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(icSmartGrid2023)

Paris, France, 04 June-07 June 2023
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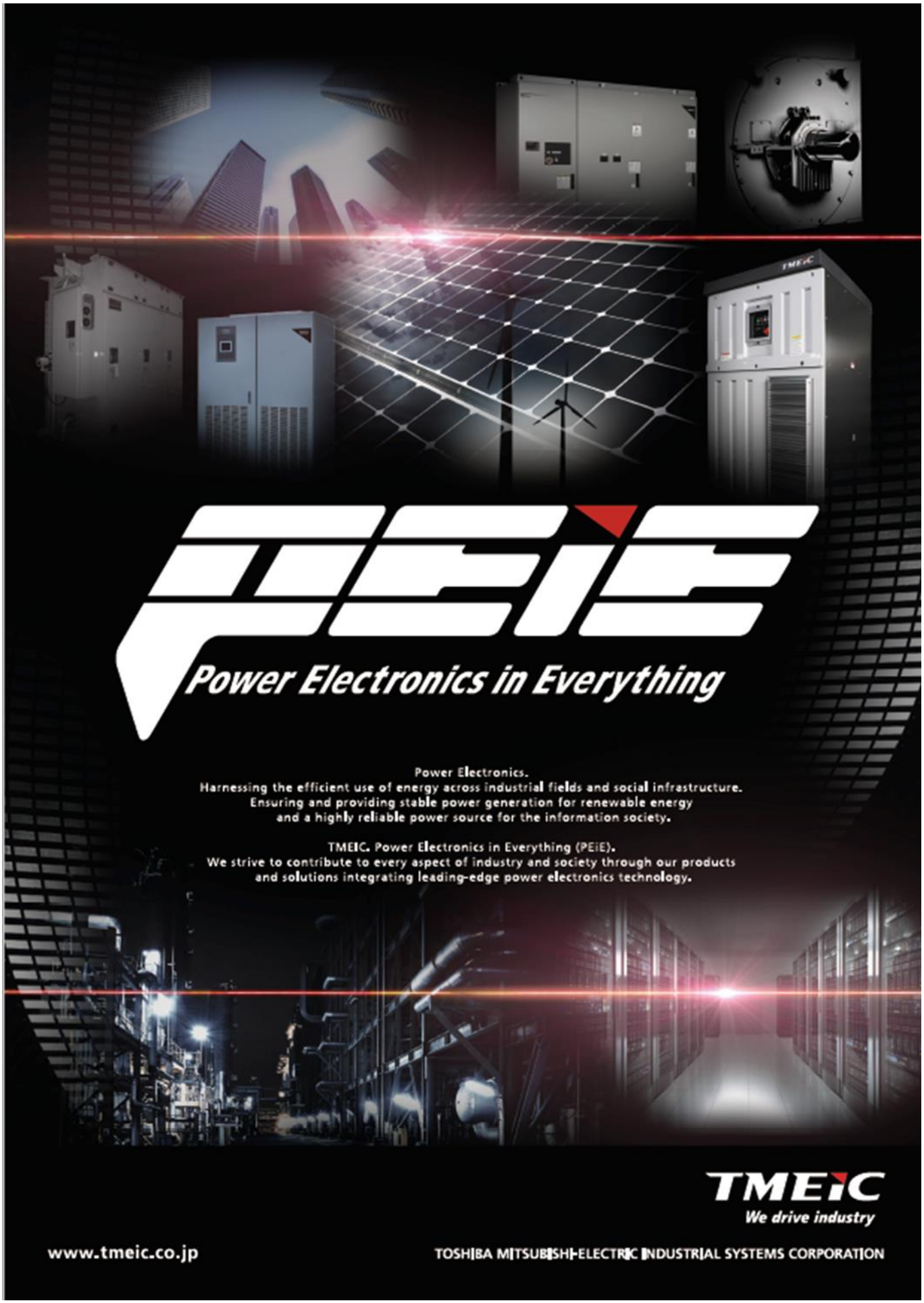

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TOPICS

The coverage of the Conference on Smart Grids includes the following areas, but not limited to:

- Successful applications of smart grid
- Integration of renewable energy sources to smart grid
- Production of energy using smart grid technologies >
- Hybrid smart grid energy system technologies
- Novel energy conversion studies in smart grid systems
- Control techniques for smart grid energy systems
- Performance analysis of smart grid energy systems under different loads
- Computational methods and artificial intelligence studies in smart grids
- Optimized power delivery and generation
- Self-healing
- Distributed Power Energy Systems and Sources, Renewable Energy, Conventional Power Sources
- New Trends and Technologies for Smart Grid
- Policies and Strategies for Smart Grid
- Microgrids for transportation electrification
- Energy Transformation from Renewable Energy System to Smart Grid
- HVDC for Smart Grid
- Power Devices and Driving Circuits for Smart Grid
- Decision Support Systems for Smart Grid
- ICT, IoT, Real-time monitoring and control
- Applications for Industries
- Smart Grid for Electrical Vehicles and Components
- Energy Management Systems, etc.
- Future Challenges and Directions for Smart Grids

LANGUAGE

The working language of the icSmartGrid2023 conference is English.

WELCOME to icSmartGrid 2023

Dear Colleague,

The purpose of the International Conference on Smart Grid (icSmartGrid) is to bring together researchers, engineers, manufacturers, practitioners and customers from all over the world to share and discuss advances and developments in Smart Grid research and applications.

After the successes of the first and the second editions of Smart Grid Workshops on behalf of European Commission Joint Research Centre at Antalya in September 18-20, 2013 and in September 23-25 April, 2014, the third addition at Istanbul in February 22, 2015, the fourth addition at Istanbul in April 28, 2015, fifth addition at Istanbul in -March 21-25, 2016 with the technical co-sponsorship of IEEE IES, the sixth addition at Nagasaki in December 4-6, 2018 with technical co-sponsorship of IEEE IES and IAS, the seventh addition at Newcastle, Australia in December 9-11, 2019, the eighth addition at Paris, France in 2020 with the technical co-sponsorship of IEEE IES and IAS, the ninth addition at Setubal, Portugal in 2021 with the technical co-sponsorship of IEEE IES and IAS, the tenth addition at Istanbul, Turkiye in 2022 with the technical co-sponsorship of IEEE IES and IAS , we are now organizing the eleventh International Conference on Smart Grid at Paris, France, in 2023 with the technical co-sponsorship of IEEE IES and IAS. icSmartGrid will continue promoting and disseminating the knowledge concerning several topics and technologies related to smart energy systems and sources. It is therefore aimed at assisting researchers, scientists, manufacturers, companies, communities, agencies, associations and societies to keep abreast on new developments in their specialist fields and to unite in finding alternative energy solutions to current issues such as the greenhouse effect, sustainable and clean energy issues.

