FOREWORD

Special Section on Recent Development of Electro-Mechanical Devices

Electro-Mechanical devices (EMD) mainly refer to mechanical switching and connecting devices, such as mechanical relays, switches and connectors. They have a long history in practical usage in various industrial fields for the purpose of delivering and/or controlling electrical signals and power, and are still serving as important key components. Especially in recent years, their roles are being re-focused in several technical fields. For example, demands of DC power distribution are increasing in power distribution. Thus, R&D efforts in the related fields of technologies have been strongly required.

The 15th International Session on Electro-Mechanical Devices (IS-EMD2015) was held on November 5–6 in Sendai, Miyagi, Japan. About 30 participants gathered, and 15 technical papers were presented. Intensive and fruitful discussions and exchanges of opinions were realized at the conference site.

In this special section, several papers from IS-EMD2015 as well as other recent research activities are published. Those papers in this special section surely provide advantageous and beneficial technical results in the related research fields.

Lastly, I would like to express my great thanks to the members of the Editorial Committee. Especially, I greatly appreciate Prof. Yoshiki Kayano and Prof. Yu-ichi Hayashi, Guest Editors, for their dedicated contribution to editorial task of this special section.

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Junya Sekikawa (Member) graduated in 1993 from the Department of Electrical Engineering, Iwate University. He received an M.E. degree in 1995 from Iwate University, Japan and a Ph.D. degree in 1999 from Nagoya University, Japan. In 2000, he became an assistant professor at Shizuoka University. Currently, he is an associate professor at Shizuoka University. He has been engaged in research on arc discharge and electrical contact phenomena. He is a member of IEEE, IEEJ and JSPF, respectively.

