-Space)			
	14.40 to 16.40	YP Session Invited Talks	A1	W1
		YP Session: Presentations	(84, 196, 102, 106, 230, 244, 198)	(111, 119, 225, 254, 273)
	16.40 to 16.50 Tea Break			
	16.50 to 18.50	Student Activity Session	A2	M1
(185, 141, 19, 49, 212, 89, 213, 71, 156)		(38, 67, 116, 137, 172, 176, 251)	(12, 31, 37, 44, 48, 64)	
18.50 to 20.30 Inaugural Dinner & Networking				
WAMS 2024 : Day-2 : 01 Mar 2024				
Time	Room 1	Room 2	Room 3	
FN	9.30 to 11.00 Invited Talk 1: Prof. Desmond Sim (Taiwan)			
	Invited Talk-2: Prof. Taimoor Khan (NIT Silchar)			
	Invited Talk 3: Dr. Madhumita Chakravarthy (CMDS, DRDO)			
11.00 to 11.15	Tea Break & Posters			
11.15 to 13.00	WiE Session: Invited Speakers	M2	W2	
		(56, 99, 157, 167, 189, 227, 15)	(13, 28, 34, 52, 117, 163, 121, 45, 253)	
AN	13.00 to 14.00 Lunch Break			
	14.00 to 16.00	WiE Session: Talks	M3	
			(103, 231, 237, 240)	W3 (154, 166, 191, 214, 217, 236)
	16.00 to 16.15 Tea Break			
	16.15 to 18.15	A3: SS 1 (Radar Antennas)	M4	A4
		(29, 150, 17, 26, 98, 151, 152)	(27, 35, 57, 107, 132, 133)	(16, 178, 202, 59, 101, 181)
18.15 to 19.30 Networking & Refreshments - Executive Committee Meeting				

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WAMS 2024 : Day-3 : 02 Mar 2024					
Time		Room 1	Room 2	Room 3	
FN	9.30 to 11.00	A5: SS2 (Satellite Antennas) (197, 228, 32, 127, 4, 82, 169)	M5 (36, 109, 138, 155, 206, 243, 205)	W4 (9, 21, 142, 232, 255, 258)	
	11.00 to 11.15	Tea Break			
	11.15 to 13.00	Industry Session	M6 (61, 25, 78, 130, 183, 239, 256)	A6 (30, 209, 252, 182, 95, 131, 262)	
	13.00 to 14.00	Lunch Break			
	14.00 to 16.00	A7: SS3 (Feeds & Reflector Antennas) (54, 177, 233, 229, 43)	A8 (128, 148, 146, 164, 187, 184, 245)	A9 (135, 144, 136, 224, 147)	
AN	16.00 to 16.15	Tea Break			
	16.15 to 18.15	Interactive Panel Session (Academia/Industry)	A10: SS4 (Metamaterial Based Arrays- 1) (94, 112, 115, 204, 257, 60)	M7 (69, 58, 90, 65, 122)	
	18.30 to 21.30	Awards Presentation, Cultural Program and Banquet Dinner			
WAMS 2024 : Day-4 : 03 Mar 2024					
Time		Room 1	Room 2	Room 3	
FN	9.30 to 11.30	Invited Talk-4: Dr. Dhananjay Jahagirdar (RCI, DRDO)			
		Invited Talk-5: Dr. Jonathan Sauder (NASA/JPL)			
		Invited Talk-6: Prof. Dhaval Pujara (PDEU)			
		Future WAMS / Feedback from Participants			
11.30 to 11.45	Tea Break				
11.45 to 13.15	A11: SS5 (Metasurface Antennas) (222, 210, 200, 74, 159, 143, 188)	A13 (249, 238, 235, 129, 267, 263, 234, 218)	A14 (223, 259, 271, 270, 145, 247)		
13.15 to 14.00	Lunch Break				
AN	14.00 to 14.30	Invited Talk-7: Dr. Zubair Akhter (TII, Abu Dhabi, UAE)			
	14.30 to 16.30	A12: SS6 (Metamat. Based Arrays-2) (114, 63, 195, 33, 11)	A15 (55, 10, 260, 96, 7, 22, 242)		
	16.30 to 16.45	Refreshments			

WAMS 2024
Raghu Engineering College (A), Visakhapatnam
PROGRAM SCHEDULE
Track-wise Papers Details

Track : ANTENNA		
Session : A1: Feeds & Rad. Elem		Chairs. B. Subbarao & V. Kothapudi
Paper ID	Paper Title	Authors
84	A study of wire Bi-conical antenna for wide-band application in Radio Astronomy	Harsha A Tanti, Amit Kumar Pradhan, Abhirup Datta
196	Radiation Pattern Improvement of Bowtie Antenna Using Annular Ring for Vehicle-to-Vehicle Communication	Jagadeesh Babu Kamili, Subbarao Boddu, Tatha Babu Addepalli, Bhaskara Rao Perli, Kiran Kumar Bandi, DEVATHOTI RAJENDRA PRASAD, Harish RVS
102	Single/Dual-Polarized $\lambda/4$ Impedance Transformer Coupled Square Microstrip Patch Antenna for X-band Applications	VENKATA KISHORE KOTHAPUDI
106	LTCC based Microstrip Antenna designed for Millimeter Wave Applications using CPW-Fed Technique	Varikuppala Akhila, Bharathi Anantha, Ahmad Farid sulaimani, G. Ravi Shankar Reddy
230	Low-Cost Monolithic Feed Assemblies for Satellite Antennas	Sudhakar Rao, Philip Venezia, Clency Lee-Yow
244	Design and Analysis of Flexible Substrate-based Multi-band Patch Antenna for 5G and Satellite Communication Applications	Ram Duvvada Sandeep
198	Design and Analysis of Square Fractal Shaped Planar Antenna	Gullala Deekshitha, Ramesh Babu SSV Botcha, Duvvarapu Pavani, Chimurala Chandra sekhar, Akash Kumar Gupta, Modali SSS Srinivas, Jakka Syamala
Session : A2: Wideband Ant. & Components		Chairs: G. Ram & P. Dalal
Paper ID	Paper Title	Authors
38	Design of Dual-Band SIW Cavity Backed Ring Slot Antenna for X/Ka-Band Applications	Aparna Elagandula, Dr. Gopi Ram, Arun Kumar Gande
251	Analyzing Specific Absorption Rate (SAR) for a Frequency-Reconfigurable Textenna	Ram Duvvada Sandeep, Salma Syed, Madhav B T P
67	Dual-band, Dual-polarized Reconfigurable Reflectarray Antenna Operating at C and X Band	Sreekavya M K, Basudeb Ghosh, Basudev Majumder
116	Design of Integrated Hexagonal Microstrip Patch antenna with DGS for Wideband Applications	Bathina Upendar Rao, N V Koteswara Rao, P Chandra Sekhar
137	Rectangle Patch Antenna with Slots and Defective Ground Structure for C-band Applications	Ramana Reddy R., Bandham Balaji, Vaddi Yaseswini, Busetty Spandana
172	Open Ended Slot-Loaded Dual-band Monopole Antenna for WiMAX/ISM-Band/WLAN/sub-6 GHz Applications.	Shougaijam Singh Chinglemba, Deepak Kumar Barik, Kalyan Mondal, Mohd Azharuddin
176	Design and Analysis of a Slotted Microstrip Patch Antenna for Wide-Band Applications with Controlled Resonance	Surabathula Srujana Keerthana, Deepak Ummidi, Ramadevi Yandrapu, Govindh Seerapu, Aruna Kumari S, Modali SSS Srinivas