You will find the detail information about this activity on the conference official website. Please visit http://www.icsmartgrid.org/

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OPENING CEREMONY SPEAKERS

Speech 1: Prof. Jean-Luc Dubois-Randé, président of UPEC

Date : June 05, 2023 09.45-09.50

Jean-Luc Dubois-Randé, university professor - hospital practitioner (PU-PH) of cardiology was re-elected president of UPEC on September 7, 2022, for a 4-year term. He has been president of UPEC since 2018. Prof Jean-Luc Dubois-Randé is a medical doctor specializing in cardiology. He is a professor at the UPEC and has been a hospital practitioner in cardiology at the Henri-Mondor Hospital since 1994. He was dean of the UPEC Faculty of Medicine from 2010 to 2018 and head of the Cardiology Department at Henri-Mondor Hospital since 2000. Prof Jean-Luc Dubois-Randé was health advisor to Geneviève Fioraso at the Ministry of Higher Education and Research of the Ayrault government between 2014 and 2015. He was President of the Conference of Deans of Medicine in France from 2016 to 2018. He has been President of the Université Paris-Est Créteil since 2018; President of the Université Numérique en Santé et Sport (UNESS) since 2020, and President of the Fondation UPEC since 2021.

Speech 2: Prof Matthias Beekmann, Director of OSU-EFLUVE (Observatory of Earth and Space Sciences : Fluid Envelopes from the Urban Scale to Astrobiology)

Date : June 05, 2023 09.50-09.55

Matthias Beekmann is the director of the Observatoire des Sciences de l'Univers - EFLUVE (Enveloppes Fluides: de la Ville à l'Exobiologie). He became Director of Research in 2007, and his functions led him to combine research and scientific administration activities. He chairs the scientific council of the national program LEFE/CHAT (Chemistry of the Atmosphere). His work in the scientific council PRIMEQUAL (finalized research on the quality of the air) allowed him at the same time to know the contribution of an interdisciplinary approach on the research and the environment, essential for a federative structure such as an OSU. His 20 years of research in the field of atmospheric physics and chemistry are dedicated to a better understanding and quantification of the formation processes of trace gases and particles affecting air quality.

The OSU-EFLUVE is one of the 25 Observatories of Sciences of the Universe in France. It is both a component (internal school) of UPEC and an OSU attached to the National Institute of Universe Sciences (INSU) of CNRS. It is associated with two partner institutions: the University of Paris VII and the Ecole des Ponts ParisTech. It brings together 4 research units, 3 of which are attached to UPEC: the Interuniversity Laboratory of Atmospheric Systems (LISA), the Water Environment and Urban Systems Laboratory (LEESU), the Center for Studies and Research in Thermal Environment and Systems (CERTES), as well as a laboratory attached to the Ecole des Ponts ParisTech, the Center for Teaching and Research in Atmospheric Environment (CEREA). The current setting up of the Observatory allows to identify different missions: to promote the development and the labeling of different observation services, to create platforms and common services, to promote a federative research at the interface of the air/water/ground environments.

Speech 3: Sabine Patoux, Departmental Councilor of Val-de-Marne

Date : June 05, 2023 09.55-10.00

- Departmental Councilor
- Delegated President to the President
- Member of the Permanent Commission
- Vice-Chair of the 4th Commission: Environment, Sustainable Development, International Relations and European Affairs
- In charge of the Energy Transition delegation
- Member of the 4th Committee: Environment, Sustainable Development, International Relations and European Affairs

From the old French word "Départir" which means "action of sharing", the Department is a portion of the French territory. France has 101 Departments: 96 in metropolitan France and 5 in the overseas territories. The Department is also a territorial authority composed of elected officials, "the departmental councilors". The Val-de-Marne has 50 departmental councilors, representing the 25 cantons of the department. The departmental councilors, elected by universal suffrage for a six-year term, make up the Departmental Council headed by the President, assisted by vice-presidents and delegated departmental councilors. The Conseil départemental meets at least once a quarter. Continuity of work is ensured between meetings by the permanent commission, composed of the President, Vice-Presidents and elected Departmental Councilors appointed by the Council. Through their decisions, the elected officials carry out the Department's policies and act at the heart of the lives of the people of Val-de-Marne. The main campus of University of Paris-Est Creteil is located in the Department of Val de Marne (https://www.en.u-pec.fr/en/about-us/presentation)

KEYNOTE SPEAKERS

Keynote 1: Ms. Noriko Kawakami TMEIC, JAPAN

Date : June 05, 2023 10.30-11.30

Dr. Noriko Kawakami (M'95-SM'16-F'18) is Senior Fellow in the Power Electronics Systems Division at Toshiba Mitsubishi-Electric Industrial Systems Corporation (TMEIC). She has led development projects of large-capacity power electronics equipment for more than 30 years. Her main achievements are related to grid-connected converters and inverters, and their applications to distributed energy sources such as fuel cells, wind turbines, and battery energy storage systems, and their sophisticated control systems, including HVDC systems employing MMC topology. In 2003, she moved from Toshiba Corp. to Toshiba Mitsubishi-Electric Industrial Systems Corporation (TMEIC) which is a successful joint venture of two major Japanese companies in the industrial field.

She served as the President of Industry Applications Society of IEE-Japan from 2018 to 2020. She has served as a members-at-Large of IEEE PELS Administrative Committee since 2018, a regional distinguished lecturer of R10 since 2020 and an editor of the Journal of Emerging and Selected Topics in Power Electronics (JESTPE) since 2020. She received the IEEE McMurray Award for Industry Achievements in Power Electronics in 2022.

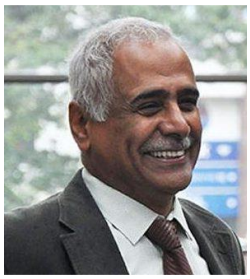
Power electronics technology contributing to carbon neutrality

Summary: At COP27, held in Egypt in November, 2022, the agreement reached at COP26 to limit the increase in global average temperature to 1.5°C was maintained and emphasized its importance. In order to achieve this goal, Japan's current target of carbon neutrality by 2050 is essential. To realize a carbon-neutral society, it is necessary to use renewable energy sources, improve the efficiency of energy consumption, and reduce CO2 emissions by promoting electrification and hydrogenation in the industrial field. Power electronics technology is involved in all of those aspects. TMEIC continues to develop power electronics (PE) technology under the slogan "PEiE: Power Electronics in Everything" to contribute to carbon neutrality.

In this presentation, I will introduce power electronics technology that contributes to carbon neutrality.

Keynote 2: Professor AbuBakr S. Bahaj, The University of Southampton, UK

Date : June 05, 2023 11.40-12.40



Professor AbuBakr S Bahaj, leads the Energy & Climate Change Division and the Sustainable Energy Research Group (ECCD, www.energy.soton.ac.uk) at the University of Southampton, where he completed his PhD, progressing from a researcher to a Personal Chair in Sustainable Energy. He is distinguished for his sustained leadership of technical innovations in the engineering and applications of renewable energy systems and energy efficiency over the last 3 decades, in the UK and internationally. He has successfully applied the engineering of renewables to alleviate environmental concerns whilst supporting the development of people addressing systems spanning the watt to megawatt scales.

Professor Bahaj established the energy theme within his University and his major research programmes include Renewable Energy, Energy Access, Cities & Infrastructure, Buildings & Communities, and Behaviour & Modelling – details are within the ECCD research portfolio booklet. His work has an h-index of 53 and resulted in over 350 articles, published in academic refereed journals and conference series of international standing.

Prof Bahaj also held/holds visiting professorships in Sweden, China and Saudi Arabia. He is a Fellow of the Institution of Engineering Technologies (FIET), Institution of Civil Engineers (FICE), and the Royal Academy of Arts (FRSA). He is Co-Chair of the Research Advisory Group for the Foreign and Commonwealth Development Office, Co-Chair of the Southampton Climate Commission and also leads the University of Southampton Sustainable Strategy Implementation Group. In 2014, he was also recognised by the Science Council voting him one of the UK's top 100 practicing scientists in the UK. He was UK's first city Chief Scientific Advisor for a local authority.

