

# IEEE GPECOM 2019 Programme

## Tuesday, June 11th

14:00-18:00	Registration
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## Wednesday, June 12th

08:30-09:15	Registration
09:15-10:00	Opening Ceremony
10:00-11:00	<b>Keynote Lecture 1: "Grid Modernization: Challenges, Opportunities, and Solutions"</b> Professor Jianhui Wang, Southern Methodist University, USA, <b>Chair:</b> Prof. Dr. Ramazan Bayındır
11:00-11:30	Coffee Break
11:30-12:30	<b>Keynote Lecture 2: "Smart Grid – Opportunities and Challenges"</b> Professor Haitham Abu-Rub, Texas A&M University at Qatar, Qatar, <b>Chair:</b> Prof. Dr. Ramazan Bayındır
12:30-14:00	Lunch Break

Session W1#1	TT1-1 Electric Machines and Drives 1	Room:	Perissia B
Session Chairs	Prof. Dr. Erdal Irmak		
14:00-14:20	ID 17: Complex-Valued Model Reference Adaptive Systems for Speed Estimation of Induction Motor, Emrah Zerdali (Niğde Ömer Halisdemir University, Turkey), Engin Cemal Mengüç (Niğde Ömer Halisdemir University, Turkey).		
14:20-14:40	ID 57: Comparative Study of Cavitation Problem Detection in Pumping System Using SVM, K-Nearest Neighbour Method, Nabanita Dutta (VIT, Vellore, India), Umashankar Subramaniyan (Prince Sultan University, Saudi Arabia), Sanjeevikumar Padmanaban (Aalborg University, Esbjerg, Denmark), Dhafer Jabber Almkhles (Prince Sultan University, Saudi Arabia), Ersan Kabalci (Nevşehir Hacı Bektaş Veli University, Turkey).		
14:40-15:00	ID 36: Influence of Cage Structure on Rotor Bar Current Waveform, Performance in Induction Machines, Tayfun Gündoğdu (Istanbul Technical University, Turkey), Güven Kömürgöz (Istanbul Technical University, Turkey), Burcu Gundogdu (The University of Sheffield, UK).		
15:00-15:20	ID 184: Improved Speed-Sensorless Input/Output Linearisation-Based SVPWM-DTC of IM, Remzi Inan (Niğde Ömer Halisdemir University, Turkey), Ridvan Demir (Niğde Ömer Halisdemir University, Turkey).		
15:20-15:40	ID 143: Strong Tracking Extended Kalman Filter Based Speed, Load Torque Estimations of Induction Motor, Emrah Zerdali (Niğde Ömer Halisdemir University, Turkey).		
15:40-16:10	Coffee Break		

Session W1#2	TT5-1 Communication Researches 1	Room:	Sobesos
Session Chairs	Prof. Dr. Antonio Cataliotti		
14:00-14:20	ID 121: The Impact of Configuration on Channel Characteristics in Visible Light Communication, Selva Muratoğlu Çürük (İskenderun Technical University, Türkiye), Merve Kimyacı (İskenderun Technical University, Türkiye).		
14:20-14:40	ID 183: Comparison of Tensorflow Object Detection Networks for Licence Plate Localization, Murat Peker (Niğde Ömer Halisdemir University, Turkey).		
14:40-15:00	ID 137: SDN-Based Data Forwarding in Fog-Enabled Smart Grids, Feyza Yıldırım Okay (Gazi University, Turkey), Suat Ozdemir (Gazi University, Turkey), Mehmet Demirci (Gazi University, Turkey).		
15:00-15:20	ID 141: Estimation of Gaussian Processes in Markov-Middleton Impulsive Noise, Anoush Mirbadin (University of Parma, Italy), Ehsan Kiani (University of Parma, Italy), Armando Vannucci (University of Parma, Italy), Giulio Colavolpe (University of Parma, Italy).		
15:20-15:40	ID 188: Downlink Performance Evaluation of NOMA Systems Based on Different OFDM Waveforms, Yasin Kabalci (Niğde Ömer Halisdemir University, Turkey), Muhammad Ali (Niğde Ömer Halisdemir University, Turkey).		
15:40-16:10	Coffee Break		

<b>Session W1#3</b>	<b>TT4-1 Power Electronics 1</b>	<b>Room:</b>	<b>Nissa</b>
<b>Session Chairs</b>	<b>Prof. Dr. Stanimir Valtchev</b>		
14:00-14:20	ID 122: Class E Resonant Converter Design for Led Drivers, Özlem Özden Zengin (Vestel Electronics Corp., Turkey), Mutlu Boztepe (Ege University, Turkey), Ahmet Tekin (Ozyegin University, Turkey).		
14:20-14:40	ID 84: A Highly Efficient Battery Charger Based on a ZCT Boost Converter, Ying-Chun Chuang (Kun Shan University, Taiwan), Hung-Shiang Chuang (Minnan Normal University, P. R. China), Chun Hsiang Yang (Industrial Technology Research Institute, Taiwan), Tien-Chi Chen (Kun Shan University, Taiwan).		
14:40-15:00	ID 172: Three-Phase Unidirectional Transformerless Hybrid Rectifier with Boost Converter, José Gonçalves (Universidade NOVA de Lisboa, Portugal), Stanimir Valtchev (Universidade NOVA de Lisboa, Portugal), Rui Melicio (Universidade de Évora, Portugal), Mohammed Al-Saadi (University POLITEHNICA of Bucharest, Romania).		
15:00-15:20	ID 126: A Comprehensive Loss Analysis of Half-Bridge LLC Resonant Converter used in LED Street Lights, Volkan Suel (Akim Metal R&D Center Istanbul, Turkey), Selcuk Kizir (Kocaeli University, Turkey).		
15:20-15:40	ID 69: Controller of DC to DC CUK Converter Comparison Between PI, PID, and Proposed Control, Ammar Algamluoli (University of Baghdad, Iraq)		
15:40-16:10	Coffee Break		

