Preface

The 21st International Toki Conference on "Integration of Fusion Science and Technology for Steady State Operation" was held in Toki on November 28 to December 1, 2011, organized by the National Institute for Fusion Science (NIFS), National Institutes of Natural Sciences. This was the twenty-first meeting of a series that originated in 1989, when the National Institute for Fusion Science was established. The topics of the 21st Conference covered a wide range of research in fusion science and near-term and long-term technology oriented to steady state operation. The topics selected for the Conference were as follows:

- 1. Progress in fusion plasma confinement
- 2. Plasma-wall interactions and divertor technology
- 3. Materials and blankets
- 4. Superconducting magnets, cryogenic systems and related technologies
- 5. Heating and fueling
- 6. Plasma diagnostics and control
- 7. Safety, environment and tritium control
- 8. Modeling and simulation for fusion plasma
- 9. Concepts of steady state DEMO
- 10. Interdisciplinary issues between fusion and other fields

The outline of the Conference is available at http://www.nifs.ac.jp/itc/itc21/index.html.

This special issue of Plasma and Fusion Research (PFR) contains papers which were presented at the Conference and accepted for publication after peer review according to the standards of the PFR.

The guest editors of this special issue are as follows:

Takeo MUROGA (NIFS, Japan) Chairperson

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Shoichi OKAMURA, Hideya NAKANISHI, Shin KUBO, Masaki NISHIURA, Toshiyuki MITO, Yamato ASAKURA, Yoshihiko HIROOKA, Akihiro ISHIZAWA and Milos SKORIC (NIFS, Japan) Yukiharu OHSAWA, Nobuaki NODA, Yukihiro TOMITA and Katsumi IDA (PFR Editors)

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Takeo MUROGA Chairperson of Guest Editors September 1, 2012