Session : A3: Special Session 1 : Radar Ant		Chairs: S. Dey & A. Kedar
Paper ID	Paper Title	Authors
29	A Sparse Concentric Ring Antenna Array Design with Wide Scanning and Low Sidelobe Level	Ashutosh Kedar
150	Metamaterial loaded 3D Stacked Antenna for Microwave Imaging of the Human Head	Athul O Asok, Priyam Kailash, SUKOMAL DEY
17	Antipodal Vivaldi antenna array for 5G mmWave applications at 28 GHz	Golla Ramyasree, Suman Nelaturi
26	DESIGN OF CIRCULAR MICROSTRIP ANTENNA WITH METASURFACE SUPERSTATE FOR WIFI APPLICATIONS	ROHIT PENKI, Dr.AMLAN DATTA, Dr.M.SATYANARAYANA
98	Design of broadband metamaterial absorbers for Cand X-band applications	Ramesh Amugothu, Dr. Vakula D
151	A LHCP Antenna for Smarter IoT Wireless Networks	Somak Bhattacharyya, Munasa Yuvaraju, Kamisetty Sasank, Diptiranjana Samantaray, Biswa Ranjan Swain, Nikhil Kumar
152	A High-Gain Metasurface Antenna for Compact 5G Applications	Sathwik Kommuju, Diptiranjana Samantaray, Somak Bhattacharyya
Session : A4: Array Antennas		Chairs. S. Reddy & D. Chaturvedi
Paper ID	Paper Title	Authors
16	Side Lobe and Side Band Reduction of Time Modulated Circular Antenna Array Using Novel Particle Swarm Optimization Algorithm	Satish Kumar, Dr. Gopi Ram, Durbadal Mandal, Dr. Rajib Kar
178	A Half-Mode SIW Cavity-Backed 3-Ports MIMO Antenna	Buela Pramodini, Dr.Divya Chaturvedi
202	Direction Finding by Time Modulated Linear Antenna arrays using Root-MUSIC algorithm	Aswathi P, Magnel Rose Mathew, Dr. Deepti Das Krishna, Murali Krishnaswamy
59	Self-Isolated Frequency Reconfigurable two-port MIMO Antenna for 5G Application	Suresh Angadi, Yashna Sharma, Raghava C Nallanthighal, Thennarasan Sabapathy
101	A Tri-band Shared Aperture Binomial Antenna Array for Air- SAR Applications	VENKATA KISHORE KOTHAPUDI, PRAVEENA KATI
181	Design of a 4-element UWB-MIMO antenna for X, Ku, and, K band applications	PANKAJ KUMAR GAUTAM, Dharmendra Kumar Jhariya
Session : A5: Special Session 2 : Satellite Ant.		Chairs: P. Focardi & Rajeev Jyoti
Paper ID	Paper Title	Authors
197	Dual Band Symmetrical Semi Cylindrical DRA with patch antenna for C and X-Band applications	Dhavaleswarapu Venkatachari, Sudhakar Sahu, DARIMIREDDY NARESH KUMAR
228	High-Efficiency All-Metal Metasurface Antenna Design for Space Applications	Kristy A Hecht, Nacer Chahat, Curtis Jin, Goutam Chattopadhyay, Mario Mencagli
32	Uncertainty Quantification of the Gain Budget for INCUS	Paolo Focardi, Alessio Mancini, Gaurangi Gupta
127	Design and Analysis of Volumetric Antenna using SIW Technology loaded with DGS for Satellite Communication	RAMPRASAD RAVULA, E. Kusuma Kumari, PUNNAM NAGARAJU
4	Significance of Phase Center in Satellite Antenna Designs	Sudhakar Rao
82	Horn Feed Assembly Modification for INCUS	Gaurangi Gupta, Paolo Focardi

