FOREWORD

Special Section on Recent Development of Electro-Mechanical Devices — Papers selected from International Session on Electro-Mechanical Devices (IS-EMD2010) and other research results —

International Session on Electro-Mechanical Devices (IS-EMD) 2010 was successfully held in Xian, China on Nov. 11–12, 2010 and many young Chinese researches and oversea researcher presented interesting papers, owing to Prof. Sawa's effort. In this section, most of papers are selected among those presented at IS-EMD 2010, and several papers submitted for this special section are also included.

Nowadays, circumstances surrounding electromechanical devices are drastically changing, due to mobile information equipment technology developments and the automobile electrification development, where the connector reliability problems are more important. In addition, theoretical analysis tools, such as 3-dimensional & mechanical-electrical coupled analysis tools, and experimental analysis tools are highly progressing, in recent days. Therefore, the new needs and the new seeds will be coupled and will be expected to make it possible to develop further innovative technologies for this field.

This year, 57th IEEE Holm-2011 conference on electrical contact, will be held in September, in Minneapolis, U.S.A. Next year, 26th International Conference on Electrical Contact will be held in Beijin, China. Therefore, International technical communication will be increasingly active, in these days. The editorial committee hopes that this section helps researchers and engineers to exchange recent technical information and stimulates significant discussion in this field.

Lastly, I greatly appreciate the enthusiastic effort of Dr. Yoshida, Secretary and other editorial committee members. I would like to say many thanks to the reviewers who spent much time to read the submitted papers and give us many helpful comments.

Noboru Morita, Guest Editor

Noboru Morita *(Nonmember)* received the B.E., M.E. and Ph.D. degrees in Electrical Engineering from Keio University, Yokohama, Japan, in 1970, 1972 and 1986, respectively. In 1975, He joined Keihin Products Operation of Toshiba Corporation, in Yokohama, Japan, since then, he has been involved in the field of carbon brush sliding contact reliabilities and electric machine design matters. In 1999, he joined Nippon Institute of Technology, in Saitama, Japan, where he has been a professor in electric and electronics department. He is an IEC Expert for IEC TC2/MT14 for standard development & maintenance for carbon brush products, and is chair of DC Machine Committee of IEE of Japan.