Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

Special Session on

"Power Efficiency and Smart Measures based on Advanced Techniques"

Organized by

Dr. Djaffar OULD ABDESLAM (djaffar.ould-abdeslam@uha.fr), University of Haute Alsace, France,

Pr. Dirk Benyoucef (dirk.benyoucef@hs-furtwangen.de), University of Furtwangen, Germany,

Call for Papers

Theme:
This special session will be the opportunity to evaluate the latest power management and power quality improvement by identification, classification and control techniques. The session will cover advances in the area of Smart Grid, Smart Home and Smart Meters. An application of advanced techniques as artificial intelligence is a good opportunity for smart home applications. It's therefore important to use the most effective methods in order to meet new requirements.

Topics of interest include, but are not limited to:
- Power quality improvement
- Advanced methods for electrical disturbances identification
- Power Factor Correction
- Advanced methods for fault detection and classification in power transmission lines
- Home Energy Management System
- Improve the peak demand management
- Smart measures
- Home data analysis and the Internet of Things
- NILM
- Energy charring and Blockchain

Submissions Procedure: All the instructions for paper submission are included in the conference website**: https://attend.ieee.org/iecon-2021/**

Good quality papers may be considered for publication in the IEEE Trans. on Industrial Electronics, subject to further rounds of review.

Deadlines:

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021

Brief CV of SS Organizers

Organizer 1:

Dr. Djaffar OULD ABDESLAM, University Of Haute Alsace (France), djaffar.ould-abdeslam@uha.fr, IEEE Senior Member (90464650) and IES Member.
Djaffar Ould Abdeslam is an Associate-Professor with Habilitation at the Department of Electrical Engineering of the University of Haute Alsace (Mulhouse, France) and at the Laboratory of Modelling, Intelligence, Process and Systems (MIPS) since 2007. He obtained HDR degree (Habilitation à Diriger des Recherches) in Electrical Engineering in 2014 (French post-doctoral degree allowing its holder to supervise PhD students).
Djaffar Ould Abdeslam hold the PES (Prime d'Excellence Scientifique), Allowance for Scientific Excellence, given by the French Ministry of Education in 2012. He is an IEEE Senior Member (90464650) and IES Member (Industrial Electronics Society), since 2008.
He had the opportunity to co-supervise 14 PhD theses and co-supervise 11 other PhD theses in progress. These various works have given: 1 book, 2 book chapter, 44 international journal papers and 92 international conference papers (among them 2 articles in IEEE Tran. on IE, , 1 article in IEEE Tran. on SG, 1 article in IEEE Tran. on PD, 1 article in IEEE Tran. on EC, 25 articles in IECON Conferences, 4 articles in ISIE Conferences and 9 articles in conferences sponsored by IEEE). One of his journal papers in IEEE Tran. on IE is cited 154 times according to ISI Web of Knowledge.
Djaffar Ould Abdeslam regularly co-organizes and chairs special sessions at IEEE-IECON and ISIE conferences (18 since 2006) in the field of modern control and signal processing techniques for improving the power quality. He was invited 14 times for plenary conferences and 11 times for international conferences technical program committee member. He participated as an author/presenter in 32 international conferences. He was an external examiner for Smart Grid research project of the Polish National Science Centre in 2014. He was invited as a researcher in Centre for Applied Power Electronics (CAPE) laboratory (University of Toronto, Canada), periods of: May 2010, May 2011, May 2012, May 2013 and May 2014.

Organizer 2:

Pr. Dirk Benyoucef, Furtwangen University (Germany), dirk.benyoucef@hs-furtwangen.de , IEEE Member (41489805).
Prof. Dr.-Ing. Dirk Benyoucef represents the field of research of applied signal processing with research focus on “Smart Systems” at Furtwangen University (HFU), faculty of Computer and Electrical Engineering. Before graduating from electrical engineering at HTW Saarland, University of Applied Science, Dr. Benyoucef did two completed vocational trainings, firstly as telecommunication mechanic and secondly as information electronics engineer. Subsequent to his degree in electrical engineering at HTW Saarland he studied general electrical engineering and completed his studies in 1998. His doctorate which he finished in 2002 at University of Saarland dealt with the development of communication procedures in energy supply networks.
Dr. Benyoucef assumed the C4 deputy professorship of professor Wittneben in 2002 and build up a research group in the field of powerline communication. Since the acquisition of professorship at HFU he is head of the degree course, which he developed himself, “Electronics and Technical Informatics” as Dean of Studies.

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Furthermore he builds up the laboratory of Digital Communications and Signal Processing and moreover he entrenched the research group ReSP (Signal Processing Research Group) with research priority of applied signal processing in “Smart Systems”. Within the context of research on “Smart Systems” Dr. Benyoucef raised and elaborated on country and federal support projects. Prof. Dr.-Ing. Dirk Benyoucef is author of more than 35 scientific publications and in addition member of IAF at HFU and of IEEE (41489805), VDE and the MPC-Group. He co-organized and chaired special sessions at IEEE-IECON and ISIE conferences (5 special sessions) in the field of signal processing techniques applied to power systems.