169	Linearly Polarised Normal Mode Helix Antenna at UHF-Band for Inter-Satellite Communication Application	Sai Kraanthi Vatyam, Ventaka Sitaraman Puram, Sandhya Reddy B, M Kumar, C Sriharsha, Senthil Kumar V
Session : A6: Reconfigurable Antennas		Chairs: A. Bharathi & N. Darimireddy
Paper ID	Paper Title	Authors
30	A Novel Reconfigurable UWB Antenna for Spectral Sensing and Signal Transmission in Cognitive Radio Applications	Bharathi Anantha, Gosula Ravi Shankar Reddy, Srilakshmi Aouthu
209	Design of Frequency Reconfigurable Dual-Band Rectangular Ring-Shaped Antenna with High Isolation	NARESHKUMAR DARIMIREDDY, RAMAMOHAN BONGU, Siva Ganga Prasad M, Vamsee Krishna
252	Design of a Hybrid Frequency and Pattern Reconfigurable Antenna for 5G Sub-6 GHz Applications	Hari Shankar Singh, Manpreet Kaur, Mayank Agarwal
182	A Compact and Wide Band Antenna for Millimeter Wave Applications	Syed Muzahir Abbas, Musa Hussain, Umair Rafique, Priyanka Dala, Yong Zhu
95	Varactor Tunable Compact MIMO Antenna with reconfigurable Multi band operating and notching for Cognitive Radio Applications	Saritha Vanka, Chandrasekhar C
131	Assessing the Impact of Human Sweat on the Performance of Frequency-Reconfigurable Textenna	Ram Duvvada Sandeep, Salma Syed, Madhav B T P
262	Exploring the Impact of Bending on Circularly Polarized Textile Reconfigurable Antenna	Ram Duvvada Sandeep, Salma Syed, Madhav B T P
Session : A7: Special Session 3 : Feeds & Reflector Antennas		Chairs: P. Kumar & G. Gupta
Paper ID	Paper Title	Authors
54	Deployment Mechanisms for Reflectors, Booms, and Feeds Across JPL Missions and Technology	Jonathan F Sauder
177	High Efficiency Small Reflector Antenna Design For Satellite Application	Pavan Kumar, Krishan Gopal, Venkata Sitaraman Puram, Sriharsha Chandrashekar, Senthil Kumar V
233	Reflector Antennas Design and Analysis Software	Gaurangi Gupta, Sriya Kotta
229	Generation of High-Gain Steered Beam using Dipole Antenna Loaded on Anomalous Reflector with Near-field Correction	Dheeraj Girish, SATEESH SHIVANANDA BADADAL, Mahesh A, Debdeep Sarkar
43	A wideband single polarization antenna for precision cosmology in S-band	Arun Patil, Mayuri Sathyanarayana Rao, Mahesh A, Keerthipriya Sathish
Session : A8: Wearable Ant		Chairs: Z. Akhter & R. Reddy
Paper ID	Paper Title	Authors
128	Wearable Button type Antenna for Wireless Body Area Network Applications	Dattatreya Gopi, P Sai Saketh Ram, G. V. Sridhar, R. Tarun Kumar, S Jahnavi, U Pavan Deepak
148	Medical Imaging using a Wideband, Conformal, Textile Antenna for Brain Tumor Detection	Athul O Asok, SUKOMAL DEY
146	Hexagonal Patch Antenna With slots and Defective Ground Structure	Ramana Reddy R., Rakesh Alagala Banyan, Vadde Pravallika, Jada Nageswararao, Shobha Rani Dibbagandla
164	Design of Wearable Monopole Antenna Sensor for Breast Tumor Detection	TiruGanesh Lanka, Dr. Divya Chaturvedi K.M
187	A Compact Antenna Sensor for Diagnosis of Glucose Concentration in Blood Samples	Jagadeesh Babu Kamili, KIRAN KUMAR BANDI

184	A Non-Invasive Glucose Monitoring Using Double S-Shaped Antenna Band Stop Filter	Neeli Syamala, Bandi Kiran Kumar, K Padma Raju
245	A WEARABLE TEXTILE ANTENNA FOR HEALTH CARE APPLICATIONS	MEENA KUMARI MULAPARTI, Ratna Kumari U.V., Ram Duvvada Sandeep
Session : A9 : Microstrip Ant		Chairs: V. Tripathy & A. Kumar
Paper ID	Paper Title	Authors
135	A Moon Shaped Slot Pentagonal Patch Antenna with DGS for High-Gain and X-Band Applications	Ramana Reddy R., EDIGA VENKATESH GOUD, Y Manish Kumar, Andela Vijaya lakshmi
144	Effect of DGS on Slotted Square Patch Antenna for 5G and LTE Applications	Ramana Reddy R., Jada Nageswararao, MS Chandhana, KONURU SAINATH
136	Novel Ultra-Miniaturized Wideband Linear-Circular and Linear-Cross Polarizer Based on Modified Electric Dipole Configuration at THz Regime	Sukomal Dey, Mohammad Abdul Shukoor
224	Bistatic U-Slot Microstrip Patch Antenna for Dual-Band In-Band Full-Duplex	Amit Sikder, Phyo Mg Mg, Amit Kumar, Akhilesh Mohan,
147	Compact Flexible Textile Antenna for Microwave Imaging of the Human Head	Athul O Asok, SUKOMAL DEY, Priyam Kailash
Session : A10: Special Session : S4 MM Arrays1		Chairs: D. Sim & D. D. Krishna
Paper ID	Paper Title	Authors
94	Bandwidth Enhancement of Metamaterial Absorber using Resistive Loading for X- and Ku-band Applications	Vinaykumar Kondigari, Sreenath Reddy Thummaluru
112	A Planar ϕ -Shaped Microwave Antenna Sensor for Glucose Concentration Monitoring	Neeli Syamala, Bandi Kiran Kumar, K Padma raju
115	Enhancing the gain of Wireless Power Transmission system using Negative Index Metamaterials	Kaarthikeya Karanam, Bipraditya Mukhopadhyay, Nayonika Chakraborty, Gorle Sirisha, Adarsh Singh, Santanu Das
204	Re-configurable Bi-functional Meta-Surface based Polarization Converter	NEEMA K, Dr. Deepti Das Krishna, Aswin Shiju
257	Tunable UWB/Narrowband Terahertz Metasurface Absorber Through Controlled Relaxation Time	Naveen Kumar Maurya, Raji Krishna, Sugumaran Subramanian, Jayanta Ghosh
60	Python-based Graphical User Interface to Extract Electromagnetic Parameters using NRW Method	Ishaan Kedar, SureshKumar TR, Alex Zachariah C, Ashutosh Kedar
Session : A11: S55 : Metasurface Antennas		Chairs: H. Singh & B. Choudhry
Paper ID	Paper Title	Authors
222	A Miniaturized Frequency Selective Dual Band Metamaterial Absorber For Mutual Coupling Reduction Between Microstrip Antennas	Soumik Dey, DEBAJIT SARMA, Sukomal Dey
210	Metasurface with Multifunctional Polarization Transforming for Multi-Band Applications	DHUPAM ARUN KUMAR, Varsha Kavali, V Seshagiri Rao, V Mohan, T Balaji
200	Circularly Polarized Metasurface-Based Hybrid Dielectric Resonator Antenna for Wireless Applications	Naresh K.Darimireddy, N. Rajasekhar, Runa Kumari
74	Investigation of Dispersion Control in Planar Rectangular Tape Helix Slow Wave Structure with Double-Positive Metamaterial Assistance	Nameesha Chauhan, Naveen Babu G, Madhur Deo Upadhyay, Jitendra Prajapati,
159	High gain metamaterial antenna for high data rate mm-wave communication systems	Abhishek Kandwal, Yogeshwar Dutt Sharma
143	A Compact Triple Band FSS Based Microstrip Antenna for 2.4/4/5.8 GHz Applications	Kalyan Mondal, Sh. Chinglemba Singh, Deepak Kumar Barik, Mohd Azharuddin

