

MMS

2018

Mediterranean Microwave Symposium

MMS 2018

The 18th Mediterranean Microwave Symposium

31 October - 2 November 2018

ISTANBUL - TURKEY



CONFERENCE PROGRAM

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CHAIRMEN'S MESSAGE

Dear Colleagues, Friends and MMS attendees,

We would like to welcome you all to the "18 Edition of Mediterranean Microwave Symposium 2018" in Istanbul, Turkey.

All MMS conferences were very cozy, friendly and academically high quality gatherings for the microwave engineering community; we expect the same in 2018. Most of the leading attendees are close friends in the field who miss each other and look forward for the next meeting. It is also an outstanding platform for research students to meet with leaders in the field and their.

A standing ovation is due to Muhammad Essaidi who initiated this conference in the year 2000.

From our side, it was a remarkable adventure to organize this valuable symposium, after Marseille, in Istanbul for the second time.

Once an imperial capital, no doubt Istanbul is an outstanding city of all times with warm-hearted people. It reflects the historical lines of humanity enriched by the cultures of Roman and Othman Empires as well as the Turkish Republic. The conference hotel, Istanbul Hilton with a magnificent view overlooking the Bosphorus, is centrally located and very convenient to create a pleasant atmosphere for the conference attendees.

We were very selective in preparing the scientific program and the venue of the conference. As for the social events, it is full of surprises that we expect you will all like.

Taking this opportunity, we wish to embrace a peaceful world and we hope that you will have a splendid stay in Istanbul.

Sidik Yarman - Cem Göknaar - Tayfun Nesimoglu
MMS Chairs of 2018

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LECTURE PRESENTATION INFORMATION

The duration of a presentation slot is 15 minutes. You will have 12 minutes for the presentation itself and 3 minutes for questions from the audience.

A LCD projector & computer (Windows XP, MS PowerPoint & Adobe Acrobat Reader) will be available in every session room for regular presentations. Neither Overhead projector, 35mm slides projectors nor VHS videotape player will be available.

Preparation of Visuals:

PLEASE NOTE THAT INDIVIDUALS USING COMPUTER PROJECTION MUST EITHER BRING THEIR OWN LAPTOP COMPUTER WITH THE APPROPRIATE PRESENTATION SOFTWARE LOADED OR BRING A MEMORY STICK CONTAINING THEIR PRESENTATION. Files can be uploaded to the local PCs in the lecture rooms during the breaks between the sessions. To avoid software compatibility problems (MS PowerPoint), speakers are advised to save their PowerPoint presentation with the Package for CD feature AND bring a backup PDF-version of their presentation.

It is strongly advised that non-white slightly darker than pastel backgrounds be used in ppt slides. Speakers should arrive in their session room 15 minutes BEFORE the start of their session to report to the chair person. A proctor will also be available in case you need technical assistance. Speakers are strongly encouraged to review their presentation in advance to avoid any last minute problems.ion

Poster Presentation Information

There will be a large number of posters presented during the three days of the conference. A large number of posters will be exhibited at each session. In order to make these sessions run smoothly, some cooperation from you, as a poster exhibitor, is necessary. First of all, it is essential that your poster is put up latest by 31 October 2018 Wednesday at 09:00 AM.

The placement of your poster will be marked on the panel, where it will be presented with the number of your poster contribution: Ex. PS1- (poster session 1.) and your 4 digit poster number which announced at program Look for your number in the conference program.

The size of the poster panel that is available to each presenter is A1 61cm (wide) x 91cm (high) The format of the poster panel is landscape (width > height). This cannot be modified. You are free to choose a poster (or many smaller posters) that fit on the given panel size. Your posters will be attached to the panel with tape, which will be available in the poster area. If you need more tape, please contact the poster area proctor. After you have removed your poster, please clear the board of all tape.

