
FOREWORD

Special Section on Recent Progress in Organic Molecular Electronics

The study on the organic material for electronic device development is very active. Various aspects of organic materials including insulators, semiconductors, conductors, optic materials, magnetic materials, and biomaterials are investigated. Their device applications extend to such fields as transistors, memories, displays, photovoltaics, optical devices, energy devices, sensors, actuators, and bioelectronics. Many of these applications make use of the fact that organic devices are lightweight, flexible, cost-effective, and ease in large-scale mass production. The organic materials are progressively increasing their importance as electronic materials. The organic electronics becomes more and more important, and attracts attention very much.

In the Electronics Society of IEICE, the Technical Committee of Organic and Molecular Electronics (OME) has taken the initiative to pursue technical development of this field. One of its important activities is the International Symposium on Organic Molecular Electronics (ISOME), which has been organized biannually since May 2000 to keep track of cutting-edge research status in this field. The 9th ISOME (ISOME 2016) was held successfully from May 18 to 20, 2016 at Niigata University Satellite Campus (Ekinan-Campus) “*TOKIMATE*” in Niigata. The symposium was blessed with 78 presentations, including 3 plenary lectures, 15 invited talks, and 60 contributed papers. 117 participants, including 92 Japanese, and 25 foreigners from 9 countries, joined lively discussion on the emerging topics of organic and molecular electronics. The papers spanned variety of aspects in organic materials for electronics and photonics, including fundamental physics and chemistry, fabrication and characterization, electronic and optical properties and devices, and biotechnologies, but considerable number of these papers can be classified in interdisciplinary area. The activity of this symposium literally symbolized the bright future of organic and molecular electronics.

In conjunction with ISOME 2016, a Special section of “Recent Progress in Organic Molecular Electronics” is issued in this volume of IEICE Transactions on Electronics. This section consists of 9 brief papers. Pertinent special issues have been published biannually since 2000 (Vol.E83-C, No.7). These issues integrate invaluable record of the development in this field, providing an important source of information to update the forefront of organic molecular electronics and to gain a new insight into the future of this field. On behalf of the Editorial Committee, I would like to express sincere gratitude to the contributors as well as the Electronic Society of IEICE.

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Keizo Kato (*Senior Member*) received B.E., M.E., and Dr. Eng. degrees in electrical and electronic engineering from Tokyo Institute of Technology, Japan in 1982, 1984 and 1987, respectively. Since 1987, he has been with Niigata University, Japan, where he is now a Professor of the Graduate School of Science and Technology. From 1999 to 2000, he worked as a Visiting Professor of University of Sheffield, UK. The areas of his research involve electrical and electronic materials, thin films and organic electronics. He served as a chair of Technical Committee of OME for the fiscal years of 2013 and 2014. He is also a member of the Institute of Electrical Engineers of Japan, the Japan Society of Applied Physics, the Laser Society of Japan, and IEEE.