188	Design and Analysis of a Tri-Band Microstrip Patch Antenna with an Optimized Defected Ground Structure	Bhagya Sri Dwaram, Gayathri Eti, sandeep Atta, Varunteja Immaneni, Satish Chowdary PSR, Modali SSS Srinivas
Session : A12: SS6 MM Arrays2		Chairs: K. Sathish & A. Pandey
Paper ID	Paper Title	Authors
114	Compact Ultra-Wideband Archimedean Spiral Antenna for Electronic Warfare System	Sujit Behera, Om Ranjan, Balamati Dr Choudhur, Raveendranath U. Nair
63	Development of Tri-plate Structured Dipole Antenna Array with Incorporated Feed Network for S-Band Radar Application	ANKUR PANDEY, Tarlok Singh, Seema Doongarwal
195	A 28 GHz FSS Backed SIW Slotted Array Antenna with Ultra Reduced Sidelobes for Ground Surveillance & RADAR Applications	Dipankar Saha, Abhishek Dutta, SOUVIK BAG, Kishan Adikary, SOUMARGO CHAKRABORTY, Masudur Rahaman
33	Design of a Broadband Stacked Annular Ring Antenna Using Theory of Characteristic Modes	Ashutosh Kedar, Upadrasta V R S S H Teja, Nayan Teja Ayyavaru, Suresh Kumar T. R.
11	5G Stacked Substrate Antenna Design and Analysis for 76-81 GHz Automotive Application	Daniel Tetteh Narh, Zhang Yan
Session : A13: Compact Ant		Chairs:F. Begum & S. Nelaturi
Paper ID	Paper Title	Authors
249	UHF Fractal Antenna for Space Applications	Femina Beegum S, Manoj Joseph, Saji Joyas, J. Girija, M. Jayakumar
238	Meanderline - based Ultraminiature Low-Profile Ultrawideband Antenna for Biomedical Applications	DEBAJIT SARMA, Athul O Asok, SUKOMAL DEY
235	ANALYSIS OF SLOT AND VIA POSITION EFFECTS ON BANDGAP CHARACTERISTICS IN MUSHROOM ELECTROMAGNETIC BANDGAP STRUCTURES	Gowri Chaduvula, Leela Kumari Balivada
129	Wrist Band Antenna for Wireless Body Area Network Applications	Dattatreya Gopi, Kota Swetha, Ravikumar palla, P Rajesh, K. Gunasagar, G Jyothie
267	SAR Analysis of a Wearable Textenna for Health Care Applications	MEENA KUMARI MULAPARTI, Ratna Kumari U.V., Ram Duvvada Sandeep, Dr. KIRAN RAMESH RATHOD
263	Multi Slot Wearable Patch Antenna for Wireless Applications	Modali SSS Srinivas, Akash Kumar Gupta, BSSV Ramesh Babu, A.V.S. Swathi, P.S.R. Chowdary, T. V. Ramkrishna
234	AN ULTRA-COMPACT AND CONFORMAL 70 GHz CIRCULAR PATCH ANTENNA FOR V-BAND (57-71GHz) 5G MILLIMETER WAVE APPLICATIONS	Manish Sharma, PARMINDER KAUR, Lovish Matta, Rana Gill