CONFERENCE PROGRAM

Wednesday, 31 October 2018				
SADIRVAN A				
09:00 09:30	Address of the Honorary Chair			
	Mohamed Essaaidi <i>Professor, Mohammed V University of Rabat, Morocco</i>			
09:30 10:30	Opening Speech of the General Chair			
	Siddik Yarman <i>Professor, Istanbul University, Turkey</i>			
09:30 10:30	Plenary Talk			
	"Advances and Prospects of Microwave Technology in ASELSAN Hayrullah Yıldız <i>ASELSAN, Turkey</i>			
10:30 10:45	Coffee Break			
10:45 12:30	SADIRVAN A	MERCURY	JUPITER	SADIRVAN B
	AP-1	MWCD-1	WCOM	
12:30 14:00	Lunch			
14:00 15:45	AP-2	MWCD-2	WPTEH	
15:45 16:00	Coffee Break			
16:00 17:45	AP-3	MWCD-3	IOT	
19:30	Welcome Cocktail- HILTON LOBBY TERRACE			

Thursday, 1 November 2018				
SADIRVAN A				
09:00 09:50	<p>Keynote Speech</p> <p>“Extreme Wave Platforms”</p> <p>Nader Egheta <i>H. Nedwill Ramsey Professor University of Pennsylvania, USA</i></p>			
09:50 10:40	<p>Keynote Speech</p> <p>“Antennas for Wireless Communications and other Applications: Recent Advances and Future Trends”</p> <p>Yahia M.M. Antar <i>Royal Military College of Canada & Queen's University, Canada</i></p>			
10:40 11:00	Coffee Break			
11:00 12:45	SADIRVAN A	MERCURY	JUPITER	SADIRVAN B
	AP-4	MWCD-4	MWSS	Poster
12:45 14:00	Lunch			
14:00 15:45	AP-5	MWCD-5	FIL (Special Session)	Poster
15:45 16:00	Coffee break			
16:00 17:45	AP-6	SCT	BIOM	Poster
19:30	Gala Dinner- HILTON BALLROOM			

Friday, 2 November 2018				
SADIRVAN A				
09:00 09:50	<p>Keynote Speech "From Engineering Electromagnetics towards Electromagnetic Engineering"</p> <p>Levent Sevgi <i>Okan University, Turkey</i></p>			
09:50 10:40	<p>Keynote Speech "An Overview of Frequency Diverse Array (FDA) Radar Concepts"</p> <p>Altunkan Hizal <i>Professor, Middle East Technical University, Turkey</i></p>			
10:40 10:50	Coffee Break			
10:50 12:50	SADIRVAN A	MERCURY	JUPITER	SADIRVAN B
	MWIM (Special Session)	MWCD-6	CMEM	
13:10 17:30	City Tour			

- AP: Antennas and Propagation
 BIOM: Bio-Medical Applications
 CMEM: Computational Methods in EM
 FIL: Filters (Special Session)
 IOT: Internet of Things
 MWIM: Microwave Imaging (Special Session)
 MWCD: Microwave Circuits and Devices
 MWSS: Microwave Systems and Signals
 SCT: Simulation and Characterization Techniques
 WCOM: Wireless Communications
 WPTHE: Wireless Power Transfer and Energy Harvesting

