

IEEE International Symposium on Power Line Communications and its Applications

8-11 April 2018 – Manchester, UK

IEEE ISPLC 2018



The 2018 IEEE International Symposium on Power Line Communications and its Applications (ISPLC) will be the 22nd symposium dedicated to scientific and technical advances in the field of communications over power lines. The event is sponsored by IEEE Communications Society (IEEE ComSoc). The conference will be held in Manchester, United Kingdom, from April 9th to April 11th, 2018. IEEE ISPLC 2018 main topic is "Smart Grid and its Application" and will focus on industry applications of power line communications, theoretical and practical aspects of communications theory, algorithms, channel and noise measurements, EMC, simulation and real implementations, evaluation and lessons from field trials and related experience, network planning, installation, operation and management, protocols, cybersecurity, standards and regulations pertaining to communications via power lines. One of the main features of ISPLC is strong industry participation; it brings together researchers, practitioners and users of PLC technology. The conference will further include a series of keynote and experts' panel talks, as well as an Industry Exhibit centred on PLC for Smart Grids. Acceptance of submissions will be based on quality, relevance, and originality, with awards for the best submissions. Accepted papers will be published in the IEEE ISPLC 2018 Conference Proceedings and in IEEE Xplore®. Submissions are invited in, but not limited to, the following areas:

Conference Venue

Manchester Metropolitan University
Business School
All Saints Campus
Oxford Road
Manchester, M15 6BH
United Kingdom



Manchester Metropolitan University – Business School

- Noise effects over PLC
- Channel characterization, modelling, emulation, and experimental systems
- MIMO, Modulation, coding and signal processing for PLC
- PLC signal coupling
- Access, in-home and in-vehicle power line networks
- System architectures integrating PLC
- PLC modem and low level design
- Field trial evaluations and results
- Broadband and multimedia applications
- PLC for Smart Metering, Distribution Automation,
- PLC integration with electric grid assets
- Experience from large scale PLC roll-outs
- Performance measurements and comparability of field trials
- Layer 2 (switching) techniques in PLC systems
- Layer 3 (routing) techniques in PLC systems
- PLC standardization and regulation
- Emerging PLC-related technologies
- Network and service management
- Network planning and optimization
- Electromagnetic compatibility and interference
- Coexistence and interoperability
- Measurement concepts, protocols and tools for PLC
- Operation and management for PLC networks
- Green communications and energy saving concepts for PLC modems
- Cross-layer optimization and service integration
- Cybersecurity in PLC

Attractions & Activities



Manchester Town Hall



World-class Football



Museum of Science & Industry



MediaCityUK



Roman Chester



Chatsworth House



The Lake District



The Peak District

Organising Committee

General Co-Chairs:

Bamidele Adebisi,
Manchester Metropolitan University, UK
Haris Gačanin,
NOKIA Research Lab, Belgium

Technical Program Committee Co-Chairs:

Xavier Mestre
Centre Tecnològic de
Telecomunicacions de Catalunya
(CTTC), Spain
Masaaki Katayama
Nagoya University, Japan.

Industry Committee Co-Chairs

Andrew Wells
Jaguar Landrover, UK
David Pitcher,
Power Plus Communications

Important Dates

Paper Submission
24th November 2017

Notification Date
19th January 2018

Final Paper
16 February 2018

PLEASE NOTE: To be published in the IEEE ISPLC 2018 Conference Proceedings and to be eligible for publication in IEEE Xplore®, an author of an accepted paper is required to register for the conference at the full (member or non-member) rate and the paper must be presented by an author of that paper at the conference unless the TPC Chair grants permission for a substitute presenter arranged in advance of the event and who is qualified both to present and answer questions. Non-refundable registration fees must be paid prior to uploading the final IEEE formatted, publication-ready version of the paper. For authors with multiple accepted papers, one full registration is valid for up to 3 papers. Accepted and presented papers will be published in the IEEE ISPLC 2018 Conference Proceedings and submitted to IEEE Xplore® as well as other Abstracting and Indexing (A&I) database.

We look forward to welcoming you to Manchester in 2018!