218	Isolation Enhancement in Fractal Inspired MIMO Antenna Using DGS for 5G Application	Jimit Karangia, Vivek Kumar Pandit, Dhaval Pujara
Session : A14: Misc. Antennas & Methods		Chairs: A. Mahesh & V. Pandit
Paper ID	Paper Title	Authors
223	Dual-Band Wide-Band Modified CPW-Fed Bow Tie Radial Slot Antenna with Rectangular Stubs	Jainish Bhavsar, Rishil Sanjay Trivedi, Vivek Kumar Pandit
259	An Open Book Shaped 3-D Patch Antenna Design for C Band Applications	MANASA CHINNAM, Vakula Damera
271	Design and Prediction Modeling of Millimeter wave Dual Band Antenna using Machine Learning	Smriti Agarwal, ankit pathak, vivek shukla, dheeraj maurya
270	Design of Low Cost Compact FR4 Microstrip Patch Antenna for 5G, ISM, and X-band Applications	Sivanvitha GV, Ram Duvvada Sandeep
145	Area efficient sparse-4 diminished-1 modulo $2n + 1$ adder	sudhavani yamani, H K raghu vamsi, durga bhavani dama
247	Retrieving Radiation Pattern of Navigation Antenna from Measurements with Directional Irradiator at Close Distance	Layth Kadhim T. Abuhadma, Yu I Choni
Session : A15: Antennas for Wireless		Chairs: D. Sarkar & A. Gupta
Paper ID	Paper Title	Authors
55	Compact Rotman Lens on water based substrate for low-frequency applicatons	Raghunathan Agaram, Keerthipriya Sathish, Nagaraj H N, Avinash A Deshpande, Shiv Sethi
10	A Compact Dual-Band Modified Cylindrical-DRA Based MIMO Antenna for WLAN / X-Band Application	CHOLAVENDAN M, Rajeshkumar Venkatesan
260	High Gain AMC- Loaded Millimeter-Wave Antenna for 5G New Radio Applications	KANURI NAVEEN, Vakula Damera
96	A Compact Planar Antenna operating at Lower and Higher 5G bands	Venkat Sai Ram Sabbarapu, Saritha Vanka, Nagurvali Shail, Prasanth Rayudu, Siva Naga Malleswari Nematikanti
7	Design of Switched Beam Antenna System using 4x4 Butler Matrix for Wireless Communication Applications	Maniratnam Badavath Naik, Vamshi Sai Yele, Veera Manikumar Devarakonda
22	A Proposed MIMO Antenna Design for Ultra-Wideband THz Applications	Amin alkabi
242	Thermal Analysis Assisted Power Handling Capability Enhancement in Probe-fed Microstrip Patch Antennas	Deb Chatterjee, Bidisha Barman, Kalyan Durbhakula

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MICROWAVE

Session : M1: MW Passive circuits 01

Chair:Dr. Somak Bhattacharyya

Paper ID	Paper Title	Authors
12	Tunable Microstrip Band Pass Filter With Constant Absolute Bandwidth Using BST Varactors and Digitally Tunable Capacitors	Gowrish Basavarajappa, Manoj Kumar
31	LoRa - Powered Smart Agriculture System for Monitoring and Controlling	Gembali Dinesh, Akash Kumar Gupta, Muttana Nagaseshireddy, Ponnuru Durga Prasanna, Metta Satya Varshini, Kotturu Gowtham
37	Simplified Biasing AFSS Microwave Absorber	Kumud Ranjan Jha, Umair B. Farooq, Satish Sharma
44	Compact Water-based Coaxial delay line	Keerthipriya Sathish, Raghunathan Agaram, Nagaraja H N, Avinash Deshpande, Shiv Sethi
48	Three-Way, Equal-Phase High Power Divider & Combiner with a Novel method of improving Isolation	Pankaj Gupta, Sudip Kumar Murmu, Ashwini U
64	Model-Based Design for Direction-finding with Amplitude Comparison	Sourabh M Joshi, Shashank Kulkarni

Session : M2: MW Passive Circuits 02

Paper ID	Paper Title	Authors
56	Design of Splash Plate Dielectric Hat Feed for Ka-Band Tracking Radar Applications	Tarlok Singh, Indira Srivastava, Bal Mukund Jha
99	Design of Amplitude and Phase Controlled Butler Beam Forming Network for X/Ku-band Airborne Synthetic Aperture Radar Applications	VENKATA KISHORE KOTHAPUDI
157	Advancing Bandpass Filters: Spatio-Temporal Modulation with Coupled Line Sections for Non-Reciprocal Behavior	SUHAIL AFROZ MOHAMMAD, Arun Kumar Gande, Gopi Ram, Prantik Dutta
167	A 2-6GHz Wideband BPF and A Miniaturised Tri-Band BPF Based on HMSIW	MARY RANI ABRAHAM, Sukomal Dey, Rajneesh Patel
189	Design and Optimization of SIW Cavity Filter for 14.5 GHz Applications	srujana vahini, Rama Krishna Dasari, rajender D, Yashomathi B
227	Design and Comparative Study on Planar ELC Resonators for er Analysis	Anilkumar Tirunagari, Narasimha Makireddi, B T P Madhav, Venkateswara Rao Manikonda
15	A Three-Ray Path Loss Model with Polarization Effects for Indoor Single-Input Single-Output Millimeter-Wave Channel Modelling Applications	Atli Lemma L Gebretsadik, Debdeep Sarkar

Session : M3 : MW Passive Circuits 03

Paper ID	Paper Title	Authors
103	Design and Analysis of 8-Way RF Feeding Network for C-Band Airborne Synthetic Aperture Radar Applications Using Conventional Technique	VENKATA KISHORE KOTHAPUDI
231	Design of Power Combiner and Power Divider at Ku Frequency Band Applications	PRADEEP GORRE, Aswini Kumar Samantaray, Sampath Kumar Bandi, Raja Babu Bandi
237	Analysis of Rotman Lens Geometry for 5G Communication	Deep Kishore Parsediya, Pramod Kumar Singhal
240	A Dual-Band Bandpass Filter Using Resonators	Kamalaker Yennamalla, Sandhya Rachamalla

Session : M4: MW Active Crts 01

Paper ID	Paper Title	Authors
27	Simple, Economical & Innovative Solution for Obsolescence Management of Active x3 MIC based RF Freq Multiplier	ROHIT LAHIRI, Gaurav Anand, Tulasi Sivakumar Deepala
35	X-Band Rugged Remotely Monitored Controller Based High Power Amplifier	Narendra S, Kavitha V, Anupama RK
57	Design of Narrow edge Liquid cooled Solid State Pulsed Power Amplifier in X Band with integrated control system	Anirudh Kumar, Priyanka Pai, Narendra S, Kavitha Vadipilla
107	High-Speed LO Generation for Advanced Radar and Communication Systems	Hemanth Kumar C, Venkatesh Chidanand Badiger, Madiwalesh M Pattar
132	Design and Realization of Cascaded S Band Power Amplifier on Hybrid Multilayer PCB	Chandrashekar K, Ashwini U, Vanitha Chavan L, Beeravelly Revanth Reddy
133	Triple-Band Efficient Rectifier Circuit for Harvesting Ambient RF-Energy	Prashad Lalbabu, Prof. Harish Chandra Mohanta, K. Phanindra Vinay, Dattatreya Gopi