Opportunities to smarting up energy access through optimised mini grid networks

Summary: Globally there are around 800 million people without access to electricity with around 600 million living in Sub Saharan Africa. The Energy for Development (e4D) programme was created in 2010 to address the energy access challenge by initiating seminal studies in electricity access for hard-to-reach poor areas in Sub Shahara Africa and beyond. At its core is fundamental research coupled with implementation of exemplar rural electrification projects as learning entities to support energy (electricity) access. The e4D research and development programme is underpinned by field studies on the implemented six mini grids with the main focus in Kenya and Uganda. Mini grids consist of a power plant linked to a local mainly isolated network to distribute power to consumers. This paper will provide an update on our work focusing on sustainable electrification and socio-economic studies. It will cover electrical network operational performances and resilience, in single and clustered as well as connected mini grids to the national grid.

Keynote 3: Professor Hoshi Nobukazu, Tokyo University of Science, Japan

Date : June 06, 2023 10.00-11.00

NOBUKAZU HOSHI received B.S., M.S., and Ph.D. degrees in electrical engineering from the Department of Electrical Engineering, Yokohama National University, Yokohama, Japan.

In 1997, he joined the Department of Electrical and Electronic Engineering, Ibaraki University, Hitachi, Japan, as a Research Associate and became an Assistant Professor in 2005.

From 2008 to 2014, he was an Associate Professor and is currently a Professor with the Department of Electrical Engineering, Faculty of Science and Technology, Tokyo University of Science, Tokyo, Japan.

His research interests include power electronics, motor control, electric vehicles, and hydrogen generation systems. He is a senior member of the Institute of Electrical and Electronics Engineers (IEEE) and a fellow of the Institute of Electrical Engineers of Japan (IEEJ). He was the corecipient of IEEE IAS Committee Prize Paper Award in 1998 and 2010.

Toward a Hydrogen Energy Society

Summary: Hydrogen is attracting attention as a clean energy source because it does not emit carbon dioxide during combustion or power generation. In addition, because hydrogen can be extracted from various resources, it is also expected to reduce energy supply and procurement risks.

Technological development is crucial at each generation stage, transportation, storage, and utilization of hydrogen and other energy sources. Methods of extracting hydrogen include natural gas reforming and electrolysis of water using electric power. Transportation methods include hydrogen gas pipelines, highpressure compressed hydrogen gas cylinders, liquid hydrogen in tanks, and hydrides. Storage methods include high-pressure compressed hydrogen gas cylinders, liquid hydrogen storage, hydrogen-absorbing alloys, and hydrides. Hydrogen energy is mainly used in three ways: it can be converted into kinetic energy by a hydrogen engine, electrical energy by a hydrogen engine generator, or directly into electrical energy by fuel cells.

This lecture will introduce the characteristics of sodium borohydride (SBH), one of the hydrogen energy carriers, a hydrogen generation method from SBH, several utilization technologies, and the technical challenge of SBH toward a hydrogen society.

Keynote 4: Professor Adel Nasiri, University of South Carolina, USA

Date : June 07, 2023 09.30-10.30

Adel Nasiri, Ph.D., Fellow IEEE, is an expert in high power electronic development, grid resiliency, renewable energy, and energy storage. He has over 25 years of experience in academia and industry.

He is presently a Distinguished Professor in the Electrical Engineering Department at the University of South Carolina. His research interests are high power converters, grid resiliency, energy storage, and microgrids. Previously, he worked at the University of Wisconsin-Milwaukee (UWM) from 2005 to 2021 and served in various roles including founding and Interim Executive Director, Connected Systems Institute (CSI) and Director, Center for Sustainable Electrical Energy, and the site director for the NSF center on Grid-connected Advanced Power Electronic Systems (GRAPES). He has published numerous technical journal and conference papers and co-authored two books and several book chapters on related topics. He also holds nine patent disclosures.

Dr. Nasiri is the past chair of IEEE Industry Applications Society (IAS) Committee on renewable and sustainable energy conversion. He is also an Editor of Power Components and Systems, and Associate Editor of the International Journal of Power Electronics and was an Editor of IEEE Transactions on Smart Grid (2013-2019) and paper review chair for IAS (2018-2019). He was the general Chair of 2012 IEEE Symposium on Sensorless Electric Drives, 2014 International Conference on Renewable Energy Research and Applications (ICRERA 2014), and 2014 IEEE Power Electronics and Machines for Wind and Water Applications (PEMWA 2014).

Development Process for a 2/3 MW, 13kV/7.2kV Converter

Summary: A comprehensive design and development of a 660kW, 20kHz, 13kV/7.2kV isolated converter is presented in this speech. The converter uses a 3-level Active Neutral Point Clamp (ANPC) and 2-level H-Bridge with a 20kHz transformer in an asymmetrical dual active bridge (DAB) arrangement. This converter, which will be a part of the next generation grid network structure, is designed to integrate a 13.8kVac system into a 4.16kVac system at 660kVA power level. The design process includes high voltage coordination such as creepage and clearance distances, electric field analysis, and packaging. Maxwell 3D/Simplorer FEA tool co-simulated with MATLAB/Simulink is used to simulate the electromagnetics, electrical, and electrostatic aspects. The analysis of transformer core, windings, leakage/magnetizing inductances, flux density, losses, efficiency and insulation coordination are also discussed. One important element is liquid cooling of the primary and secondary converter that is presented in detail. Results of transformer testing for high voltage and partial discharge are outlined.

TUTORIALS

Speaker 1: Professor Seref Sagiroglu, Gazi University, Ankara, Türkiye

Date : June 06, 2023 11.10-12.10

Prof. Dr. Seref Sagiroglu completed his undergraduate education in 1987 at Erciyes University, Department of Electronics Engineering. He completed his doctoral studies at the University of Wales College of Cardiff (now Cardiff University, UK) in 1994. He continues his academic career as the full professor in Software Engineering at Gazi University Computer Engineering Department. Sagiroglu has an outstanding academic with more than 8000 citation; almost 400 articles published in SCI/SSCI indexed journals, national and international conferences, symposium and workshops.

Prof. Sagiroglu:

• is author and/or editor of more than 20 books, owns 4 patents and has completed national and international projects on security, big data, intelligent modeling and control, biometric, etc.

• organised more than 50 national and international events on artificial intelligence, 5G, Big Data, Machine Learning, Deep Learning, Information and Cyber Security, Privacy, IPv6, etc. as a chairman or co-chairman. Some of them are: International Conference on Information Security and Cryptology (www.iscturkey.org); IEEE International Conference on Computer Science and Engineering (www.ubmk.org); IEEE Big Data, Deep Learning and Fighting Cyber Terrorisms (www.ibigdelft.org); IEEE International Conference on Machine Learning and Applications (www.icmla-conferences.org); Big Data Analytics, Security and Privacy Workshop (www.bigdatacenter.gazi.edu.tr); National Cyber Terrorism Conference (www.siberteror.org); Turkey Open Data Conference (www.acikveriturkiye.org); IEEE 5G Summit-Istanbul (www.ieeesummit.org); IPv6 Council Turkey (www.ipv6forumtr.org); National IPv6 Conference (www.ipv6.org).

