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FOREWORD

Special Section on Recent Progress in Organic Molecular Electronics

Organic light-emitting diode (OLED) display is one of successful organic electronics devices. The other passive and active devices such as functional insulators, semiconductors, conductors, optic or magnetic materials, and biomaterials have been investigated. It is important to combine organic devices with the manufacturing processes of low productive energy. For example, printable or coatable devices and flexible application. Not long ago these technology led to Japan. Unfortunately Korea, China and Taiwan have the lead over these research fields in the world now. However, much excellent many researches have been reported from Japan every year. We are very happy if this special issue introduces interesting topics to you.

In the Electronics Society of IEICE, the Technical Committee of Organic and Molecular Electronics (OME) has showed the excellent leadership as a pioneer in this field. One of its important activities is the International Symposium on Organic Molecular Electronics (ISOME), and has been organized biannually since 2000. The 11th ISOME (ISOME2020) would be held on August 6 to 8, 2020 at Yakusa Campus, Aichi Institute of Technology. However, the original schedule was May 28 to 30. But it was postponed by the first infection of new corona virus in spring. Unfortunately ISOME2020 was carried out by the on-line presentation (Zoom system) because one cannot cast aside the infection of COVID-19 until August.

The symposium was blessed with 46 presentations, including 2 plenary lectures, 10 invited talks, and 34 contributed papers. 71 participants, including 68 Japanese and 3 foreigners from 2 countries joined to the discussion. The topics in the conference expanded to the wide range such as functional organic materials, Surface modification, thin films, nano-interfaces, single molecular devices, organic electronic devices, optical devices, sensors, measurement, energy conversion technology, bio-technology, and flexible electronics. The active vitality of this symposium specified the promising prosperity of organic molecular electronics and biotechnology.

In conjunction with ISOME 2020, a special section of "Recent Progress in Organic Molecular Electronics and Biotechnology" is issued in this volume of IEICE Transactions on Electronics. This Section consists of 1 regular and 10 brief papers. Pertinent special issues have been published biannually since 2000 (Vol.E83-C, No.7). These issues integrate invaluable record of the spreading progress in this field. Finally on behalf of the Editorial Committee, I would like to express sincere gratitude to the contributors as well as the Electronic Society of IEICE, and especially the ISOME2020 Organizing Committee members.

Tatsuo Mori (Aichi Inst. Technol.), Guest Editor-in-Chief

Tatsuo Mori *(Member)* received B.E., M.E. and Dr. Eng. Degrees in electrical engineering from Nagoya University, Japan in 1985, 1987 and 1990, respectively. He belonged to Nagoya University as assistant professor, lecturer, or associated professor since 1990. He moved as a professor from Nagoya University to Aichi Institute of Technology on April, 2012. His research field is high field phenomena of polymeric insulating materials and the fabrication and estimate of organic devices such as OLEDs and OPVs, and perovskite solar cells. He served as a chair of Technical Committee of OME for the fiscal years of 2017 and 2018. He is also a member of the Institute of Electrical Engineering of Japan, the Japan Society of Applied Physics, the Institute of Electrical and Electronics Engineering (IEEE), the Society of Polymer Science, the Japan Society of Vacuum and Surface Science, the Illuminating Engineering Institute of Japan, the Japan Photovoltaic Society, and Japan OLED Forum.