P NO	AP-1	Presenting Author
1008	Novel Design of Dual High Band-Noctch UWB Antenna Based on CSRR and Parasitic Arms	Baraa Kareem
1009	New Design of Tri-Band, Small Size Microstrip Slot Antenna Based on Fractal Geometry for Mobile and Wireless Communications	Zaid Abdul Hassam
1039	Design and Miniaturization of UHF RFID Reader Antenna	Kawther Mekki
1050	A miniaturized polarization insensitive Frequency Selective Surface at Ka-band	Rana Sadaf Anwar
1062	PSO Based Approach to the Synthesis of a Cylindrical-Rectangular Ring Microstrip Conformal Antenna Using SVR Models with RBF and Wavelet Kernels	Mahmud Esad Yigit
P NO	AP-2	Presenting Author
1063	Pattern Synthesis of Linear Antenna Array via a New Hybrid Taguchi - Genetic - Particle Swarm Optimization Algorithm	Mahmud Esad Yigit
1115	A Novel Design of Multi-Band Microstrip Patch Antenna for Wireless Communications	Younes Karfa Bekali
1130	Multilayered Wideband SIW Antenna Incorporated with Slot and DGS	Achmad Munir
1142	Design of a Multi-Layer Beam-steering WLAN Antenna	Kardelen Yilmaz
1082	Miniaturized Circularly Polarized Patch Antenna for RFID System	Lotfi Osman
P NO	AP-3	Presenting Author
1148	Design and Implementation of Transmitting and Receiving Antenna Pair on Flat Ring Surface	Yigit Haykir
1150	Design of Fractal based Monopole Antenna Array with Ultra-Mutual Coupling Reduction for MIMO Applications	Dogu Cagdas Atilla
1032	A Dual-Band Frequency Selective Surface Design for Satellite Applications	Esmat Mutluer
1090	Systematic Design of a Circularly Polarized Microstrip Antenna Using a Shape Super-Formula and the Characteristic Mode Theory	Mohammad Poordaraee
1128	Multi-Band Compact Frequency Selective Surface Based on Modified Loop and Parasitic Patch	S. H. Sedighy

P NO	AP-4	Presenting Author
1077	Study of a Conical DRA Array with Enhanced Bandwidth and Gain for C-band Applications	Lotfi Osman
1024	Design of SIW frequency agile antenna based on a varactor loaded on U-slot	Fakher Sboui
1042	Hexagonal-Pixel Surfaces for the Reconfiguration of Inkjet-Printed Antennas	Ozgur Ergul
1044	Novel Wearable Radio-Frequency Antennas Based on Woven Conductive Fabrics	Ozgur Ergul
1046	Dual Band Edge Wall Slotted Array Antenna with Reduced Cross Polarization at X Band	Baisakhi Bandyopadhyay
P NO	AP-5	Presenting Author
1084	Design of 4x4 Antipodal Vivaldi Antenna Array for Actively Electronic Scanned Array (AESAs) Radars	Muhammad Salman Ijaz
1126	The Effect of the Ground Slots up on the Bandwidth Performance for UWB Antenna	Mohamed S. Soliman
1151	Size reduction technique of microstrip patch antenna using saw teeth slots	Cagatay Aydin
1029	Design of Dual Wide Band Dielectric Resonator Antenna using Sierpienski Fractal Geometry	Rinki Ghosal
1072	Design and implementation of a directional antenna for a Traffic alert and Collision Avoidance System (TCAS)	Mostafa Samy Abdelsadek Mohamed
P NO	AP-6	Presenting Author
1056	Integrated Substrate Integrated Waveguide Diplexer and Microstrip Antenna	Noor Hasimah Baba
1055	Designs for leaky-wave antennas using Metamaterial structures	Sara Ghanem
1119	Numerical Analysis of All dielectric chiral Metasurface with Optical Activity property	Ali Yahyaoui
1129	Ultra-wideband RCS Reduction Using Polarization Conversion Metasurfaces	E. Ameri
1137	A Broadband Linear-to-Circular Polarization Conversion Anisotropic Metasurface	Faroq Tahir