<b>Session W1#4</b>	<b>TT2-1 Wind Energy Systems 1</b>	<b>Room:</b>	<b>Perissia B</b>
<b>Session Chairs</b>	<b>Asst. Prof. Dr. Altan Gencer</b>		
16:10-16:30	ID 132: Toward Optimal Generation Scheduling of Correlated Wind-Thermal System Considering Maintenance Cost: A Stochastic Strategy, Hamid Reza Massrur (Shiraz University of Technology, Iran), Taher Niknam (Shiraz University of Technology, Iran), Sayed Aboozare Bozorgavari (Electricity Distribution Companies Kohgiluyeh & Boyer-Ahmad Yasuj, Iran).		
16:30-16:50	ID 78: Thermoelectric Modelling, Optimization of Offshore Windfarm Export Systems – State of the Art, Syed Hamza Hasan Kazmi (Ørsted Offshore, Denmark), Joachim Holbøll (Tech. University Denmark, Denmark), Thomas Herskind Olesen (Ørsted Offshore, Denmark), Troels Stybe Sørensen (Ørsted Offshore, Denmark).		
16:50-17:10	ID 138: A Comparative Study on the Impact of Grid Code Regulations on Stability of Wind Integrated Power System, Hazem Karbouj (Indian Institute of Technology Bombay, India), Zakir Rather (Indian Institute of Technology Bombay, India).		
17:10-17:30	ID 150: Multiple Models Representation for a Doubly-Fed Induction Generator Based Wind Energy Conversion Systems, Samir Abdelmalek (University of Chlef, Algeria), Altan Gencer (Nevsehir Haci Bektas Veli University, Turkey), Sarah Rezazi (Tipaza University, Algeria).		

<b>Session W1#5</b>	<b>TT6-1 Wireless Communication 1</b>	<b>Room:</b>	<b>Sobesos</b>
<b>Session Chairs</b>	<b>Dr. Muhammad Najam-UI-Islam</b>		
16:10-16:30	ID 27: Recursive Cryptanalysis of the IoT Authentication Protocol, Muhammad Najam-UI-Islam (Bahria University Islamabad, Pakistan), Madiha Khalid (Bahria University Islamabad, Pakistan), Hyesung Park (Georgia Gwinnett College, USA), Umar Khokhar (Georgia Gwinnett College, USA).		
16:30-16:50	ID 164: ZigBee and LoRa based Wireless Sensors for Smart Environment and IoT Applications, Ayanle Ali (Yildiz Technical University, Turkey), Sibel Zorlu Partal (Yildiz Technical University, Turkey), Salih Kepke (Yildiz Technical University, Turkey), Hakan P Partal (Yildiz Technical University, Turkey/Syracuse University, USA).		
16:50-17:10	ID 108: Analysis of Dickson Voltage Multiplier for RF Energy Harvesting, Musaab Mohammed Al-Azawy (Aksaray University, Turkey), Filiz Sari (Aksaray University, Turkey)		
17:10-17:30	ID 187: Smart Irrigation System for Open-Field and Protected Agriculture Based on LoRa Technology: A Novel Algorithm, Thabit Sultan Mohammed (Dhofar University, Oman), Omer Khan (Dhofar University, Oman), Ammar Al-Bazi (Coventry University, UK)		

Session W1#6	TT1-3: Generation, Transmission, Distribution and Microgrids 1	Room:	Nissa
Session Chairs	Prof. Dr. Mihai Cernat		
16:10-16:30	ID 128: A Graph-theoretic Method for Identification of Electric Power Distribution System Topology, Guomin Ji (University of Oklahoma, USA), Dhruv Sharma (University of Oklahoma, USA), Wanghao Fei (University of Oklahoma, USA), Di Wu (North Dakota State University, USA), John Jiang (University of Oklahoma, USA).		
16:30-16:50	ID 192: Analysis of a Residential Distribution System with the Application of Conservation Voltage Reduction at House Level, Ugur S. Selamogullari (Yildiz Technical University, Turkey), Alaa Alsaad (Yildiz Technical University, Turkey)		
16:50-17:10	ID 158: An Adaptive Virtual Inductance Feedforward Scheme for VSI Resiliency in Weak Grids, Aswad Adib (Kansas State University, USA), Fariba Fateh (Kansas State University, USA), Behrooz Mirafzal (Kansas State University, USA).		
17:10-17:30	ID 171: Optimal Placement of Distributed Energy Resources in a DC Microgrid with Constant Power Loads to Minimize Bus Voltage Deviations, Line Losses, Mosaddique Nawaz Hussain (Indian Institute of Technology, India), Vivek Agarwal (Indian Institute of Technology, India).		
17:30-17:50	ID 198: Design of A User-Friendly GUI for Data Loggers Used in Solar Power Plants, Erdal Irmak (Gazi University, Turkey), Mustafa Ersan (Konelsis A.S., Turkey), Orhun Guney (Konelsis A.S., Turkey).		
18:00-20:30	WELCOME RECEPTION		

# IEEE GPECOM 2019 Programme

Thursday, June 13th

08:30-09:00	Registration
09:00-10:00	<b>Keynote Lecture 3:</b> "Encoderless Control of Traction Electric Drives: problems, solutions, and new opportunities" Dr Alecksey Anuchin, Moscow Power Engineering Institute, National Research University, Russia <b>Chair:</b> Prof. Dr. Saffet Ayasun
10:00-11:00	<b>Keynote Lecture 4:</b> "Wireless power transmission in LV microgrids" Professor Stanimir Valtchev, Universidade Nova de Lisboa, Portugal <b>Chair:</b> Prof. Dr. Saffet Ayasun
11:00-11:30	Coffee Break