• also has been founding members of Information Security Association (www.bilgiguvenligi.org.tr); Member of IEEE Biometric Task Force; Turkish Science Research Foundation (www.tubav.org.tr), and The Foundation of the People Caring for the Future (www.gonder.org.tr). Sagiroglu had such duties as President and Executive Committee Members of those NGOs.

• completed the duties as the Deans of Graduation School of Science and Technology and Engineering Faculty, and Head of Computer Engineering Department at Gazi University; Editors of International Journal of Information Security Science (www.ijiss.org); International Journal of Information Security Engineering (in Turkish) (www.dergipark.gov.tr/ubgmd) and CyberMag (www.cybermag.com); General Director of FutureTech (www.futuretech.com.tr); Member of Cyber Security Group of Higher Education Council of Turkey.

• contributed to consultants to Havelsan; IT Regulatory Body of Turkey (BTK) and Personal Data Protection Regulatory Body of Turkey (KVKK).

• has delivered as invited or keynote speakers more than 500 seminars, talks, conferences at universities, schools, sectors, TV and Radio Programs, institutions and organisations in the topics of Information Security, Big and Open Data, Cyber Security and Defense, Artificial Intelligence, Computer and Software Engineering, Privacy, Biometrics, Innovation Culture Creation, IPv6, 5G, etc. • now is the director of AI and Big Data Center of Gazi University, Ankara Turkey.

Big Data Analytics, Security and Privacy Issues in Smart Grid Systems

Summary: Big data has great potential to provide opportunities not only many fields but also energy enhancing technical, organizational, social and economic gains and contributions. The current potential of applying big data approaches for better planning, managing, designing, and securing power grid operations are very challenging tasks and needs significant efforts. This talk will cover the issues of computational complexity, data security and privacy, cost, management, planning and integration of big data into power grid systems and also focus on the key challenges in big data analytics, privacy and security issues.

This talk will discuss EV charging power quality issues, analysis approaches, and mitigation measures.

CONFERENCE PROGRAM SUMMARY

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4 PAPERS
(4*20=80 Min)</td><td>P66</td><td rowspan="6">Session-14
(Online)
6 PAPERS
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CONFERENCE PROGRAM SUMMARY

Program Summary of icSmartGrid Paris, France June 04-07, 2023

	JUNE 05, 2023 (MONDAY)					JUNE 06, 2023 (TUESDAY)					JUNE 07, 2023 (WEDNESDAY)	
13:30-15:30	P1 P2 P3 P4 P5 P6	Session-1 6 PAPERS (6*20=120 Min)	P7 P8 P9 P10 P11 P12	Session-2 (Online) 6 PAPERS (6*20=120 Min)	13:00-15:00	P33 P34 P35 P36 P37 P38	Session-7 6 PAPERS (6*20=120 Min)	P39 P40 P41 P42 P43 P44	Session-8 (Online) 6 PAPERS (6*20=120 Min)	13:00-15:00	P72 P73 P74 P75 P76 P77	Session-15 6 PAPERS (6*20=120 Min)
15:30-15:40	Break				15:00-15:10	Break				15:00-15:10	Break	
15:40-17:40	P13 P14 P15 P16 P17 P18	Session-3 6 PAPERS (6*20=120 Min)	P19 P20 P21 P22 P23 P24	Session-4 (Online) 6 PAPERS (6*20=120 Min)	15:10-17:10	P45 P46 P47 P48 P49 P50	Session-9 6 PAPERS (6*20=120 Min)	P51 P52 P53 P54 P55 P56	Session-10 (Online) 6 PAPERS (6*20=120 Min)	15:10-17:10	P78 P79 P80 P81 P82 P83	Session-16 6 PAPERS (6*20=120 Min)
17:40-17:50	Break				17:10-17:20	Break				17:10-17:20	Break	
17:50-19:30	P25 P26 P27 	Session-5 3 PAPERS (3*20=60 Min)	P28 P29 P30 P31 P32	Session-6 (Online) 5 PAPERS (5*20=100 Min)	17:20-18:20	P57 P58 	Session-11 2 PAPERS (2*20=40 Min)	P59 P60 P61	Session-12 (Online) 3 PAPERS (3*20=60 Min)	17:30-18:00	CLOSING CEREMONY	
19:30-20:45	Welcome Party											

Date: 05 June 2023	
KEYNOTE	
10:00-10:30	Opening Ceremony and Speeches: -Mr. Hidehiko Kikuchi, Corporate Senior Advisor to TMEIC, Japan -Prof. Jean-Luc Dubois-Randé, président of UPEC -Prof Matthias Beekmann, Director of OSU-EFLUVE -Sabine Patoux, Departmental Councilor of Val-de-Marne -Prof. Brayima Dakyo, General Chair, icSmartGrid 2023 -Prof. Gilles Lefebre, General Co-Chair, icSmartGrid 2023 -Prof. Fujio Kurokawa, General Co-Chair, icSmartGrid 2023 -Prof. Ilhami Colak, General Co-Chair, icSmartGrid 2023 **Chairs: Professor Nobumasa MATSUI, Professor Seref SAGIROGLU**
10:30-11:30	Speaker: Ms.Noriko Kawakami TMEIC, Japan **Chairs: Professor Fujio KUROKAWA, Professor Gilles LEFEBVRE**
11:30-11:40	**BREAK**
KEYNOTE	
11:40-12:40	Speaker: Professor AbuBakr S. Bahaj, The University of Southampton, UK **Chairs**:**Professor Brayima DAKYO**, **Professor Ramazan BAYINDIR**
12:40:13:30	**LUNCH**

ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
Date: 05 June 2023			
SESSION 1	**CHAIRS: Yudai Furukawa, Ameni Boumaiza**	**SESSION 2**	**CHAIRS: Harrouz Abdelkader, Sevki Demirbas**
13:30-13:50	**ID:3 Synchronous Reference Frame Control of Transformer Based DC Ma Current Sensor** Muhammed Calar (Gazi University)*; Korhan Kayisli (Gazi University)	13:30-13:50	**ID:2 Harmonics Compensation of Grid-connected PV Systems Using A Novel M5p Model Tree Control** Ahmed Bouhouta (Research Laboratory of Electrical Engineering & Automatic, Lrea, University of Médéa)*; Samir Moulahoum (University of Médéa); Nadir Kabache (Laboratory of Electrical Engineering and Automatic, University of Medea); Abdelhafidh Ma Moualdia (University of Medea); Ilhami Colak (Nisantasi University)
13:50-14:10	**ID:90 Identifying Electric Vehicles From Smart Meter Recordings** Mahdi Jalili (Rmit University)*	13:50-14:10	**ID:7 An Integrated Wind Turbine and Power Grid Model** Michal Michon (University of Lincoln)*; Ibrahim M Albayati (University of Lincoln)*; Aliyu Aliyu (University of Lincoln
14:10-14:30	**ID:6 Data-driven Flexibility-oriented Energy Management Strategy for Building Cluster Meso Energy Hubs** Mahdi Nozarian (Kntu); Amin Hajizadeh (Aalborg University)*; Alireza Fereidunian (Kntu)	14:10-14:30	**ID:38 Smart Grid Energy Trading Using Peer-to-peer Blockchain Technology.** Nasim Ahmed (Bangladesh University of Engineering & Technology)*; Md. Ziaur Rahman Khan (Buet)
14:30-14:50	**ID:8 Weighted Feature Detection Mechanism for Internet of Vehicles Over Heterogeneous Vehicular Network** Hamdan A Alshehri (Jazan University)*	14:30-14:50	**ID:16 Comparative Study Between The Sliding Mode and Backstepping Current Control of A Grid-connected Direct Drive Wind-pmsg System** Fatiha Bekraoui (Lddi, Faculté Des Sciences Et De La Technologie, Université D'adrar, Algérie.)*
14:50-15:10	**ID:9 Smart Solar Greenhouse Based Pldc** Ahmad S Alzahrani (Najran University)*	14:50-15:10	**ID:33 Time-series Based Household Electricity Consumption Forecasting** Anita Philips (Karunya Institute of Technology and Sciences)*; J Jaya Kumar (Karunya University)
15:10-15:30	**ID:168 A Cost-effective Fuzzy-based Demand-response Energy Management for Photovoltaics and Batteries** Syeda Shafia Zehra (Politecnico Di Milano)*; Michael Wood (Politecnico Di Milano); Francesco Grimaccia (Politecnico Di Milano); Marco Mussetta (Politecnico Di Milano)	15:10-15:30	**ID:41 Attack Strategies Among Prosumers in Smart Grids: A Game-theoretic Approach** Elvina Gindullina (Athonet)*; Leonardo Badia (University of Padova); Mattia Borgo (University of Padova); Bruno Principe (University of Padova); Lorenzo Spina (University of Padova); Laura Crosara (University of Padova)
15:30-15:40	**BREAK**		