Session : M5: MW Active Cts & Systems

Paper ID	Paper Title	Authors
36	A Highly Integrated Design of Dual-band HF Band (13.56MHz) / UHF Band (915MHz) Rectifier for Wireless Power Transfer	Chien-Chin Huang, Ta-Jen Hsu, Hsin Chen
109	An Efficient Dual-Band Rectifier for GSM/Wi-Fi Bands Operated Microwave Power Transfer Applications	Md Ahsan Halimi, Taguru Anusha, Sumon Modak, Battula Suresh
138	A Novel Broadband 45° Phase Shifter For Space Applications at Ka – Band	Pragati Swami, Jolie R, Suvarna L, Ramalakshmi N, Dr Senthil Kumar V
155	Design of Class-F Power Amplifier for Active Antennas Operating over the UWB regime	Shushmasri Ch, Sukomal Dey
206	Current Trends of Microwave Imaging	B Sridhar, Naresh K. Darimireddy, B.Ram Mohan, N.Raja Sekar,
243	Design of 3.3GHz-3.8GHz 5Watt High Power Amplifier using GaN HEMT Device	Sangam Bhalke, Ravi GUGULOTHU, Sandeep Chaturvedi, Anant Naik, Ramakrishna Dasari
205	Compact Narrow-Band Sharp Rejection Bandstop Filter Using U-Shaped Resonator For GNSS Receiver	Ramalakshmi NNagendra Dr Kumar, Vamsi Krishna Velidi, Sivareddy Devireddy, AVG Subramanyam, V Senthil Kumar

Session : M6: Freq Selective Surfaces

Paper ID	Paper Title	Authors
25	A Thin Quad Band FSS Based on Enclosed Cross Slots to Foster Gain in Multiband Applications	PRATYANCHA PRASAD, Ravi Pushkar, Dr. Akhilesh Kumar,
78	Systematic Analysis of a RF-Choke Enabled 2-bit Reconfigurable Digitally Coded Metasurface for 5G Beam Steering Applications	SNEHA MUKHOPADHYAY, Dipankar Saha, Bhaskar GUPTA, Ayona Chakraborty, SAMIK CHAKRABORTY
130	A 2-bit Polarization-Insensitive Unit Cell for Triple Band Reconfigurable Intelligent Surface	Amit Sikder, Vimal Kumar, Akhilesh Mohan
183	A New Defective Ground Structure Inspired High Gain Rectenna System for RF Energy Harvesting in Smart City Applications	Javaid Ahmad Sheikh, Nareen Jan, Aabid Rashid Wani, ahsan halimi, Altaf A Balkhi
239	Compact Diplexer Using Electromagnetic Bandgap Resonators for C and X Band Radar Systems	Soumik Dey, Aswin Sankar P D, Adarsh S Kumar, Nanda Kishore S, Asish Kumar T, Athul O Asok, DEBAJIT SARMA, Sukomal Dey
256	Polarization-Insensitive Metasurface-Biosensor for Glycosuria Sensing in Terahertz Regime	Naveen Kumar Maurya, Prakash Pareek, Lokendra Singh, DR.SADHANA KUMARI, NaveJayanta Ghosh
61	A Multifunctional FSS with dual band shielding in transmission mode and absorption in reflection mode	Priyanka Das, T. Aishwarya

Session : M7: Microwave Systems

Paper ID	Paper Title	Authors
58	RFI Survey in L and S band for APSErA Cosmology Experiment	Keerthipriya Sathish, Mayuri Sathyanarayana Rao, Debdeep Sarkar, Kasturi S, Srivani K S, Girish B S, Somashekar R, Saurabh Singh, Yash Agarwal, Adarsh Kumar Dash, Vishakha S Pandharpure
65	Simulation and Design for Sub-THz Spectrum TWT Pierce Source with Beam Stabilizer and Magnetic Field Guard	Mohit Ravindra Thakur, Sandra Radhakrishnan, Dr. V. M. Phalle, Anurag Srivastava
69	Multi-Channel Transmit-Receive Module (MCTRM) Operating In X-Band For Radar Application	devendra Kirad, Varsha G H, Ashwini U, Aditya Chauhan, Rajesh Kumar s
90	Design and Development of Ku Band Receiver Front End for Radar Application	Pramod C Metri, Putti Ram Swarup, Susarla Hari
122	RF Front End Combinational Filter for Airborne V/UHF Communication System	Kalyana Rao Bolleddu, JITESH REDDY R

WIRELESS

Session : W1: MIMO/SISO

Paper ID	Paper Title	Authors
111	Design and Analysis of narrowband 28.0GHz n257 and n261 for Short Range Communication with Higher Data Rates	Dr. KANHAIYA SHARMA, Manish Sharma, Ganga Prasad Pandey, Naresh Kumar, Rana Gill
119	Channel Estimation and Data Detection using Coarse Quantization for Multiuser MIMO OFDM Systems	VAMSIDHAR ANAGANI, SURYA KAVITHA T, THEJESH KUMAR CH, SUNIL KUMAR G, SRIDHAR G.V, Dattatreya Gopi
225	Cross Slotted Antenna at X Band for Wireless Applications	Srivalli Gundala, Srinivasa Baba V S S N, Sathwika Srigada, Pooja Nenavath, Preethililly K, Sravan Kumar Kumar Talusani
254	Parking Wireless Assistive System for Smart City Parking Management	Rohit Anand, Jaskiran Sobti, Krishna Kant Dixit, Ahmed Alkayyat, Shivani Pant, Harshpreet Kaur
273	Adaptive filter Clipper-Based PAPR Reduction Techniques for Massive MIMO-OFDM	B Sridhar, S Sridhar, S RamaKrishna, Naresh K Darimireddy