<b>Session T2#1</b>	<b>TT1-1 Communication Researches 2</b>	<b>Room:</b>	<b>Perissia B</b>
<b>Session Chairs</b>	<b>Prof. Dr. Armando Vannucci</b>		
11:30-11:50	ID 112: The Perspectives and Practice of PLC HomePlug AV Modems Application in the Network Devices and Industrial Tools, Anton Merkulov (Almaty University of Power Engineering and Telecommunications, Kazakhstan), Viatcheslav Shuvalov (Siberian State University of Telecommunications and Information Sciences, Russia).		
11:50-12:10	ID 23: Emerging LPWAN Technologies for Smart Environments: An Outlook, Yasin Kabalci (Nigde Ömer Halisdemir University, Turkey), Muhammad Ali (Nigde Ömer Halisdemir University, Turkey).		
12:10-12:30	ID 155: Study of Utilizing Multiple IMUs for Inertial Navigation Systems Without GPS Aid, Osman Tokluoğlu (Ankara Yıldırım Beyazıt University, Turkey), Enver Çavuş (Ankara Yıldırım Beyazıt University, Turkey).		
12:30-12:50	ID 159: An Innovative Coupling Solution for Power Line Communication in MV Electrical Networks, Antonio Cataliotti (University of Palermo, Italy), Giovanni Artale (University of Palermo, Italy), Valentina Cosentino (University of Palermo, Italy), Salvatore Guaiana (University of Palermo, Italy), Dario Di Cara (Institute of Marine Engineering National Research Council (CNR) Palermo, Italy), Nicola Panzavecchia (Institute of Marine Engineering National Research Council (CNR), Italy), Giovanni Tinè (Institute of Marine Engineering National Research Council (CNR), Italy), Riccardo Fiorelli (STMicroelectronics, Agrate, Italy).		
12:50-14:00	Lunch Break		

<b>Session T2#2</b>	<b>TT5-1 Electric Machines and Drives 2</b>	<b>Room:</b>	<b>Sobesos</b>
<b>Session Chairs</b>	<b>Prof. Dr. Guven Komurgoz</b>		
11:30-11:50	ID 113: Advanced Power System Stabilizer for a Single Machine – Infinite Bus Model: Transient Analysis, Saeid Alaaesh (University of Benghazi, Libya), Awad Shamekh (University of Benghazi, Libya), Ali Altowati (University of Benghazi, Libya).		
11:50-12:10	ID 111: Effect of the Tap Winding Configurations on the Leakage Reactance of the Concentric Transformer Coils, Kamran Dawood (Istanbul Technical University, Turkey), Guven Komurgoz (Istanbul Technical University, Turkey).		
12:10-12:30	ID 106: Model Predictive Control of Two Separate Induction Machines using Dual-Output Indirect Matrix Converter, Ozan Gulbudak (Karabuk University, Turkey), Mustafa Gokdag (Karabuk University, Turkey)		
12:30-12:50	ID 5: Analysis of Speed/Position Controller Based on Several Types of a Fuzzy Logic for Travelling Wave Ultrasonic Motor, Altan Gencer (Nevsehir Haci Bektas Veli University, Turkey).		
12:50-14:00	Lunch Break		

<b>Session T2#3</b>	<b>TT4-1 Wind Energy Systems 2</b>	<b>Room:</b>	<b>Nissa</b>
<b>Session Chairs</b>	<b>Prof. Dr. Ramazan Bayındır</b>		
11:30-11:50	ID 163: Analysis of fault ride through capability improvement of the permanent magnet synchronous generator based on WT using a BFCL, Altan Gencer (Nevşehir Hacı Bektaş Veli University, Turkey).		
11:50-12:10	ID 170: A Consistent Power Management System Design for Solar, Wind Energy-Based Residential Applications, Melike Esen (Firat University, Turkey), Gökay Bayrak (Bursa Technical University, Turkey), Ozan Çakmak (Ondokuz Mayıs University, Turkey), Soner Çelikdemir (Bitlis Eren University, Turkey), Mehmet Özdemir (Firat University, Turkey).		
12:10-12:30	ID 199: Effects of Change in Wind Energy Generation on the Power Grid Angle, Merden Yesil (National Load Dispatching Center Turkish Electricity Transmission, Turkey), Ali Kose (Gazi University, Turkey), Erdal Irmak (Gazi University, Turkey).		
12:30-12:50	ID 55: Non-isolated Multi-Port Inverter Topologies for Renewable Energy Applications: A review, Abdelsalam Elmakawi (Ankara Yıldırım Beyazıt University, Turkey), Kamil Bayındır (Ankara Yıldırım Beyazıt University, Turkey).		
12:50-14:00	Lunch Break		

<b>Session T2#4</b>	<b>TT4-1 Smart Grid Researches 1</b>	<b>Room:</b>	<b>Perissia B</b>
<b>Session Chairs</b>	<b>Prof. Dr. Saffet Ayasun</b>		
14:00-14:20	ID 109: Stability Regions in the Parameter Space of PI Controller for LFC System with EVs Aggregator, Incommensurate Time Delays, Ausnain Naveed (Niğde Ömer Halisdemir University, Turkey), Şahin Sönmez (Niğde Ömer Halisdemir University, Turkey), Saffet Ayasun (Niğde Ömer Halisdemir University, Turkey).		
14:20-14:40	ID 80: Parameter Elicitation for Consumer Models in Demand Response Management, Andras Kovacs (Hungarian Academy of Sciences, Hungary)		
14:40-15:00	ID193 : Analysis of a Residential Distribution System with the Application of Conservation Voltage Reduction at House Level, Mehmet Rida Tur (Mardin Artuklu University, Turkey), Ramazan Bayındır (Gazi University, Turkey)		
15:00-15:20	ID 66: Providing an IEC 61850 Counterpart of the Trusty Multimeter - Approaching the Maintenance Procedures for IEC 61850 Substations, Andrea Bonetti (Megger Sweden AB, Sweden), Nikolay Ignatovski (Electricity System Operator EAD, Bulgaria), Sidney Fernandez (Megger Limited, Philippines).		
15:20-15:40	ID 151: Microgrids: Communication Scenarios, Topologies, Technologies, Waqas Toor (Khwaja Fareed University of Engineering and Information Technology, Pakistan), Saqib Khan (Khwaja Fareed University of Engineering and Information Technology, Pakistan).		
15:40-16:10	Coffee Break		

