



## Preface—JES Focus Issue on 4D Materials and Systems

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This focus issue of the *Journal of The Electrochemical Society* (JES) is devoted to the First International Conference on 4D Materials and Systems, Yamagata University, Japan and Microfluidics, MEMS/NEMS Sensors and Devices II symposium, held at the Seattle, Washington, Meeting of the Society, May 13–17, 2018.

It has been an exciting opportunity to collect together selected papers from authors who were invited to present talks at 4DMS from August 26–30, 2018, at the Faculty of Engineering at Yamagata University, and at Microfluidics, MEMS/NEMS Sensors and Devices II symposium. The 4DMS conference had five parallel tracks: (1) Gel Symposium, (2) Flexible and Printed Electronics, (3) Material Processing, (4) Electrochemical Materials and Devices for Energy Conversion and Storage, and (5) Sensors and Systems.

We would like to highlight a few articles that reflect emerging trends in the field of 4D materials, Microfluidics, MEMS/NEMS Sensors and Devices. A Perspective article by Muthukumaran

Packirisamy et al., on Bio-Nano-Interaction in Treatment and Management of Cancer; development of ABE-Stat, a Fully Open-Source and Versatile Wireless Potentiostat Project Including Electrochemical Impedance Spectroscopy by Daniel M. Jenkins et al.; 4D Printing of Smart Stimuli-Responsive Polymers by Raffaella Suriano et al., Editors' Choice articles on Artificial Intelligence Based Mobile Application for Water Quality Monitoring by Sushanta Mitara et al., and Development of Screen-Printed Flexible Multi-Level Microfluidic Devices with Integrated Conductive Nanocomposite Polymer Electrodes on Textiles by Bonnie Gray et al.

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