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FOREWORD

Special Section on Recent Development of Electro-Mechanical Devices

Recent progress of electronic devices brought in downsized systems and high signal-rate transmission. Improvement of electro-mechanical devices including electrical contacts as well as electrical and optical signal interconnections are fundamental and critical technical fields for continuing progress. Microelectronics/nano-scale electronics and DC power distribution in automotive electronics are new fields in research and development of electro-mechanical devices. For environment aspects, Pb-free and Cd-free materials have been strongly required in electro-mechanical devices, and recycle, reuse, and reduce techniques are also important issues.

The International Session on Electro-Mechanical Devices (IS-EMD) has been annually held since 2001 in order to stimulate R&D activities on the related fields. The 16th International Session on EMD (IS-EMD2016) was held in Awaji Island, Hyogo, Japan on November 2016, and 15 technical papers were presented. Intensive and fruitful discussions and exchanges of opinions were realized by the participants.

The Special Section Editorial Committee had 13 submitted papers from both IS-EMD2016 and other recent research activities. The Committee selected six papers which provide advantageous and beneficial technical results in the related research fields.

The Special Section is the achievement of the Editorial Committee. I would like to express my great thanks to the members of the Committee. Especially, I greatly appreciate Prof. Yuichi Hayashi and Prof. Yoshiki Kayano, Guest Editors, for their dedicated contribution to editorial task of the Committee.

Special Section Editorial Committee
Guest Editors: Yuichi Hayashi (NAIST), Yoshiki Kayano (The Univ. of Electro-Communications)
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Hideaki Sone *(Fellow)* received the B.E. degree in electrical engineering and the M.E. and Ph.D. degrees in electrical communications from Tohoku University, Sendai, Japan. He joined the Faculty of Engineering, Tohoku University, as a Research Associate in 1980. He is currently a Professor of the Cyberscience Center, Tohoku University. His main research interests include information telecommunication systems and instrumentation electronics. Dr. Sone is a member of IEICE, IEEE, SICE, and IEEJ.



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