

# Special Section on Sensors Applications Symposium

**T**HE IEEE Sensors Applications Symposium (SAS) 2019 was the 14th edition of this conference. SAS, one of the flagship conferences of the IEEE Instrumentation and Measurement Society, brings together sensor developers, innovators, and users, providing a forum for the exploration of new applications in sensor technology. SAS 2019 was very successful thanks to a large number of high-quality articles and the numerous participants who attended the conference, one-third of them were students. A wide range of subject areas was covered during SAS 2019, such as sensor data fusion, energy harvesting for sensors, biomedical sensors and systems, industrial applications, novel sensing technologies, smart building, and smart agriculture. In addition, hot topics, such as assisted living for the aging population, flexible and wearable sensors, sensors for automotive applications, and smart IoT sensing and networking, were also addressed.

The SAS 2019 edition has drawn a remarkable interest worldwide. The conference received 157 submissions of which 108 articles were accepted for presentation at SAS 2019. The SAS review process was designed to ensure a high quality of accepted articles with attendees from all over the world. Accepted articles were divided for presentation into 14 oral sessions and two poster sessions, during the three days of the conference. Authors of the SAS 2019 articles were invited to submit the extended versions to the IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT (TIM). Seventeen submissions were received, which were put through a rigorous and arduous review process. Finally, five articles were accepted, some after several rounds of modifications and enhancements, for publication in the Special Section of TIM.

Despite a small number of articles published, the topics covered by the articles highlight the subject areas typically addressed at the SAS conference. Topics covered by the

selected articles indeed include ion sensor-based measurement systems for combustion monitoring in gas turbines, a low-cost unmanned surface vehicle for pervasive water quality monitoring, a self-sustaining smartwatch to maximize the paragliders fly time, a comparison of the carbon nanofiber–fiber and silicone-based electrodes for bioimpedance measurements, and finally a comparison of molecularly imprinted polymer responses of two plastic optical fiber sensors. We hope you will find these articles interesting and beneficial to your research.

We would like to thank the Technical Program Committee Co-Chairs of the IEEE SAS 2019 for the excellent articles screening they have performed, in order to assure a high-quality conference. We are really grateful to all reviewers for having produced very accurate review reports.

A special thanks to Mrs. Reta Wehmeier for her precious support during the whole submission and review process.

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After nine years of experience in the industry as a System DSP Engineer in VLSI technology at Texas Instruments, Dallas, TX, USA, he joined the University Côte d'Azur (UCA), Nice, as an Associate Professor in 2008. He is currently leading the Edge computing and DiGital systEms (EDGE) Team, Laboratory of Electronics, Antennas and Telecommunications (LEAT), a mixed research unit from UCA and CNRS, Paris, France. He has authored or coauthored more than 100 scientific publications and holds two patents. He has collaborated with several universities and research centers, such as ETH Zürich, Zürich, Switzerland; the University of Verona, Verona, Italy; the University of Rennes—IRISA, Rennes, France. His research interests include wireless sensor networks for the Internet of Things, power efficiency, autonomous systems, energy harvesting, low-power management policies, edge computing, and artificial

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Dr. Pegatoquet was the General Co-Chair of the IEEE Sensors Applications Symposium (SAS) 2019, Sophia Antipolis, France.

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Dr. Andò is also an Associate Editor of the *IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENTS* and the Editor-in-Chief of the *IEEE INSTRUMENTATION*

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