<b>Session T2#5</b>	<b>TT4-1 Photovoltaic Systems 1</b>	<b>Room:</b>	<b>Sobesos</b>
<b>Session Chairs</b>	<b>Prof. Dr. Rajesh Saiju</b>		
14:00-14:20	ID 185: Image Processing-based Assessment of Dust Accumulation on Photovoltaic Modules, Muhammed Unluturk (Konya Technical University, Turkey), Ahmet Afsin Kulaksiz (Konya Technical University, Turkey), Ali Unluturk (Erzurum Technical University, Turkey).		
14:20-14:40	ID 51: Photovoltaic model based on data sheet values using Matlab simulation tool, Rajesh Saiju (University of Applied Sciences Fachbereich 2: Energie und Biotechnologie, Germany), Alexander Kroggel (University of Applied Sciences Fachbereich 2: Energie und Biotechnologie, Germany), Nils Wiese (University of Applied Sciences Fachbereich 2: Energie und Biotechnologie, Germany).		
14:40-15:00	ID 168: Cascaded Predictive Direct Power Control for Grid Connected Photovoltaic System, Seif El Islam Remache (Oum El Bouaghi University, Algeria), Ali Yahia Cherif (Oum El Bouaghi University, Algeria), Kamel Barra (Oum El Bouaghi University, Algeria), Abdellatif Reama (Laboratoire Conception des Systèmes Industriels ESIEE, France).		
15:00-15:20	ID 196: A Novel Interpolation-Based Maximum Power Point Tracking Method, Amir Ostadrahimi (Worcester Polytechnic Institute, USA), Yousef Mahmoud (Worcester Polytechnic Institute, USA).		
15:20-15:40	ID 167: The Potential, Economic Analysis of Grid-connected Solar PV Power in Kenya, Remember Samu (Ozyegin University, Turkey), Gokturk Poyrazoglu (Ozyegin University, Turkey), Murat Fahrioglu (Middle East Technical University Northern Cyprus Campus, Turkey).		
15:40-16:10	Coffee Break		

Session T2#6	TT4-1 Wireless Communication 2	Room:	Nissa
Session Chairs	Asst. Prof. Dr. Waseem Khan		
14:00-14:20	ID 191: Miniaturised Broadband Patch Antenna with Asymmetric Coplanar Waveguide-Fed based on Epsilon Negative Transmission Line Abdellalam El Yassini (Cadi Ayyad University Faculty of Sciences, Morocco), Saida Ibnayaich (Cadi Ayyad University Faculty of Sciences, Morocco), Mohammed Ali Jallal (Cadi Ayyad University Faculty of Sciences, Morocco), Abdelouhab Zeroual (Cadi Ayyad University Faculty of Sciences, Morocco), Samira Chabaa (Ibn Zohr University, Morocco)		
14:20-14:40	ID 146: Polarization Reconfigurable Microstrip Slotted Antenna with Two Opposite Feeds, Zaid Saleh (The University of Jordan, Jordan), Malek Al-Mallah (The University of Jordan, Jordan), Yanal Faouri (The University of Jordan, Jordan).		
14:40-15:00	ID 152: Affinity Propagation Machine Learning based Clustering in Cognitive Radio Networks, Dost Muhammad Saqib Bhatti (Dawood University of Engineering and Technology, Pakistan), Zeeshan Ali (National Research Council of Italy (IREA-CNR), Italy), Muhammad Arif Bhatti (Mehran University of Engineering and Technology, Pakistan), Abdul Rahim Ansari (Hanyang University, South Korea).		
15:00-15:20	ID 182: Study of a Microstrip Bow Tie Patch Antenna Loaded with a Novel Triangular SRR of Meta- Material for RFID Applications, Zeineb Zaalouni (University Manar, Tunisia), Sabri Beldi (NANOMISENE Laboratory, Tunisia), Ali Gharsallah (University Manar, Tunisia).		
15:20-15:40	ID 70: Linear Antenna-Array with Log-increasing Inter-Element Spacing, Non Uniform Weights, Waseem Khan (Air University, Pakistan), Sarah Saeed (Air University, Pakistan), Atiq-Ur Rehman (Air University, Pakistan).		
15:40-16:10	Coffee Break		

Session T2#7	TT4-2 Power Electronics 2	Room:	Perissia B
Session Chairs	Prof. Dr. Qiang Song		
16:10-16:30	ID 134: The analysis of power losses of power inverter based on SiC MOSFETs, Qiang Song (Beijing Institute of Technology, China), Wei Wang (Beijing Institute of Technology, China), Shuo Zhang (Beijing Institute of Technology, China), Yiting Li (Beijing Institute of Technology, China), Mukhtiar Ahmad (Beijing Institute of Technology, China).		
16:30-16:50	ID 124: Model Predictive Control for Battery Charger Applications with Active Damping, Mustafa Gökdağ (Karabuk University, Turkey), Ozan Gulbudak (Karabuk University, Turkey)		
16:50-17:10	ID 123: A Minimum Number of Switch Five-Level Inverter for Renewable Energy Sources Applications, Amirhosein Akbari (Queen's University, Canada), Fereshteh Poloei (Queen's University, Canada), Alireza Bakhshai (Queen's University, Canada).		
17:10-17:30	ID 96: Design, Analysis of Two-phase Interleaved Boost Converter, H5 Inverter Based Microinverter, Ersan Kabalci (Nevsehir Haci Bektas Veli University, Turkey), Aydin Boyar (Nevsehir Haci Bektas Veli University, Turkey).		
17:30-17:50	ID 178: Optimization of the Fuzzy MPPT Controller by GA for the Single-Phase Grid-Connected Photovoltaic System Controlled by Sliding Mode, Borni Abdelhalim (Centre de Développement des Energies Renouvelables CDER, Algeria), Bouchakour Abdelhak (CDER, Algeria), Zaghba Layachi (CDER, Algeria), Thameur Abdelkrim (CDER, Algeria), Lakhdari Abdelkader (CDER, Algeria) and Bessous Noureddine (University of Hamma Lakhder El-Oued, Algeria)		