P NO	CMEM	Presenting Author
1125	Estimation of Electrical Properties of Infinite Slab With Newton's Method	Mehmet Nuri Akıncı
1124	A study of wave propagation in a pair of unparallel straight lines	Anh Tuan Tran
1043	A Broadband Electromagnetic Solver Based on Multiscale MLFMA and Hybrid Integral Equations	Ozgur Ergul
1045	A Radar Cross Section Reduction Method Using the Concept of Coordinate Transformation and Isotropic Dielectric Layers	Canberk Pay
1041	A Perturbation Method for TM Scattering from a Conducting Strip Buried or Right on the Interface between Two Dielectric Half-Spaces	Inci Umakoglu Dolu
P NO	MWCD-1	Presenting Author
1147	Microwave Circuits with Exceptional Points and Applications in Oscillators and Sensors (Invited Talk)	Mohamed Nada, Filippo Capolino
1071	A 50 Gb/s PAM-4 Optical Modulator Driver for 3D Photonic Electronic Wafer Scale Packaging	Xi Zhang
1110	A High Speed 180 nm CMOS Cryogenic SAR ADC	Mustafa Berke Yelten
1011	A High Linearity Broadband Gain Block/LNA MMIC with Diode Predistortion in GaAs pHEMT Technology	Adnan Gündel
1028	Design of an 8x8 SiGe BiCMOS Butler Matrix	L. Boccia
P NO	MWCD-2	Presenting Author
1078	Planar Slow-Wave Structures for Low-Voltage Millimeter-Band Vacuum Devices (novel approach for fabrication, numerical and experimental measurements)	Andrei Starodubov
1033	LCP Ultra-Wideband Self-Packaged Microstrip to Stripline Transition With Multilayer Balun Demonstration	Khaled Aliqab
1127	Bi-Static Time Domain Study for Microwave Breast Imaging	Zahra Katbay
1111	Design and Implementation of a Novel and Compact 2-Bit Wide Band Digital Phase Shifter	Celal Avci
1092	A Wideband (3-13 GHz) 7-Bit SiGe BiCMOS Step Attenuator with Improved Flatness	Yasar Gurbuz

P NO	MWCD-3	Presenting Author
1140	Chiral SRR metasurfaces for circular polarisation conversion	Mariem Aznabet
1095	Polarization Insensitive Metamaterial Absorber Using Sunflower Shaped Unit Cell	Sinan Aksimsek
1023	Development of SIW LWA from non-uniform CRLH unit cells with SLL reduction	Rihem Noumi
1059	Multispurious Harmonic Suppression in Compact Coupled-Line Bandpass Filters by Trapezoidal Corrugations	Tarun Kumar Das
1075	RF Front End and Baseband Integration Considerations for Single Board GNSS Software Defined Receivers	Tayfun Aydin
P NO	MWCD-4	Presenting Author
1031	Waveguide Switchable Bandstop and Bandpass Filters Using RF MEMS Switches	Xiao Li
1036	Transitional Butterworth-Chebyshev Filters	Metin Şengül
1027	Compact Tunable Bandpass Filter for RF and Microwave Applications	Fayrouz Haddad
1104	Dual Band Filter Design for GSM Bands Using Frequency Mapping and Real Frequency Technique	Serkan Yıldız
1135	A Lumped Element Analog of Dual-Stub Microwave Electromagnetically Induced Transparency Resonator	Farooq Ahmad Tahir
P NO	MWCD-5	Presenting Author
1106	A Numerical Approach for the Design of Matching Networks Consisting of Brune Sections Based on Fujisawa Constraints	Serkan Yıldız
1114	Broadband Impedance Transformation by Defected Dielectric on Microstrip Lines	Tolga Kaya
1136	Design of an Ultra-Wideband GaN Power Amplifier via Real Frequency Technique	Sedat Kilinc
1141	Wideband Quarter Wave Transformer Based on Defected Ground and Split Ring Resonator Structures	Yahya Yuksek
1105	Real Frequency Design of Multiband Matching Networks with Mixed Lumped-Distributed Elements and Foster Resonance Sections	Serkan Yıldız

