

Introduction to the Issue on High-Power Fiber Lasers

WELCOME to the IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS (JSTQE) Issue on High-Power Fiber Lasers! This is the first of two issues on laser systems. The second issue, to be published in March/April 2009, will cover fiber laser systems and applications, as well as laser beam combination.

This first issue, published in January/February 2009, focuses on the fiber lasers themselves. The aim is to capture the current rapid progress in the field, sufficiently rapid to motivate new JSTQE issues less than two years after the publication of the highly successful May/June 2007 issue on progress in solid-state, fiber, and tunable sources. Although the issue was open to a wide range of aspects of fiber lasers, the papers can be grouped into three comparatively narrow categories: waveguide engineering and propagation, pulsed fiber lasers and amplifiers, and novel laser schematics, wavelengths, and materials. We view this as a reflection of the areas of research currently seeing the most rapid progress, and indeed, the areas in most need of additional research. These topics are discussed in both invited and contributed papers, which provide comprehensive overviews of the current status and future trends as well as original results and recent developments in fiber lasers.

We hope you will find this issue to be an interesting and useful reference that will impact and stimulate further research on high-power fiber lasers.

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Dr. Ramachandran was the Program Chair for the IEEE Lasers and Electro-Optics Society (LEOS) Summer Topicals in 2006. He has also been a member of numerous other conferences and grant-review committees. He is a member of the Optical Society of America (OSA) and the IEEE-LEOS. His work on higher order mode fibers has been highlighted several times in popular or trade magazines such as *Laser Focus World* and *Photonics Spectra*.

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