Session T2#7	TT1-3: Generation, Transmission, Distribution and Microgrids 2	Room:	Sobesos
Session Chairs	Prof. Dr. Mihai Cernat		
16:10-16:30	ID 116: Hybrid Microgrid Considering PV Generator, Energy Storage Systems, Ismail Kafazi (Ibn Tofail University Kenitra, Morocco), Rachid Bannari (Ibn Tofail University Kenitra, Morocco), Mostafa Bouzi (Ibn Tofail University Kenitra, Morocco).		
16:30-16:50	ID 114: Ecosystem Thinking: Creating Microgrid Solutions for Reliable Power Supply in India's Power System, Zheng Ma (University of Southern Denmark, Denmark), Maria Broe (University of Southern Denmark, Denmark), Annika Fischer (University of Southern Denmark, Denmark), Tobias Borg Sørensen (University of Southern Denmark, Denmark), Mike Vølund Frederiksen (University of Southern Denmark, Denmark), Bo Norregaard Jørgensen (University of Southern Denmark, Denmark).		
16:50-17:10	ID 48: Allowable Capacity Estimation of DGs for New 70 kV Transmission System in Korea, Jaewoo Kim (Yonsei University, South Korea), Seung-Mook Baek (Kongju National University, South Korea), Seokju Kang (Yonsei University, South Korea), Jung-Wook Park (Yonsei University, South Korea).		
17:10-17:30	ID 107: Quality of Power Enhancement of Distribution Network System Using DSTATCOM in Simulink Tool of MATLAB, Rajat Sharma (MNIT, India), Jay Prakash Keshri (MNIT, India) and Harpal Tiwari (MNIT, India)		
17:30-17:50	ID 46: Design, Analysis of a Flyback Micro Inverter with H5 Topology, Ersan Kabalci (Nevsehir Haci Bektas Veli University, Turkey), Aydin Boyar (Nevsehir Haci Bektas Veli University, Turkey), Nuri Alper Metin (Nevsehir Haci Bektas Veli University, Turkey).		

<b>Session T2#9</b>	<b>TT4-1 Communication Researches 3</b>	<b>Room:</b>	<b>Nissa</b>
<b>Session Chairs</b>	<b>Prof. Dr. Alfredo Sanz</b>		
16:10-16:30	ID 50: Characteristics of PLC Channels over High Voltage Power Cables and Mixed Cable-Overhead High Voltage Power Lines, Vasiliy Kharlamov (Unitel Engineering LLP, Russia), Yuri Shkarin (Energosetproject Institute JSC, Russia), Sergey Romanov (Unitel Engineering LLP, Russia), Anton Merkulov (Almaty University of Power Engineering and Telecommunications, Kazakhstan).		
16:30-16:50	ID 77: Cooperative Reuse of fragmented Spectrum in High-Voltage Power-Line Carrier Systems - A New Approach of PowerLink IP, Jaroslav Kussyk (Siemens AG Austria, Austria), Ralf Adelseck (Siemens AG Munich, Germany).		
16:50-17:10	ID 115: A new PLC Stack for Distributed, Synchronous Configuration, J. Miguel Sanz (University of Zaragoza, Spain), Victor Reyes J. Miguel Sanz (University of Zaragoza, Spain), Alfredo Sanz (Microchip Technology Zaragoza S.L.U., Spain), Javier Guerreira (Microchip Technology Zaragoza S.L.U., Spain)		
17:10-17:30	ID 181: Energy Internet: A Novel Vision for Next-Generation Smart Grid Communications, Yasin Kabalci (Niğde Ömer Halisdemir University, Turkey), Muhammad Ali (Niğde Ömer Halisdemir University, Turkey)		
17:30-17:50			