Session : W2: Wireless Comm

Paper ID	Paper Title	Authors
13	Implementation of Serial FPDP and 10G Ethernet in an FPGA based Real Time Embedded Hardware	ABHINANDAN SARKAR, Jayabrata Chakrabarty, M Sheik Althaf
28	SOP Minimization in Cooperative Relay-based NOMA Network with Control Jammer	Narasimha Nayak Vankudoth, Rohan D.B.S., Kumar Reddy Dandu , Paipuri Sridhar, Dr.Kiran kumar Gurrala
34	Improving Secrecy Rate in NOMA Network with Jamming Schemes	Narasimha Nayak Vankudoth, Pranathi Nilakantam, Divya Konduru, Deepthi Basthati
52	Effect of Realistic Behavior of High- Frequency Antennas in Spectral Efficiency	Aditya Kumar, Meenakshi Rawat
117	Performance Evaluation of 3GPP-Standard Driven Polar Coded Modulation for 5G	Lopamudra Mazumder, Sandip Ghosal
121	Multiuser Precoded OFDM System over Nonlinear Power Amplifier	Somak Bhattacharyya, Shivam Kumar, Sanjeev Sharma, Rahul Hindustani
163	A NOVEL APPROACH FOR SHADOW REMOVE AND PAVEMENT CRACK DETECTION USING DEEP LEARNING TECHNIQUE	Kusuma Talada, Sreeram Prabhat Sojay, Tekupudi Sangeetha, Vanapalli Rohit, Botta Priyanka
253	Data Visualization of Weather Conditions in Hilly Regions using Wireless technology	Rohit Anand, Ahmad Alkhayyat, Arti Badhoutiya, Jaskiran Sobti, Rajesh Singh, Raman Kumar
45	Performance of Multiple Intelligent Reflecting Surfaces in RF and FSO Communication Systems	M D SELVARAJ, Kirubakaran S

Session : W3: Wireless Applications

Paper ID	Paper Title	Authors
154	Exploring ML Solutions for Challenges in WSN Development: A Comprehensive Survey	SRUJANA PENNAM, J.Priyanka, K.Gurucharan, M.Rajanbabu
166	Reconfigurable Ultra-wideband Bandpass Filter with Controlled Band-Notches for Dynamic Operation	Partha P Shome, Taimoor Khan
191	A Frequency domain 8-bit chipless RFID tag for IOT and Sensor Applications.	Ashish Kumar Girmilla, Priyabrata Sethy, Santanu Kumar Behera
214	Wireless Energy Harvesting with Rectenna Technology for Wi-Fi Band	sanjeeva reddy, YASHWANTH MULKANURI, POORNA CHANDRA SAI MEKALA, JAYAVARDHAN KURIMINENI, Jayshree Das, RAMESH DESHPANDE
217	Bayesian Neural Network for Robust Estimation of Signal Source Number in Acoustic Sensor Data	Sandip Ghosal, Samiran Das
236	Type 2 Diabetes Prediction using Machine Learning: A Game-Changer for Healthcare	Sadhana Singh

Session : W4: RF Tags

Paper ID	Paper Title	Authors
9	Slot Loaded offset feed SIW Cavity Backed Triangular Perturbed Antenna with Improved Bandwidth	Shankaragouda M Patil, Rajeshkumar Venkatesan
21	Performance Evaluation of Diversity Techniques in Wireless Communication Systems	Chandra Sekhar K, G JAYA SANDEEP SAI, Balijireddy Pujitha, B Appala Naidu, B Sai Dheeraj, A Uday Jagadeesh
142	TUMOR IDENTIFICATION AND CLASSIFICATION OF MRI BRAIN IMAGES USING DEEP LEARNING OPTIMIZERS (Adam vs Sgdm)	Dummu Malleswara Rao, T L Spandana, D Tejomai, ANAPAGADDI VIJAYA SHYAM, BANTU SUSHANTH
232	AREA and DELAY Efficient Processing Element Architecture using MBE and Wallace Tree Adder for CNN Accelerators	Roopa R Kothapalli, Vanapalli Leela Rani, Balaji N
255	Real-Time Beehive Condition Improving Frequency Selection and Bee Welfare Monitoring and Analysis	Rohit Anand
258	Towards Multi-Sensing Aspects: Robust Passive Chipless RFID Sensor Tag	Rohit Anand, Syed Muzahir Abbas, HAFSA ANAM, Subhas Mukhopadhyay, Shobit Agarwal, Priyanka Dalal

Poster Dimensions should be (3 x 3)ft

Poster Presentations

Paper ID	Paper Title
8	Employing Efficient Decoding Algorithms to Reduce Bit Error Rates in 5G Applications and Beyond
24	Equalization of RMC R.4 Signals using MMSE and Zero Forcing Equalization Techniques
40	Detection of Brain Stroke by using the Novel Adaboost Classifier Algorithm Classifier Algorithm Compared with Multi-Layer Perceptron
41	A Rectangular Slotted Symmetrical Antenna for WLAN Applications
51	Analysis of the Multidirectional Single Channel Speech Quality Improvement Using Dyadic Discrete Wavelet Transform in Comparison with Discrete Wavelet Transform for Improved Accuracy
70	Design of Triangular Shaped Multiple Input Multiple Output Antenna with Defected Substrate for 5G Sub 6 GHz and WLAN Applications
72	A Broadband Rectifier With High Power Conversion Efficiency and High Power Handling Capability for Microwave Power Transfer Applications
81	Smart Blind Glasses Using OpenCV Python
91	Reflector-based Isolation Technique for mm-Wave MIMO Antenna
93	Real-Time Bitcoin Cost Identification to Improve Efficiency Using Lasso Regression in Comparison with Decision Tree