Date: 05 June 2023			
ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
SESSION 3	CHAIRS: Amin Hajizadeh, Muhammed Calar	SESSION 4	CHAIRS: Orhan Kaplan, Oyedotun E Oyewole
15:40-16:00	**ID:12 A Reliable Technique for Power Generation Enhancement in Unsymetrical PV Arrays During Partial Shading** Belqasem Aljafari (Najran University)*; Sudhakar Babu (Chaitanya Bharati Institute of Technology); Karthik Balasubhramanian (Degroote School of Business Mcmaster University)	15:40-16:00	**ID:44 Optimal Power Control Based-metaheuristic Algorithm Based Variable Speed Wind Energy System of Dfig** Harrouz Abdelkader (Department of Hydrocarbon and Renewable Energy, Laboratory (Leesi), University of Adrar, Algeria)*; Ibrahim Boussaid (University of Adrar); Merahi Farid (Electrical Engineering Department. Automatic Laboratory of Setif (University of Ferhat Abbas Setif1); Ibrahim Yaichi (Laboratoire De Developpement Durable Et D'informatique (Lddi), University Ahmed Draia Adrar, Algeria); Ilhami Colak (Nisantasi University); Korhan Kayisli (Gazi University); Virgil Dumbrava (University Politehnica Bucharest)
16:00-16:20	**ID:15 Validating and Improving An Aggregated Ev Model for Energy Systems Evaluation** Kun Qian (University of Southern Denmark)*	16:00-16:20	**ID:125 Peak Shaving Control of Ev Charge Station with A Flywheel Energy Storage System Integrated in Micro Grid** Erdal Bekiroglu (Bolu Abant Izzet Baysal University)*; Sadullah Esmer (Bolu Abant Izzet Baysal University)
16:20-16:40	**ID:136 Peer to Peer Energytrading Demonstrator Using Blockchain** Ameni Boumaiza (Qeeri)*; Antonio Sanfilippo (Qeeri)	16:20-16:40	**ID:88 Determining A Methodology for Effective Reliability Program Plans** Gorkem Sarikaya (Turk Havacilik Ve Uzay Sanayii)*; Sevki Demirbas (Gazi University)
16:40-17:00	**ID:20 Non-invasive Wireless Iot Oil Level Monitor Node Using Submersible Sensors for Early Leak Detection** Johnpaul P Cana (Mapua University)*; Jocelyn F Villaverde (Mapua University)	16:40-17:00	**ID:99 Improving Loadability in Unbalanced Distribution Network Using Flexible Step Voltage Regulator** K C Bevin (Iit Delhi)*; Ashu Verma (Iit Delhi)
17:00-17:20	**ID:113 Improving Energy Efficiency in Climatic Test Chambers with Deep Learning and Absolute Humidity Methods** Erdal Bekiroglu (Bolu Abant Izzet Baysal University)*; Hakan Karaca (Ottonom Engineering Solutions)	17:00-17:20	**ID:133 Predictive Functional Control for Photovoltaic System Optimization** Nassima Ouali (Université D 'abderrahmane Mira De Bejaia)*; Lehouche Hocine (Bejaia University); Abdelhakim Belkaid (University of Bordj Bou Arreidj); Ilhami Colak (Nisantasi University); Cylia Ibaouene (Université Abderrahmane Mira - Bejaia); Abdelyazid Achour (Université De Bejaia)
17:20-17:40	**ID:84 Power Control-based Fuzzy and Modulated Hysteresis Methods for Micro-grid Using A Photovoltaic System** Djamila Rekioua (University of Bejaia)*; Khodir Kakouche (University of Bejaia); Toufik Rekioua (University of Bejaia); Pierre-olivier P.o. Logerais (Certes)	17:20-17:40	**ID:175 Sliding Mode Control with Reaching Law Method for Brushless DC Motor Speed Control** Ferhat Bodur (Gazi Universty); Orhan Kaplan (Gazi University)*
17:40-17:50	BREAK		

Date: 05 June 2023			
ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
SESSION 5	CHAIRS: Yuji Mizuno, Johnpaul P Cana	SESSION 6	CHAIRS: Ahmed Bouhouta, Nassima Ouali
17:50-18:10	**ID:24 Tinyml for Fault Diagnosis of Photovoltaic Modules Using Edge Impulse Platform** Adel Mellit (Electronics Department); Nicola Blasuttigh (University of Trieste)*; Alessandro Massi Pavan (University of Trieste (Italy))	17:50-18:10	**ID:174 Super Twisting Observer Based Second Order Sliding Mode Control for Power Converter with Disturbance** Ferhat Bodur (Gazi Universty); Orhan Kaplan (Gazi University)*
18:10-18:30	**ID:25 A Critical Analysis of The Impact of The Pandemic on Sustainable Energy Scenarios** Gomer Abel Rubio (Espol)*; Wilton Edixon Agila (Espol); Leandro González (Cnh2); Maria Ramirez (Escuela Superior Politécnica Del Litoral (Espol)); Herman N Pineda (Espol)	18:10-18:30	**ID:163 Output Feedback Event-triggered Control of Doubly Fed Induction Generators for Wind Turbines** Mahmoud Abdelrahim (Assiut University)*; Michele Cucuzzella (University of Pavia); Dhafar Almakhles (Prince Sultan University)
18:30-18:50	**ID:29 A Comparative Study of Energy Management Systems for Non-cooperative and Cooperative Multi-microgrids** Yanandlall Gopee (Laas-cnrs)*; Anne Blavette (Cnrs); Guy Camilleri (Irit-smac); Xavier Roboam (Laplace); Corinne Alonso (Laas)	18:30-18:50	**ID:167 Performance Analysis of The 10 Mwp Photovoltaic Plant of Tozeur in Tunisia** Islem Boujlel (Temi); Pierre-olivier P.o. Logerais (Certes)*; Rached Ben Younes (Temi); Chorfi Sara (Steg); Saafi Khawla (Steg); Naoui Rahil (Steg)
18:50-19:10		18:50-19:10	**ID:26 Comparative study of the MPPT methods applied to the PV system; Perturbation & Observation technique, sliding mode control and fuzzy logic control** FADILA TAHIRI (Laboratory LDDI, university ADRAR)*; Harrouz Abdelkader (Department of Hydrocarbon and Renewable Energy, Laboratory (LEESI), University of Adrar, Algeria)
19:10-19:30		19:10-19:30	**ID:170 Comparative Analysis of Decoupling Control Methods for Multiport-isolated Bidirectional DC-DC Converter with Hydrogen Storage System Integration** Oyedotun E Oyewole (University of Strathclyde)*; Dr K Ahmed (Strathclyde)
19:30-20:45	Welcome Party		