<b>18:30-23:30</b>	<b>GALA DINNER</b>
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<b>POSTER SESSION-I (June 13th, 13:15-14:15)</b>		<b>Room:</b>	<b>Foyer Lounge</b>
<b>Session Chairs</b>	<b>Asst. Prof. Dr. Altan Gencer</b>		
ID 10: Assessment of Acoustic impact for the wind farm in Algeria, Benmedjahed Miloud (CDER, Algeria), Rachid Maouedj (CDER, Algeria)			
ID 21: Computed Torque Control of Robot Manipulator, Martino Ojwok Ajang Ajangnay (Juba University, Republic of South Sudan)			
ID 24: Controlling the Indoor Air Quality onboard a RO-RO ship by means of Neuro-Fuzzy Controller, Hossam Eldin Agamy (AASTMT, Egypt), M. Moleh (Alexandria University, Egypt), K. Elserafy (Port Said University, Egypt), M. Abdel Geliel (AASTMT, Egypt), N. Abdel Rahman (AASTMT, Egypt)			
ID 47: The Impact of Weather Condition on the Harmonic Behaviour of Grid Connected Photovoltaic Systems, Abdullah Alhussainy (King Abdulaziz University, Kingdom of Saudi Arabia), Thamer Alquthami (King Abdulaziz University, Kingdom of Saudi Arabia)			
ID 68: Efficient V2G Model on Smart Grid Vehicles Using AI, Muhammad Fahad (Karachi Institute of Economics and Technology, Pakistan), Hira Beenish (Karachi Institute of Economics and Technology, Pakistan)			
ID 76: Conceptual Model in Grid Computing to Mitigate Sustainability Challenges, Suresh Shanmugasundaram (Botho University, Botswana), Divyapreya Chidambaram (Botho University, Botswana)			
ID 82: Design of Robust Control Based on $H^\infty$ Approach of DFIG for Wind Energy System, Youcef Bakou (CDER, Algeria), Lakhder Sayhi (CDER, Algeria), Mohamed Abid (University Djillali Iiabes, Algeria), Abdel Ghani Aissaoui (University of Tahri Mohamed, Algeria), Ibrahim Yaichi (Ahmed Draia University, Algeria), Youcef Hammaoui (CDER, Algeria)			
ID 87: Power system interconnection of Fuel Cell Energy Sources at the Distribution Level using artificial neural networks, Dehini Rachid (University of Bechar, Algeria), Berbaoui Brahim (Unité de Recherche en Energies Renouvelables en Milieu Saharien, Algeria), Glaoui Hachemi (University of Bechar, Algeria)			
ID 91: Combined Solar Simulator for Testing Photovoltaic Devices, Tetyana Frolova (Kharkiv National University of Radio Electronics, Ukraine), Gennadiy Churyumov (Kharkiv National University of Radio Electronics, Ukraine), Viktor Vlasjuk (Lashkaryov Institute, Ukraine), Vitaliy Kostylyov (Lashkaryov Institute, Ukraine)			
ID 100: A Demonstrative Overview of Photovoltaic Systems Faults, Ahmed Bouraiou (CDER, Algeria), Ammar Neçaibia (CDER, Algeria), Abdeldjalili Slimani (CDER, Algeria), Rachid Dabou (CDER, Algeria), Abderrezzaq Ziane (CDER, Algeria), Nordine Sahuane (CDER, Algeria)			
ID 118: Comparative Study of Solar Cell Energy Harvesting with, without Rotating Platforms, Gülnur Özfürk (Abdullah Gul University, Turkey), Dexter Chintu (Abdullah Gul University, Turkey), Veli Tayfun Kılıç (Abdullah Gul University, Turkey)			
ID 127: A Moving Window Least Mean Square Approach to State of Charge Estimation for Lithium Ion Batteries, Fereshteh Poloei (Queen's University, Canada), Amirhosein Akbari (Queen's University, Canada) and Yan-Fei Liu (Queen's University, Canada)			
ID 195: New Parameterizing Method for Gompertz-based Photovoltaic Model, Yousef Mahmoud (Worcester Polytechnic Institute, USA)			

# IEEE GPECOM 2019 Programme

**Friday, June 14th**

09:00-09:30	Registration
09:30-11:00	<b>Keynote Lecture 5:</b> "DC Microgrids research and applications in homes, EV charging stations, more electrical ships, and seaports", Professor Josep M. Guerrero, Aalborg University, Denmark <b>Chair:</b> Prof. Dr. Erdal Irmak
11:00-11:30	Coffee Break

<b>Session F3#1</b>	<b>TT1-1 Electric Vehicle Applications</b>	<b>Room:</b>	<b>Perissia B</b>
<b>Session Chairs</b>	<b>Asst. Prof. Dr. Gokturk Poyrazoglu</b>		
11:30-11:50	ID 125: Design of an H-Bridge Bidirectional DC-DC Converter with LCL Filter for High Power Battery Applications, Murat Karabacak (Sakarya University of Applied Sciences, Turkey), Tariq Kamal (Sakarya University, Turkey), Özhan Atmaca (ELKON Elektrik Sanayi Ticaret A.Ş., Turkey), Erdeniz Erol (ELKON Elektrik Sanayi Ticaret A.Ş., Turkey).		
11:50-12:10	ID 52: Design of the Circuitry, Battery Management System, Wireless Communication of an Electric Vehicle, Atakan Kurt (Ozyegin University, Turkey), Ugur Dolu (Ozyegin University, Turkey), Burak Kaya (Ozyegin University, Turkey), Gokturk Poyrazoglu (Ozyegin University, Turkey).		
12:10-12:30	ID 40: Design, Analysis of Bi-directional DC-DC Driver for Electric Vehicles, Nuri Alper Metin (Nevsehir Haci Bektas Veli University, Turkey), Aydin Boyar (Nevsehir Haci Bektas Veli University, Turkey), Ersan Kabalci (Nevsehir Haci Bektas Veli University, Turkey).		
12:30-12:50	ID 148: A Consecutive Energy Management Approach for a VPP Comprising Commercial Loads, Electric Vehicle Parking Lots Integrated with Solar PV Units, Energy Storage Systems, Arian Zahedmanesh (University of Wollongong, Australia), Kashem Muttaqi (University of Wollongong, Australia), Danny Sutanto (University of Wollongong, Australia).		
12:50-14:00	Lunch Break		

<b>Session F3#2</b>	<b>TT5-1 Electric Machines and Drives 3</b>	<b>Room:</b>	<b>Nissa</b>
<b>Session Chairs</b>	<b>Prof. Dr. Stanimir Valtchev</b>		
11:30-11:50	ID 35: Design of Interior Permanent-Magnet Machines with Novel Semi-Overlapping Windings, Tayfun Gündoğdu (Istanbul Technical University, Turkey), Güven Kömürgöz (Istanbul Technical University, Turkey).		
11:50-12:10	ID 102: Strand Wire Winding Methods in a Solenoidal Coil with Limited Geometry for Good Impedance Matching, Veli Tayfun Kilic (Abdullah Gul University, Turkey), Emre Unal (Bilkent University, Turkey), Hilmi Volkan Demir (Bilkent University, Turkey).		
12:10-12:30	ID 169: Design, Optimization of Permanent Magnet Synchronous Motor for Electric Vehicle Applications, Ahmet Hamdi Levent (Yildiz Technical University, Turkey), Abdulsamed Lordoğlu (Yildiz Technical University, Turkey), Mustafa Gürkan Aydeniz (Yildiz Technical University, Turkey).		
12:30-12:50	ID 135: Weighing Multiple Model Adaptive Control of Time-Variant Input Delay SISO Systems using Fuzzy Rule Switching, Peyman Abbasi (K N Toosi University of Technology, Iran), Mohammad Ali Nekoui (K N Toosi University of Technology, Iran) and Pouya Abbasi (Science and Research branch of Islamic Azad University, Iran)		
12:50-14:00	Lunch Break		

