



JES Focus Issue on Ubiquitous Sensors and Systems for IoT

Preface—JES Focus Issue on Ubiquitous Sensors and Systems for IoT

Rangachary Mukundan,^{1,*} Ajit Khosla,^{2,**,z} Praveen Kumar Sekhar,^{3,**} Peter Hesketh,^{4,*} Charles Henry,⁵ and Luca Magagnin^{6,**}

¹Los Alamos National Laboratory, Los Alamos, New Mexico 87545, USA

²Faculty of Engineering, Yamagata University, Yonezawa, Yamagata 992-8510, Japan

³Nanomaterials and Sensors Laboratory, School of Engineering and Computer Science, Washington State University Vancouver, Vancouver, Washington 98686, USA

⁴Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, Georgia 30318, USA

⁵Department of Chemistry, Colorado State University, Fort Collins, Colorado 80523, USA

⁶Dipartimento di Chimica, Materiali e Ingegneria Chimica Giulio Natta, Politecnico di Milano, 20131 Milan, Italy

© 2018 The Electrochemical Society. [DOI: [10.1149/2.0271808jes](https://doi.org/10.1149/2.0271808jes)] Published June 5, 2018. *This paper is part of the JES Focus Issue on Ubiquitous Sensors and Systems for IoT.*

This focus issue of the *Journal of The Electrochemical Society* (JES) is devoted to Ubiquitous Sensors and Systems for IoT. Ubiquitous sensors are becoming an integral part of Internet of Things (IoT) applications, and progress in this domain can be seen each month. The promise is that everyone and everything will be connected via wireless data collection, and services like healthcare will be brought to everyone, everywhere, anytime, for virtually any need. These devices sense the environment and provide applications in home automation, home safety and comfort, and personal health. At a macro level they provide data for smart cities, smart agriculture, water conservation, energy efficiency industry 4.0, and Society 5.0. Other applications include supply chain management, transportation, and logistics.

We would like to highlight a few articles that reflect emerging trends in the field of Ubiquitous Sensors and Systems for IoT. Review

articles by Abhi Raj et al., on Power Sources for the Internet of Things, Sajjad Husain Mir et al., on Organic-Inorganic Hybrid Functional Materials: An Integrated Platform for Applied Technologies, and Haibin Tang et al., on Surface-Enhanced Raman Scattering Sensors for Food Safety and Environmental Monitoring.

Sheng-Joue Young et al., on ZnO Nanorods Adsorbed with Photochemical Ag Nanoparticles for IOT and Field Electron Emission Application provides a useful reference to those who are interested in the field of Sensors and IoT.

The editors of this issue would like to thank all of the authors who have contributed manuscripts, all of the reviewers, JES Editor Robert Savinell for his guidance, and the ECS staff, especially Beth Schademann, Paul Cooper, Annie Goedkoop, Beth Craanen, and Andrea Guenzel for making this issue a success.

*Electrochemical Society Fellow.

**Electrochemical Society Member.

^zE-mail: khosla@yz.yamagata-u.ac.jp