Date: 06 June 2023	
KEYNOTE	
10:00-11:00	Speaker: Prof. Hoshi Nobukazu, Tokyo University of Science, Japan **Chairs: Professor Brayima DAKYO, Professor Erdal IRMAK**
11:00-11:10	**BREAK**
TUTORIAL	
11:10-12:10	Speaker: Professor Seref Sagiroglu, Gazi University, Ankara, Türkiye **Chairs: Professor Erdal BEKIROGLU, Professor Mahamadou Abdou TANKARI**
12:10-13:00	**LUNCH**

ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
Date: 06 June 2023			
SESSION 7	**CHAIRS: Emmanuel Fragniere, Petronela Pankovits**	**SESSION 8**	**CHAIRS: Manish Kumar Yadav, Korhan Kayisli**
13:00-13:20	**ID:30 Approximate Reasoning Techniques in The Control of States of Operation of The Pem Fuel Cell** Wilton Edixon Agila (Espol)*; Gomer Abel Rubio (Espol); Jonathan Avilés (Escuela Superior Politécnica Del Litoral, Espol); Leandro González (The National Hydrogen and Fuel Cell Technology Testing Centre)	13:00-13:20	**ID:191 Social Adoption of Smart Grids: The Research Agenda** Samet Ayik (Gazi University)*; H. Nurgul Durmus Senyapar (Gazi University); Ramazan Bayindir (Gazi University)
13:20-13:40	**ID:31 An Integrated Transmission and Distribution Grid Model for The Cybersecurity Analysis of An Ev Ecosystem** Danial Jafarigiv (Hydro-québec Research Institute (Ireq))*; Rawad Zgheib (Hydro-québec Research Institute (Ireq)); Minh Au (Hydro-québec Research Institute (Ireq)); Ribal Atallah (Hydro-québec Research Institute (Ireq)); Marthe Kassouf (Hydro-québec Research Institute (Ireq))	13:20-13:40	**ID:192 Importance of Charging Infrastructure for The Public Adoption of Electric Vehicles - Recommendations for Turkey** Nurgul Durmus Senyapar (Gazi University); Umit Cetinkaya (Gazi University)*; Samet Ayik (Gazi University); Zeliha Aras Altinok (Ankara University); Ramazan Bayindir (Gazi University)
13:40-14:00	**ID:32 Extended Node Method for Steady-state Heating Network Calculation Based on Electric Analogies** Daniela Vorwerk (Helmut Schmidt University Hamburg)*; Detlef Schulz (Helmut Schmidt University Hamburg)	13:40-14:00	**ID:182 Battery Energy Storage Systems in Different Countries for Arbitrage Services** Umit Cetinkaya (Gazi University)*; Samet Ayik (Gazi University); Sevki Demirbas (Gazi University); Ramazan Bayindir (Gazi University)
14:00-14:20	**ID:34 Virtual Power Injection for Optimal Adjustment of Droop-controlled Inverters** Dongmei Chen (University of Texas At Austin)*; Kaden Plewe (Ut Austin); Matthew Chu Cheong (Ut Austin); Pengwei Du (Ercot)	14:00-14:20	**ID:107 Strategic Energy Trading Among Prosumers in A Smart Grid** Elvina Gindullina (Athonet)*; Leonardo Badia (University of Padova); Davide Roana (University of Padova); Simone Boscolo (University of Padova); Laura Crosara (University of Padova)
14:20-14:40	**ID:35 Sensor Fault Detection in Photovoltaic Systems Using Ensemble Learning-based Statistical Monitoring Chart** Fouzi Harrou (Kaust)*; Ying Sun (King Abdullah University of Science and Technology (Kaust)); Abdelhakim Dorbane (Belhadj Bouchaib University of Ain Temouchent); Benamar Bouyeddou (University of Saida-dr Moulay Tahar)	14:20-14:40	**ID:108 Deferred Supplier Energy Amount Prediction Using Neural Network Based on Switching Strategy for Resilient Smart Grid** Eya Kalboussi (Université De Lorraine-lgipm)*; Nadia Ndhaief (Université De Lorraine-lgipm); Nidhal Rezg (Lgipm)
14:40-15:00	**ID:128 Wide-area Stabilizing Control Using Distributed Generation Systems** Amin Sharafi (Rmit University)*; Arash Vahidnia (Rmit University); Mahdi Jalili (Rmit University)	14:40-15:00	**ID:183 Stochastic Seasonal Planning of Dg-based Smart Grid and Energy Hub by Considering Demand Response Program and Environmental Impacts** Narges S. Ghiasi (Clemson University)*
15:00-15:10	**BREAK**		

