Call for Papers
IEEE Instrumentation and Measurement Society
IEEE Instrumentation and Measurement Magazine
Special issue on ‘Measurements for Advanced Networking & Networks for Advanced Measurements’

Measurements for Advanced Networking & Networks for Advanced Measurements

The main aim of this special issue is to offer a forum that facilitates professional exchange of knowledge related to the most recent advances about metrology either involving or based on advanced networking. Nowadays, communication protocols and systems are, in fact, capable of assuring and covering the whole range of attractive performance, from range to data rate as well as from power consumption to network scalability. As an example, the outstanding performance in terms of bandwidth, capacity and reliability promised by 5G technology associated with available computational power should make it possible to realize unprecedented measurement networks based on real-time processing and integration of measures including even hi-definition or 4K videos. On the other side, wireless sensor networks involving several measurement nodes distributed on wide geographical areas require different specifications (as low power consumption, long range coverage area, heterogenous computational models) to accomplish their tasks. New tailored approaches and methods are thus required for networks design and implementation as well as assess their performance in the different operating conditions they are involved in.

The scope of this special issue covers aspects ranging from fundamental research to all kinds of advanced technologies.

A special emphasis will not be only devoted to cover the current state-of-the-art, but also emerging trends, hot topics and open problems.

Prospective authors are invited to submit tutorial-style papers on topics related to Instrumentation and Measurement for Measurements for Advanced Networking & Networks for Advanced Measurements including, but not limited to the following:

- 5G-based networks for advanced measurements
- Performance assessment and characterization of 5G-based networks
- IoT networks for advanced measurements
- Performance assessment and characterization of IoT networks
- Cross-layer characterization of communication protocols in sensor networks
- Enabling technologies for advanced measurements networks
- New methods for test and measurement of advanced networks

Papers should present to the wide audience a general overview of one scientific subject of your interest really framed in the Instrumentation and Measurement field.

Contributions dealing with Open Problems in IM are very welcome, also presenting challenging and ambitious solutions, which could be habilitated by current and advanced technology.

While drafting your paper to be submitted to IMM, you are strongly invited to take care that:
• The paper is properly framed in the field of Instrumentation and Measurement. This could be achieved by properly structuring the Review of the State of the Art and motivations of your work.
• In line with mission of the IEEE I&M Magazine, the paper aims to provide an overview of the topic addressed to the general I&M audience.

The paper format is compliant with the IMM’s author guidelines: http://ieee-ims.org/publications/im-magazine. In general, each paper should contain 3500-5000 words, and present 4-6 figures.

When your paper is ready, please submit it completely through the AllenTrack submission system.

With your submission, please include a cover letter where you specify that this paper has been submitted for this special issue.

Prospective authors are invited to submit an 8-page (maximum, references included) paper proposal written in English (title, list of authors, abstract with a brief summary, text, references) according to the timetable below.

**Schedule:**
Full-length paper submission: February 1, 2020

**Guest Editors:**
Leopoldo Angrisani

Editor in Chief: Bruno Ando