Emerging Optoelectronic Technologies

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This special section on emerging optoelectronic technologies represents some of the high-quality work reported at the International Conference on Emerging Optoelectronic Technologies held in Bangalore, India, during December 1991. The conference was sponsored by SPIE; the Jawahar Lal Nehru Center for Advanced Scientific Research in Bangalore; the Department of Science and Technology of India; and the U.S. National Science Foundation. Over 300 leading scientists and engineers from all over the world participated in the conference. A glance at the table of contents yields convincing evidence of the diversity of interests and capabilities of the optoelectronic community. The papers represent work reported in the areas of materials and fabrication technologies, optoelectronic devices and integrated circuits, optical waveguides, and novel phenomena and optoelectronic systems.

The first nine papers included in this special section are expanded versions of the papers presented at the conference. The other six papers represent the recent results from research groups in India, the United States, and Canada.

We are grateful to the reviewers of the papers published here who made many constructive suggestions for improving the manuscripts and to all the authors who were most cooperative with editorial requests. Our sincere thanks to Editor Brian J. Thompson for his guidance and help with the editorial process.

Vijai K. Tripathi received a BSc degree in 1958 from Agra University, India, a MScTech degree in electronics and radio engineering in 1961 from Allahabad University, India, and MSEE and PhD degrees in electrical engineering in 1964 and 1968, respectively, from the University of Michigan, Ann Arbor. From 1961 to 1963, he was a senior research assistant at the Indian Institute of Technology, Bombay. In

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Govind P. Agrawal received the BS degree from the University of Lucknow in 1969 and the MS and PhD degrees from the Indian Institute of Technology, New Delhi, in 1971 and 1974, respectively. After holding positions at the Ecole Polytechnique, France, the City University of New York, and AT&T Bell Laboratories, Dr. Agrawal joined the faculty of the Institute of Optics at the University of Rochester, New York, in January

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A. Selvarajan obtained his MSc in physics from Annamalai University and his PhD from Indian Institute of Science, Bangalore. Currently, he is a professor at the Department of Electrical Communication Engineering, Indian Institute of Science. He has more than 70 publications in the areas of optics and spectroscopy, holography, acousto-optics, fiber optics, and integrated optics. His current interests in-

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