Date: 06 June 2023			
ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
SESSION 9	CHAIRS: Danial Jafarigiv, Dongmei Chen	SESSION 10	CHAIRS: Necmi Altin, Alphousseyni Ndiaye
15:10-15:30	**ID:36 Fostering "energy Communities": An Ethnographic-seci Approach to User-centered Residential Micro-smart Grid Adoption** Emmanuel Fragniere (Hesso)*	15:10-15:30	**ID:106 Frequency Regulation Support From District Cooling System and V2g Facility in Cluster of Buildings** Manish Kumar Yadav (Indian Institute of Technology Delhi)*; Ashu Verma (Indian Institute of Technology Delhi); Bijaya Ketan Panigrahi (Iit Delhi)
15:30-15:50	**ID:37 Comparative Design of A Stand-alone Solar Energy System with Socioeconomic Factors** Petronela Pankovits (Léonard De Vinci Pôle Universitaire, Research Center, 92 916 Paris La Défense, France)*; Borredon Victoire (Esilv); Kaci Yann (Esilv); Zakaria Abouliatim (Léonard De Vinci Pôle Universitaire, Research Center, 92 916 Paris La Défense, France); Celeste Socquet (Léonard De Vinci Pôle Universitaire, Research Center, 92 916 Paris La Défense, France)	15:30-15:50	**ID:102 Implementation of Genetic Algorithm-based Mppt for PV System in Tropical Climate: Study and Comparison with Conventional Method** Fares Debbabi (Universite Des Antilles)*; Fateh Mehazzem (Université Des Antilles); Ted Soubdhan (Antilles University)
15:50-16:10	**ID:97 Smart Equipment Failure Detection with Machine Learning Applied to Thermography Inspection Data in Modern Power Systems** Ana Maria Garzon (Universidad Del Rosario); Natalia Laiton (Universidad Del Rosario); Victor Sicacha (Universidad Del Rosario); David Celeita (Universidad Del Rosario)*; Trung Dung Le (Geeps)	15:50-16:10	**ID:137 An Improvement of Power Demand Prediction Method Using Weather Information and Machine Learning: A Case of A Clinic in Japan (ii)** Tomoya Inagata (Nagasaki Institute of Applied Science)*; Keita Matsunaga (Nagasaki Institute of Applied Science); Yuji Mizuno (Osaka Electro-communication University); Masaharu Tanaka (Nagasaki Institute of Applied Science); Fujio Kurokawa (Nagasaki Institute of Applied Science); Nobumasa Matsui (Nagasaki Institute of Applied Science)
16:10-16:30	**ID:40 Supercapacitor-based Active Stabilization Method for DC Microgrid with Constant Power Load Causing Instantaneous Instability** Ramjee Meena (Delhi Technological University); Arkabrata Dattaroy (Iit Roorkee)*; Avik Bhattacharya (Indian Institute of Technology Roorkee)	16:10-16:30	**ID: 196 Governor Control Systems in Hydroelectric Power Plants: Overview, Challenges, and Recommendations** Mustafa Ersan (Contectus Global Technology Inc.); Erdal Irmak (Gazi University)*
16:30-16:50	**ID:87 Prediction of The Efficiency of Solar Photovoltaic Energy Injection in A Subtropical Located Grid by Trend Curves Modelling of Actual Production. Douala Case Study.** Fumtchum Georgette (University of Douala, National Higher Polytechnic School of Douala)*	16:30-16:50	**ID: 195 Daily Prediction of PV Power Output Using Particulate Matter Parameter with Artificial Neural Networks** Erdal Irmak (Gazi University)*; Mehmet Yesilbudak (Nevsehir Haci Bektas Veli University); Oguz Tasdemir (Kırşehir Ahi Evran University)
16:50-17:10	**ID:104 Impact of Grid Impedance Characteristics on The Design Consideration of Utility-scale PV Systems** Mojahed Rashed Al-tamimi (King Saud University)*; Faris E Alfaris (King Saud University)	16:50-17:10	**ID:193 Evaluation of Scada Test Beds and Design of A New Software-based Test Bed** Ismail Erkek (Gazi Universitesi); Erdal Irmak (Gazi University)*
17:10-17:20	BREAK		

Date: 06 June 2023			
ORAL PRESENTATIONS		ONLINE PRESENTATIONS	
SESSION 11	CHAIRS: Mojahed Rashed Al-tamimi, Fumtchum Georgette	SESSION 12	CHAIRS: Fares Debbabi, Mehmet Yesilbudak
17:20-17:40	**ID:169 African Renewable Energy Potentialities Review for Local Weak Grids Reinforcement Study** Mohamed Lamine Toure (Laboratoire Greah); Mamadou B Camara (University Le Havre)*; Alireza Payman (Lehavre Univ); Brayima Dakyo ("university of Le Havre, France")	17:20-17:40	**ID:109 Optimization of the MPPT Perturbation and Observation controller by the Adaptive method for stand-alone PV systems** Alphousseyni Ndiaye (Universite Alioune Diop de Bambey-Senegal)*
17:40-18:00	**ID:98 Multiple-regression Method for Online Fault Detection and Diagnosis of PV Systems Using Kalman Filter Algorithm** Yehya Alrifai (École Supérieure Des Technologies Industrielles Avancées (Estia))*; Ionel Vechiu (Estia Institute of Technology); Adriana Aguilera Gonzalez (Estia)	17:40-18:00	**ID:181 Artificial Intelligence Applications for Energy Management in Microgrids** Suleyman Emre Eyimaya (Gazi University); Necmi Altin (Gazi University)*
		18:00-18:20	**ID:103 PV&TEG Hybrid System controlled with Fuzzy based MPPT** Ruhi Zafer Caglayan (Gazi University); Korhan Kayisli (Gazi University)*; Mariacristina Roscia ("university of Bergamo, Italy"); Harrouz Abdelkader (Department of Hydrocarbon and Renewable Energy, Laboratory (Leesi), University of Adrar, Algeria); Ramazan Bayindir (Gazi University); Ilhami Colak (Nisantasi University)

Date: 07 June 2023	
KEYNOTE	
09:30-10:30	Speaker: Prof. Adel Nasiri, University of South Carolina, USA **Chairs: Professor Ramazan BAYINDIR, Professor Mamadou B Camara**
10:30-10:40	**BREAK**

Date: 07 June 2023			
ORAL PRESENTATIONS		**ONLINE PRESENTATIONS**	
SESSION 13	**CHAIRS: Carlo Olivieri, Javad Khazaei**	**SESSION 14**	**CHAIRS:Erdal Irmak, Luis F Ruiz**
10:40-11:00	**ID: 194 New Predictive Control Method for Optimal Minimization of Plug-in Electric Vehicle (PEV) Charging Cost with Vehicle-to-Home (V2H) capability** Harun TURKER (Ponzio Solar SA)*; Marc PONZIO (Ponzio Solar SA); Seddik Bacha (Grenoble-Alpes University)	10:40-11:00	**ID:185 Design and analysis of energy efficient IoT system for health monitoring** Nikhil Guleria (Amity University, Noida)*; Aarya Singh (Amity Uiversity Noida); Sindhu H Gupta (Amity University)
11:00-11:20	**ID:95 Multi-objective Ev Charging and Comfort Management Considering V2g Functionality and Distribution System Constraints** Selim Turkoglu (Ytu); Hilmi Cihan Guldorum (Yildiz Technical University); Ozan Erdinc (Yildiz Technical University)*	11:00-11:20	**ID:27 Quantifying Potential Power Savings From Household Appliance Consumption Data: A Methodological Approach and Estimated Results** Harriet Nyanchama Ocharo (Hitachi Ltd. R&d Group)*; Daisuke Komaki (Hitachi)
11:20-11:40	**ID:17 Development of An Energy Management System for Minimizing Hydrogen Consumption in Fuel Cell and Ultracapacitor Hybrid Electric Garbage Trucks and Analysis of The Sizing Impact** Gulsen Erdinc (Istanbul Gelisim University)*	11:20-11:40	**ID:101 Trends In The Use of Domestic Appliances In Urban Residential Households In Burkina_Faso : Results From A Residential Electricity Consumption Survey** Komlan Hector Seth TKHS TETE (Institut 2iE)*
11:40-12:00	**ID:188 Effect of An Open Crack on The Output Parameters of A Heterojunction Solar Cell** Amina Ennemri (Umbb); Halima Mazouz (Renewable Energies Department, Blida University); Ali Khouzam (Certes); Pierre-olivier P.o. Logerais (Certes)*	11:40-12:00	**ID:23 Factory Energy Management by Steam Energy Cluster Modeling in Paper-making** Sangkeum Lee (Etri)*; Sarvar Hussain Nengroo (Korea Advanced Institute of Science and Technology); Yeonji Jung (Electronics and Telecommunications Research Institute (Etri)); Seonhyeog Kim (Electronics and Telecommunications Research Institute (Etri)); Soonhyun Kwon (Electronics and Telecommunications Research Institute); Youngmee Shin (Electronics and Telecommunications Research Institute (Etri)); Joahyoung Lee (Electronics and Telecommunications Research Institute (Etri)); Yoonmee Doh (Electronics and Telecommunications Research Institute (Etri)); Taewook Heo (Electronics Telecommunications Research Institute); Dongsoo Har (Kaist)
12:00-13:00	**LUNCH**		
		12:00-12:20	**ID:28 A Probabilistic Renewable Energy Allocation Applying Metaheuristics Optimization Methodologies** Mohamed Mustafa Mustafa (Arab Academy For Science, Technology & Maritime Transport); Rania A Ibrahim (Arab Academy For Science, Technology & Maritime Transport)*; Hussein Desouki (Arab Academy For Science, Technology & Maritime Transport); Rania Swief (Ain Shams University)
		12:20-12:40	**ID:93 Bearing Fault Identification for High-speed Wind Turbines Using Cnn** Mohamed Hamid (Arab Academy For Science, Technology & Maritime Transport); Rania A Ibrahim (Arab Academy For Science, Technology & Maritime Transport)*; Mostafa Abd_el-geliel (Arab Academy For Science, Technology and Maritime Transport); Hussein Desouki (Arab Academy For Science, Technology & Maritime Transport)