<b>Session F3#3</b>	<b>TT4-1 Communication Researches 4</b>	<b>Room:</b>	<b>Sobesos</b>
<b>Session Chairs</b>	<b>Dr. Anton Merkulov</b>		
11:30-11:50	ID 103: Uncertain LTI Model of Population Density in a Bounded Habitat, Jordan Kravev (Technical University of Sofia, Bulgaria)		
11:50-12:10	ID 194: Investigation of Inter-User Interference Effect on 5G Uplink Communications, Yasin Kabalci (Niğde Ömer Halisdemir University, Turkey), Muhammad Ali (Niğde Ömer Halisdemir University, Turkey).		
12:10-12:30	ID 153: Distinctive Features, Characteristics,, Field Tests of the WDPLC Systems, Anton Merkulov (Almaty University of Power Engineering and Telecommunications, Kazakhstan), Robert Frankenberg (Siemens AG, Austria), Jaroslav Kusyky (Siemens AG, Austria).		
12:30-12:50	ID 25: Fuzzy Based Chaotic Synchronization of Chen Systems, Gülden Bulut (Nevsehir Haci Bektas Veli University, Turkey), Hasan Güler. (Firat University, Turkey)		
12:50-14:00	Lunch Break		



<b>Session F3#4</b>	<b>TT4-1 Smart Grid Researches 2</b>	<b>Room:</b>	<b>Perissia B</b>
<b>Session Chairs</b>	<b>Dr. Andrea Bonetti</b>		
14:00-14:20	ID 49: Impact of Natural Gas Price on Electricity Price Forecasting in Turkish Day-Ahead Market, Oguzhan Goktug Poyrazoglu (Bilkent University, Turkey), Gokturk Poyrazoglu (Ozyegin University, Turkey).		
14:20-14:40	ID 120: Stability Delay Margin Computation of Load Frequency Control System with Demand Response, Deniz Katipoğlu (Niğde Ömer Halisdemir University, Turkey), Sahin Sönmez (Niğde Ömer Halisdemir University, Turkey), Saffet Ayasun (Niğde Ömer Halisdemir University, Turkey).		
14:40-15:00	ID 79: Attacks due to False Data Injection in Smart Grids: Detection & Protection, Maryam Iqbal (Bahria University Islamabad, Pakistan), Muhammad Ayman Iqbal (Sarhad University, Pakistan).		
15:00-15:20	ID 110: Saudi Arabia's Electricity: Energy Supply, Demand Future Challenges, Fahad Alharbi (Lancaster University, United Kingdom), Denes Csala (Lancaster University, United Kingdom).		
15:20-15:40	ID 186: Effect of LAN-based Communications Errors on Dynamic Stability of Power Systems, Ahmed Abdolkhalig (The University of Tobruk, Libya), Qing Fang (State Grid Beijing Electric Power Company, China), Ashraf Mohamed (The University of Tobruk, Libya)		
15:40-16:10	Coffee Break		

<b>Session F3#5</b>	<b>TT4-1 Photovoltaic Systems 2</b>	<b>Room:</b>	<b>Sobesos</b>
<b>Session Chairs</b>	<b>Asst. Prof. Dr. Altan Gencer</b>		
14:00-14:20	ID 190: MIMO-Elman Neural Network for Solar Radiation Components Forecasting based on the desired tilt angle, Mohammed Ali Jallal (Cadi Ayyad University, Morocco), Samira Chabaa (Cadi Ayyad University, Morocco), Abdessalam El Yassini (Cadi Ayyad University, Morocco), Abdelouhab Zeroual (Cadi Ayyad University, Morocco), Saida Ibnyaich (Cadi Ayyad University, Morocco) and Mustapha Raoufi (Cadi Ayyad University, Morocco)		
14:20-14:40	ID 56: Single Switch High Gain Non-Isolated DC-DC Converter For Building Integrated Photovoltaic Systems, Abdelsalam Elmakawi (Ankara Yildirim Beyazit University, Turkey), Kamil Bayindir (Ankara Yildirim Beyazit University, Turkey).		
14:40-15:00	ID 75: HOMER Analysis for Integrating Solar Energy in Off-Grid, On-Grid SCO Telecommunication Sites, Muhammad Usman (Mirpur University of Science and Technology, Pakistan), Afnan Mehmood Malik (Mirpur University of Science and Technology, Pakistan), Anzar Mahmood (Mirpur University of Science and Technology, Pakistan), Anila Kousar (Mirpur University of Science and Technology, Pakistan).		
15:00-15:20	ID 162: Hybrid photovoltaic-wind system for the electricity production in isolated sites, Mouhadjer Samir (Unité de Recherche URERMS Adrar-Algérie, Algeria), Neçaihia Ammar (Unité de Recherche URERMS Adrar-Algérie, Algeria), Benmedjahed Miloud (Unité de Recherche URERMS Adrar-Algérie, Algeria).		
15:20-15:40	ID 34: Smooth Sliding Mode-Based MPPT Algorithm for Photovoltaic Applications, Salah Lachtar (URER/MS Adrar, Algeria), Ahmed Bouraiou (URER/MS Adrar, Algeria), Omar Djaafri (URER/MS Adrar, Algeria) and Rachid Maouedj (URER/MS Adrar, Algeria).		
15:40-16:10	Coffee Break		

