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## FOREWORD

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### Joint Special Section on Opto-electronics and Communications toward NGN and beyond

This special section is associated with the 12th Optoelectronics and Communications Conference (OECC2007) and the 16th International Conference on Integrated Optics and Optical Fiber Communication (IOOC2007) which was held in Yokohama, Kanagawa, Japan on July 9–13, 2007 cosponsored by IEICE Communications Society and IEICE Electronics Society. The Conference program included 260 contributed papers on research, development, and applications of optical communication systems and optoelectronic devices. The purpose of this special section is to chronicle current progress in these fields on the basis of presentations at the conference. However, this special section is not intended to be a conference digest. Advances in the researches after the conference are included in most of the papers.

This special section includes following five categories: 1) Networks and Applications, 2) Transmission Systems and Technologies, 3) Optical Fibers, Cables and Fiber Devices, 4) Optical Active Devices and Modules, 5) Optical Passive Devices and Modules. Papers in categories 1 and 2 are published in the Transaction on Communications and those in categories 3, 4 and 5 are published in the Transaction on Electronics.

For this special section, as many as 9 papers are submitted for category 1 and 2. These papers are reviewed from the view points of originality, effectiveness, logicality, reliability and so on. Finally, 5 papers are accepted for publication. The accepted papers deal with topics highlighted at the conference; photonic networking node technologies (3), long haul transmission technologies (1) and home networking technologies (1). I hope that this special section will be useful in disseminating some of the recent progress in the field of optical communications and optoelectronics, and that it will also stimulate readers' interest in the future OECC.

Finally, I would like to express my sincere appreciation to all the authors for their valuable contributions and to the reviewers for their outstanding efforts to complete the reviewing process. I am greatly indebted to the editorial committee members listed below who worked diligently to enhance the quality of this special section.

#### Editorial Committee members

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Minoru Shikada, Guest Editor-in-Chief

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**Minoru Shikada** (*Member*) received B.E., Ph.D. degree in Electronics Engineering from Tohoku University in 1973, 2005, respectively. He joined Central Research Laboratory, NEC in 1973 and had worked in the area of optical fiber communication system. From 1993 he managed Optical System Research Laboratory, where he led research and development of optical fiber communication systems. He is currently a chief manager of Central Research Laboratories, NEC. He was awarded Achievement Award (1998) from IEICE.