P NO	MWCD-6	Presenting Author
1089	High Efficiency Wideband Power Amplifier with Class-J Configuration	Engin Çağdaş
1131	An Inductor-less Bipolar-MOSFET (BiFET) Dual Band Low-Noise Amplifier (LNA) with Power Gain Peaking	Muhammad Shah Alam
1098	A High Power, GaN, Quarter-Wave Length Switch for X-Band Applications	Onur Memioğlu
1010	A High Linearity Wide Bandwidth GSM/WCDMA/LTE Base Station LNA MMIC with Ultra Low Noise Figure	Adnan Gündel
1025	Power Amplifier Design Optimization with Simultaneous Cooperation of EDA Tool and Numeric Analyzer	Lida Kouhalvandi
1093	0.13 μ m SiGe BiCMOS W-Band Low-Noise Amplifier for Passive Imaging Systems	Yasar Gurbuz
P NO	FIL (Special Session)	Presenting Author
1152	Recent Advances in Microwave Filter Design on Filpro	Nevzat Yildirim
1154	Design of Microstrip Quadruplet Filters on Filpro	Sacid Oruc
1121	Design of Selective Linear Phase Cross-Coupled Dielectric Resonator Filters	Onur Ozan Ozturk
1122	Synthesis Approach for Compact Ku-Band Waveguide Lowpass Filters with Wide Rejection Bandwidth	Metehan Cetin
1123	Dimensional Design of Dual Mode Waveguide Multiplexers	Gokhan Boyacioglu
P NO	MWSS	Presenting Author
1091	Phase Noise Reduction in Low Cost 24/77 GHz FMCW Sensors	Mohammad Rezaei
1004	The Fast Multipole Method for Sparse Solution of Linear Inverse Scattering Problems	Emre Alp Miran
1066	On The Inherent Self-Interference Suppression of Full-Duplex Phased Arrays	Ilker Kalyoncu
1144	Frequency Modulated Continuous Wave Radar for Range Detection	Enes Burak Şahin
1058	Implementation of a SAR Demonstrator for Automotive Imaging	Markus Schartel

P NO	SCT	Presenting Author
1018	Homogenization of Microwave Metamaterial Structures Using Full-Wave Solutions and Genetic Algorithms	Ozgur Ergul
1019	Improved Fonts for Chipless Radio-Frequency-Identification Tags Based on Letters	Ozgur Ergul
1016	Parametric study of different shapes-slotted substrate integrated waveguide for wideband Applications	Diaa Fawzy
1049	Effect of Bending on the Characteristics of a Coplanar Textile Antenna	Lotfi Osman
1040	Electromagnetic Propagation Modeling Over Irregular Terrain Using a New Hybrid Method	Gul Yesa Altun
P NO	WCOM	Presenting Author
1138	An Ultra-Wideband Millimeter-wave Antenna using a Novel Pentagon Filling Technique	Farooq Tahir
1076	Design of Flexible Antennas for Wideband Mobile Communication	Hilal Koc
1080	Circularly Polarized On-Chip Antenna for 60GHz Indoor Wireless Communications	Arash Masrouri
1094	Measurement of frequency occupancy levels in TV bands in urban environment in Kosovo	Hena Maloku
1101	Spurious-Free Synthesizer Design For Fast Frequency Hopping Spread Spectrum	Hilmi Kayhan Yilmaz
P NO	WPTEH	Presenting Author
1048	A Wireless Power Transfer Application Using CSRR	Jong-Chul Lee
1068	Microwave Energy Harvesting by using a Broadband Fractal Antenna and a Dual-Band Rectifier	Huriye Ozdemir
1085	Modified Patch Antenna with Matching Network for Energy Harvesting at Mutliple Frequencies	Sadik Ulker
1088	Simple RF Energy Harvesting Circuit Using AMC Backed Bowtie Antenna	Sandhya Chandravanshi
1149	The Analysis of Variation in Plate Geometry for Capacitive Power Transfer Pads Utilized in Electric Vehicles	Dogu Cagdas Atilla