<b>Session F3#6</b>	<b>TT4-1 Generation, Transmission, Distribution and Microgrids 3</b>	<b>Room:</b>	<b>Nissa</b>
<b>Session Chairs</b>	<b>Asst. Prof. Dr. Canras Batunlu</b>		
14:00-14:20	ID 197: Comparative Analysis of Partial Shading Power Losses in Photovoltaic Topologies, Mohammad K. Al-Smadi (Worcester Polytechnic Institute, USA), Yousef Mahmoud (Worcester Polytechnic Institute, USA) .		
14:20-14:40	ID 144: Techno-Economic Feasibility Analysis of Grid-Tied PV-Wind Hybrid System to Meet a Typical Household Demand: Case Study – Amman, Jordan, Mohammad Abujubbeh (METU Northern Cyprus Campus, Mersin), Vincent T. Joseph (METU Northern Cyprus Campus, Mersin), Zakria Qadir (METU Northern Cyprus Campus, Mersin), Murat Fahrioglu (METU Northern Cyprus Campus, Mersin), Canras Batunlu (METU Northern Cyprus Campus, Mersin).		
14:40-15:00	ID 104: Sliding Mode Control of Grid-connected Inverters Using Inverter Output Current, Zakaria Afshar (K.N.Toosi University of Technology, Iran), Mahmoud Molla Yousefi (K.N.Toosi University of Technology, Iran), Seyed Mohamad Taghi Bathaee (K.N.Toosi University of Technology, Iran).		
15:00-15:20	ID 145: Determining Maximum Allowable PV Penetration Level in Transmission Networks: Case Analysis - Northern Cyprus Power System, Mohammad Abujubbeh (Middle East Technical University - Northern Cyprus Campus, Turkey), Murat Fahrioglu (Middle East Technical University - Northern Cyprus Campus, Turkey).		
15:20-15:40	ID 67: An Improved SoC Controller for Flow Battery based ESS to provide Efficient Grid Services, Mohamed Bahloul (International Energy Research Centre, Ireland), Ankur Majumdar (International Energy Research Centre, Ireland), Shafi K Khadem (International Energy Research Centre, Ireland).		
15:40-16:10	Coffee Break		

16:15-17:00

## CLOSING CEREMONY

POSTER SESSION-II (June 14th, 13:15-14:15)		Room:	Foyer Lounge
Session Chairs	Dr. Gokhan Keven		
ID 130: Magnetic Flux Density Calculation Of Square Coils with Rounded Corners, Muhammed Furkan Erman (Abdullah Gul University, Turkey), Veli Tayfun Kilic (Abdullah Gul University, Turkey)			
ID 136: Analysing stability of time delayed synchronous generator, designing optimal stabilizer fractional order PID controller using particle swarm, Mohammad Ali Mohammad Ali Daftari (K N toosi University of Technology, Iran), Mohammad Ali Nekoui (K N toosi University of Technology, Iran)			
ID 139: Hydropower Capacity of Different Power Sectors in Pakistan, Zakria Qadir (METU Northern Cyprus Campus, Mersin), Mohammad Abujubbeh (METU Northern Cyprus Campus, Mersin), Alveena Mariam (Technical Support Engineer, Pakistan), Murat Fahrioglu (METU Northern Cyprus Campus, Mersin), Canras Batunlu (METU Northern Cyprus Campus, Mersin)			
ID 140: Power Control of Fuel Cell Connected to Power System, Hachemi Glaoui (University of Bechar, Algeria), Dehini Rachid (University of Bechar, Algeria)			
ID 142: A low cost maximum power point tracking method based on PI controller Arduino implementing, Amal Satif (National School of Applied Sciences (ENSA), Morocco), Rachid Elgouri (National School of Applied Sciences (ENSA), Morocco), Laamari Hlou (Faculty of Science Ibn Tofail University, Morocco)			
ID 147: Evolution of PRIME to PLC-RF hybrid systems, Alfredo Sanz (Microchip, Spain)			
ID 157: Hybrid Control Based on Sliding Mode Fuzzy of DFIG Power Associated WECS, Lakhdar Saihi (Unité de Recherche en Energies Renouvelables en Milieu Saharien (URERMS), Algeria), Fateh Ferroudji (URERMS, Algeria), Brahim Berbaoui (URERMS, Algeria), Youcef Bakou (URERMS, Algeria), Khaled Koussa (URERMS, Algeria), Farouk Meguellati (URERMS, Algeria), Khaira Roumani (URERMS, Algeria)			
ID 160: 75kW Double-Cage Asynchronous Motor Design for Electric Vehicle, The Examination of Space Harmonics, Önder Kalaycıoğlu (Yıldız Technical University, Turkey), Abdulsamed Lordoğlu (Yıldız Technical University, Turkey), Mustafa Gürkan Aydeniz (Yıldız Technical University, Turkey)			
ID 161: Predictive Model on Interest to Own Smart Meter, Siti Rashidah Mohd Nasir (Universiti Teknologi MARA, Malaysia)			
ID 165: Industrial Implementation of a Smart Controller for Electric Vehicle Chargers, Tuğçe İlhan (Vestel Electronics, Turkey), Göktürk Poyrazoğlu (Ozyegin University, Turkey)			
ID 173: Reduction of Main-Grid Dependence in Future DC Micro-Grids Using Electric Springs, S Hari Charan Cherukuri (VIT University, India), Saravanan Balasubramanian (VIT University, India), Sanjeevikumar Padmanaban (Aalborg University, Denmark), Sagar Mahajan Bhaskar (Prince Sultan University, India), Ersan Kabalci (Nevsehir Haci Bektas Veli University, Turkey), G. Arunkumar (VIT University, India).			
ID 175: Adaptive Model Predictive Control for Three Phase Voltage Source Inverter using ADALINE estimator, Ali Yahia Cherif (University Larbi Ben M'hidi-Oum Elbouaghi, Algeria), Seif El Islam Remache (University Larbi Ben M'hidi -Oum Elbouaghi, Algeria), Kamel Barra (University Larbi Ben M'hidi -Oum Elbouaghi, Algeria), Patrice Wira (University Haute Alsace, France)			
ID 177: Comparative Study on Photovoltaic Water Pumping Systems Driven by Direct Current Motor (DCM), Induction Motor (IM) Optimized with P&O, Abdelhak Bouchakour (URAER, Algeria), Bomi Abdelhalim (URAER, Algeria), Boukebbous Seif Eddine (URAER, Algeria), Zaghba Layachi (URAER, Algeria), Fazzani Amor (URAER, Algeria)			