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ORAL PRESENTATIONS	
SESSION 15	**CHAIRS: Ozan Erdinç, Toure Ibrahima**
13:00-13:20	**ID:161 Comparison of Lstm-based Prediction Strategies for Grid Modal Parameters Forecast** Carlo Olivieri (University of L'aquila)*; Giorgio Maria Giannuzzi (Terna Spa); Francesco De Paulis (University of L'aquila)
13:20-13:40	**ID:162 Development of Single-phase Shunt Active Power Filter for Reduction of Current Harmonics in Data Center Power System** Marinko Miletic (University of Zagreb Faculty of Electrical Engineering and Computing); Katica Raic Raguz (University of Zagreb Faculty of Electrical Engineering and Computing); Vinko Zelenicic (University of Zagreb Faculty of Electrical Engineering and Computing); Igor Erceg ("university of Zagreb, Faculty of Electrical Engineering and Computing"); Damir Sumina (University of Zagreb Faculty of Electrical Engineering and Computing)*
13:40-14:00	**D:4 Data-driven Sparse Model Identification of Inverter-based Resources for Control in Smart Grids** Javad Khazaei (Lehigh University)*; Wenxin Liu (Lehigh University); Faegheh Moazeni (Lehigh University)
14:00-14:20	**ID:178 Batteries Energy Storage Systems: Review of Materials, Technologies, Performances and Challenges** Luis F Ruiz (Certes)*; Gilles Lefebvre (Certes Iut Paris Est Créteil University, 61 Av. General De Gaulle 94010 Créteil Cedex France.); Hélène Peton (Institut De Recherche En Gestion (Irg)); Jura Arkhangelski (Certes Iut Paris Est Créteil University, 61 Av. General De Gaulle 94010 Créteil Cedex France.); Abdou Tankari Mahamadou (University of Paris Est Creteil, Certes Lab.)
14:20-14:40	**ID:179 Series-parallel DC-DC Converter for Power Supply System Using Renewable Energy as Distributed Power Sources** Yudai Furukawa (Nagasaki Institute of Applied Science)*; Kazuhiro Kajiwara (Nagasaki Institute of Applied Science); Daiki Shibahara (Nagasaki Institute of Applied Science); Nobumasa Matsui (Nagasaki Institute of Applied Science); Sho Tezuka (Isahaya Electronics Corporation); Yuji Ohta (Isahaya Electronics Corporation); Fujio Kurokawa (Nagasaki Institute of Applied Science)
14:40-15:00	**ID:100 Day-ahead Optimal Power Flow for Smart-community Microgrid with Centralized Electrical Storage and Wind Turbine** Jura Arkhangelski (University of Paris Est Creteil, Certes Lab.)*; Abdou Tankari Mahamadou (University of Paris Est Creteil, Certes Lab.); Lefebvre Gilles (University of Paris Est Creteil, Certes Lab.)
15:00-15:10	**BREAK**
Date: 07 June 2023	
ORAL PRESENTATIONS	
SESSION 16	**CHAIRS: Harun Türker, Jura Arkhangelski**
15:10-15:30	**ID:180 Surge Voltage Suppression Using Power Device Embedded Module for Half-bridge DC-DC Converter** Jizhe Wang (Nagasaki Institute of Applied Science)*; Kazuhiro Kajiwara (Nagasaki Institute of Applied Science); Taka Kanayama (Fukuoka University); Yuji Ohta (Isahaya Electronics Corporation); Nobumasa Matsui (Nagasaki Institute of Applied Science); Tadashi Suetsugu (Fukuoka University); Fujio Kurokawa (Nagasaki Institute of Applied Science)
15:30-15:50	**ID:190 A Review on Electrolyser and Hydrogen Production From Wind Energy** Toure Ibrahima (Greah-laboratory, University of Le Havre Normandie, France)*
15:50-16:10	**ID:187 Design of Reconfigurable Frequency Synthesizer Memristor Based Hybrid Nco for Hardware Security Applications** Gujjula Ramana Reddy (Sathyabama Institute of Science and Technology)*; Dr Chitra Perumal (Sathyabama Institute of Science and Technology); Dr Prakash Kodali (National Institute of Technology Warangal)
16:10-16:30	**ID: 13 Fuzzy based Locust Swarm Algorithm for Identification operating state of Electrical Energy System with Multiple units** K.Harinadha Reddy (Lakireddy Bali Reddy College of Engineering)*
18:20-18:40	**ID: 184 Impact of Electric Vehicle Integration on an Industrial Distribution Network: Case Study Based on Recent Standards** Ana Simarro García (Renewable Energy Research Institute and Department of Electrical, Electronic, Automatic and Communications Engineering of ETSII-AB, University of Castilla-La Mancha (UCLM), 02071 Albacete, Spain)*; Raquel Villena Ruiz (Renewable Energy Research Institute and Department of Electrical, Electronic, Automatic and Communications Engineering of ETSII-AB, University of Castilla-La Mancha (UCLM), 02071 Albacete, Spain); Andrés Honrubia Escribano (Renewable Energy Research Institute and Department of Electrical, Electronic, Automatic and Communications Engineering of ETSII-AB, University of Castilla-La Mancha (UCLM), 02071 Albacete, Spain); Emilio Gómez Lázaro (Renewable Energy Research Institute and Department of Electrical, Electronic, Automatic and Communications Engineering of ETSII-AB, University of Castilla-La Mancha (UCLM), 02071 Albacete, Spain)
16:50-17:10	**ID: 139 Experimental Implementation of Improved P&O MPPT Algorithm based on Fuzzy Logic for Solar Photovoltaic Applications** Claude Bertin Nzoundja Fapi (Ecole Centrale de Nantes)*; Hyacinthe TCHAKOUNTE (University of Ngaoundéré); Mohamed Hamida (Ecole Centrale de Nantes); WIRA PATRICE (Universite de Haute Alsace); Martin Kamta (University of Ngaoundéré)
17:10-17:20	**BREAK**
17:30-18:00	**CLOSING CEREMONY**

Presentation Instruction for icSmartGrid 2023 Presenters

Virtual & Oral presentation

Presentation time is 15 minutes including 5 minutes Question/Discussion.