JOURNAL OF PLASMA AND FUSION RESEARCH
The Journal of the Japan Society of Plasma Science and Nuclear Fusion Research
Vol. 82, No.1, January 2006

Prologue
Key Values of Diversity ................................................................. TAKAMURA Shuichi 1

Special Topic Article
Present Design and R&D Status of International Fusion Materials Irradiation Facility (IFMIF)
1. Introduction .......................................................... MATSUI Hideki 3
2. Development of Test Facilities for IFMIF
   SHIMIZU Akihiko, KIMURA Akihiko, KASADA Ryuta, KURISHITA Hiroaki and BABA Mamoru 7
3. Development of Liquid Lithium Target System in IFMIF
   NAKAMURA Hiroo, HORIKE Hiroshi, KONDO Hiroo, TANAKA Satoru and FUKADA Satoshi 16
4. Development of Accelerator for IFMIF .................................. MAEBARA Sunao and WATANABE Kazuhiro 21
5. Central Control/Common Instrumentation and Conventional Facilities .................. SUGIMOTO Masayoshi 26
6. Summary ................................................................. SUGIMOTO Masayoshi 28

Project Review
Scientific Activity on Simulation Studies at National Institute for Fusion Science in 2004 .......... OKAMOTO Masao 31

Information ...................................................................................... 53
Plasma and Fusion Calendar .......................................................... 57
Articles in PFR .................................................................................. 58
Announcement ................................................................................ 59

Cover
Pressure deformation obtained by the direct numerical simulation of the 3D compressible MHD equations of LHD. The green surface and thin lines represent the isosurface of the pressure and the stream lines, respectively. The vortices deform the pressure into the mushroom-like structure. (The figure is provided by Dr. MIURA Hideaki (NIFS) in section 2.12 of Project Review 'Scientific Activity on Simulation Studies at National Institute for Fusion Science in 2004')