97	Dual-band E-textile Artificial Magnetic Conductor
108	A Millimeter-Wave Array antenna for Improvement of Radiation Patterns
118	A Four-Port Super-wideband Monopole Antenna Including Multi-Band Wireless Applications for On-Body Applications with SAR Analysis
124	Sustainable Design and Analysis of Quasi Snowflake Fractal Antenna for Multiband Wireless Applications
139	Study of False Alarm Using Sliding Window for Pulse Detection Radar System
149	A Review on Microwave Imaging for Breast Cancer Detection
160	Semi-Lumped Cross-Coupled Non-reciprocal Bandpass Filter for 5G Communications
161	CX Band Semi Disk-Ring Dual Band Shared Aperture Antenna
165	Bandwidth Enhancement of SIW Cavity Backed Slot Antenna Using High-Order Radiation Modes
174	Design And Analysis Of Parasitically Coupled DRA Using Parametric Analysis For High Gain Using Aperture Coupling
175	A Broad Impedance Bandwidth with Dual Sense Triple Band Circular Polarized Printed Antenna
180	Intelligent Modeling of Circular Microstrip Antenna for RF Energy Harvesting Applications
186	Design and Development of Compact Microstrip Patch Antenna with DGS for Wireless Applications
192	Intelligent Torque Control System for Vehicle Safety: A Human-Centric Approach with ESP8266 and Blink IoT Integration
193	DESIGN AND IMPLEMENTATION TWO ELEMENT MIMO ANTENNA OF METAMATERIAL BASED SUPERSTRATE FOR 5G APPLICATIONS
194	Design and Optimization of Non-Woven Polyester Made U shaped Flexible Patch Antenna for Early Detection of Thyroid Cancer
203	Study Of 5G Adaptive Beamforming in Antennas
207	Aperture Coupled High Gain Metasurface Based Antenna for CP Radiation
215	Circular Polarized Conformal Array Antenna For Satellite Applications
220	LTCC Antenna for WLAN Applications
221	Performance Evaluation of OFDM, FBMC and UFMC for Wireless Communication
250	A 3-bit Intelligent Reflective Surface with Reconfigurable Phase States, Angular Stability and Polarization Insensitivity for WiFi and IoT applications
83	AATHREYASAT: A CANSAT MODEL FOR AIR POLLUTION MEASUREMENT IN COMPETITION
100	Analysis of Uniform Amplitude Butler Beam Forming Network for X/Ku-Band for Air-Borne Synthetic Aperture Radar Applications
125	Design of a dual-band Monopole antenna for Internet of Things and Sub-6 GHz 5G applications
171	A Novel Compact Two-Port MIMO Antenna verified with TCM Analysis for 28/38GHz 5G mm-wave Applications
179	Metasurface-based Frequency Reconfigurable two-port MIMO Antenna for 5G Application
266	Integrating Gas-Sensitive Layers on Rectangular Patch Antenna for Enhanced Gas Detection
173	Design and Analysis of Rat-Race Coupler for 5G MIMO Antenna System Applications
50	X-band Waveform Generator with Calibration feature for Active Phased Array Radar

268	4X4 Planar Antenna Array for Enhanced Gain
20	Substrate Integrated Waveguide Fed Dielectric Rod Filter

Young Professionals Session : Presentations		
Name	Designation	Affiliation
Dr. MD AHSAN HALIMI	Assistant Professor	V R Siddhartha Engineering College, Vijayawada, India
Dr. Arvind Kumar	Assistant Professor	VNIT Nagpur
Dr. Kunooru Bharath	Engineer	ICOMM TELE LIMITED, Hyderabad
Sreenath Reddy Thummaluru	Assistant Professor	IIITDM Kancheepuram
Dhupam Arun Kumar	Assistant Professor	Raghu Engineering College

STUDENT PAPER CONTEST

Sr.no	Name	Category	Title
1	Mamta Devi Sharma	Ph.D	Design and Performance Evaluation of RF Energy Harvester for Wearable Sensor Nodes
2	Tilakdhari Singh	Ph.D	A Trapezoidal Ground-based Truncated Rectangular Patch Antenna for Non-Invasive Monitoring of Bone Fracture Healing
3	Arya K M	Ph.D	A FSS- based Single Layer Reflective Polarizer for X/Ku- Bands
4	Arun Kumar	Ph.D	Compact Polarization-Insensitive FSS with Angularly Stability in Dual Stop-band Range
5	Buch Dhyey	Masters	Fabry-Perot Cavity Antenna-based Feed Cluster with Interlaced Feed Apertures for Satellite Communication Applications
6	Sai Harshini Behara	Bachelors	Sierpinski Gasket Fractal-based Microwave Metamaterial Absorber
7	Gowri P	Bachelors	EM Design of Beam Steering Antenna using Active Frequency Selective Surfaces at 24 GHz
8	Pallavi U Sharma	Bachelors	Study on Quantum Radars for Space Applications
9	Praveen Reddy M	Bachelors	A Novel Metamaterial Absorber for WiBAN and X-Band Applications

WAMS 2024 – WIE SCHEDULE

Date: 1st March,2024 Venue: ROOM 1

S.NO	SCHEDULE	SPEAKER
INVITED TALKS		
1	11.15AM – 11.45AM	Dr.Binsu Kailath, IIITDM, Kancheepuram
2	11.45AM – 12.15PM	Dr.Madhumita Chakravarthy, DRDO
3	12.15PM – 12.45PM	Dr.Balamati Chaudhary, CSIR-NAL
4	12.45PM – 1.15PM	PANEL DISCUSSION
Oral presentation for industry professionals		
5	2PM – 2.15PM	SANGEETHA BALASUBRAMANIAM, MATHWORKS
6	2.15PM – 2.30PM	L.PUNITHA, SAMEER-CEM
7	2.30PM-2.45PM	TANMAYI SEEDRALA, ASTRA MICROWAVE
8	2.45PM – 3PM	VISHAKHA PANDHARPURE, RAMAN RESEARCH INSTITUTE
BEST RESEARCH SCHOLAR AWARD		
9	3PM – 3.10PM	VADLAMUDI ROJA
10	3.10PM – 3.20PM	DIVYA MOKARA
11	3.20PM – 3.30PM	BHAVYA E.V
12	3.30PM-3.40PM	NAMEESHA CHAUHAN
13	3.40PM – 3.50PM	SUJATHA NARESH