P NO	IOT	Presenting Author
1038	A Comparison of Long-Range Licensed and Unlicensed LPWAN Technologies According to Their Geolocation Services and Commercial Opportunities	Ylli Rama
1021	ZIGBEE Based Time and Energy Efficient Smart Parking System using IOT	Zakria Qadir
1026	Smart Solar Microgrid Using Zigbee and Related Security Challenges	Vincent Tafadzwa
1134	Small Conformal UHF RFID Tag Antenna for Labelling Fruits	Abubakar Sharif
1139	Concentration measurements of aqueuse liquid based on the RFID-UHF Technology	Otman El Mrabet
P NO	BIOM	Presenting Author
1079	A Novel Approach For Fabrication Of Flexible Antennas For Biomedical Applications	Andrei Starodubov
1022	Experimental Assessment of Wi-Fi Signal Levels in Indoor Environments	Mimoza Ibrani
1074	RF Sensor for Adulteration Detection of Liquid Silicone used in Medical Industry	Nilesh Kumar Tiwari
1034	Wireless Monitoring of ECG Signal in Infants Using SWM and DWT Techniques	Haroon Rashid
1020	Design and Development of a Low Cost Device for Bone Fracture Detection Using FFT Technique on Matlab	Zakria Qadir
1145	Cancer diagnosis in breast using biological and electromagnetic properties of breast tissues on antenna performance	Nagja Ali

P NO	Microwave Imaging (Special Session): MWIM	Presenting Author
5001	In-line monitoring of food contamination via Microwave Imaging	Francesca Vipiana
5002	A New Multi Static System for Microwave Breast Cancer Imaging	İbrahim Akduman
5003	Printed Monopole Antenna Designs for A Microwave Head Scanner	Panos Kosmas
5004	Doppler radar for real time surveillance	Lorenzo Crocco
5005	Tissue Mimicking Phantoms for Microwave Brain Stroke Imaging	Mehmet Çayören
5006	Detection of the Cavities Inside a Target with Near Field Orthogonality Sampling Method	Mehmet Nuri Akıncı
P NO	POSTER	Presenting Author
1005	Novel Variable Coupling Technique for Microwave Liquid Heating and Sensing	Ali Abduljabar
1013	Examination of stability against beam parameters in a Ku band helix TWT	Lutfi Oksuz
1015	A 77 GHz High Power and Gain Transformer-Coupled Amplifier in CMOS FD-SOI 28 nm	Abdelaziz Hamani
1030	Practical Recurrence Formulation for Composite Substrates: Application to Coplanar Structures with Bi-anisotropic Dielectrics	Abdelhamid Khodja
1037	Optocoupler Effect On In-Vivo Characterization For Human Body Communication Body area network; human body communication; optocoupler; balun; capacitive coupling; galvanic coupling	Fouad Maamir
1047	Analysis of performances of microstrip patch antennas printed on biaxial anisotropic substrates	Mohamed Lamine Tounsi
1052	Design Methodology and Implementation of E232LiFi System for Visible Light Communication	Vaishali Anil Kumar

1053	Design of Biomedical Passive RFID tag Antenna	Bassem Jmai
1065	Feasibility study of LoRa ad-hoc network in a urban noisy environment	Silvano Bertoldo
1081	Miniaturized and circularly polarized inverted C shaped patch antenna for X and Ku bands applications	Mekimah Boualem
1083	RF MEMS Tunable Capacitor for Voltage-Controlled Oscillator Application in C-Band Range	Ruddy Herard Chatim
1096	Combining GPS and GLONASS Range Observations for Joint Position, Velocity and Time Calculation	Adem Kazoğlu
1118	Response of CPW Transmission Line to the Nearfield Waves of a Magnetic Dipole	Mohsen Zahir Joozdani
1132	An amplifier design for cosmic particles radio detectors	Alina Badescu
1146	Experimental Analysis of Range Detection for Portable SFCW Ground Penetrating Radar	Achmad Munir
1153	Scattering by Buried Pcmc Cylinder Using Iterative Proceducer	Abdulkadir Hamid
1155	Design of an Equilateral Triangular Patch Antenna by Using Aght 8 with Overlapping Microstrip Feed Line For S Band Application	Pranjal Borah

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