Available online at www.sciencedirect.com
SCIENCE DIRECT®
Journal of Nuclear Materials 343 (2005) vii
journal of nuclear materials
www.elsevier.com/locate/jnucmat

Foreword

The Sixth International Workshop on Spallation Materials Technology was held on November 30 to December 5, 2003, in Hayama, Kanagawa, Japan. This volume contains the proceedings of that meeting and includes nearly all of the papers presented at the workshop. High Energy Accelerator Research Organization and Japan Atomic Energy Research Institute organized this meeting in cooperation with Forschungszentrum Jülich (FZJ), Germany; Los Alamos National Laboratory (LANL), USA; Paul Scherrer Institute (PSI), Switzerland; and Oak Ridge National Laboratory (ORNL), USA.

The main purpose of this work is to ensure that maximum scientific and technical information is obtained for the concepts and engineering designs of major high-power spallation neutron sources throughout the world. In addition, from a more fundamental point of view, intriguing material issues related to the unique spallation environment have attracted many researchers. Coverage will emphasize cavitation erosion (pitting) and pressure waves in liquid metal targets, radiation effects in target structural materials and in accelerator elements, compatibility of materials with their environments, particle transport and target/moderator engineering in the field of high-intensity spallation neutron sources, corrosion effects under radiation in nuclear transmutation materials and material issues in the neutrino factory in the future.

The series of International Workshops on Spallation Materials Technology began in April 1996 in Oak Ridge, Tennessee, USA. Proceedings containing summaries and presentation materials of the speakers were published [1]. Subsequent workshops of the series were held in Ancona, Italy, September 1997 and Santa Fe, New Mexico, USA, April 1999. The respective proceedings of these meetings [2,3] also contained summaries and presentation materials of the speakers. For the fourth workshop in the series, held in Schruns, Austria, October 2000, the proceedings were published as full papers because of the rapid progress of the work and the burgeoning wealth of results and analyses [4]. The fifth workshop in the series was held in Charleston, South Carolina, USA, May 2002 [5].

References

[1] L.K. Mansur, H. Ullmaier (Eds.), Proceedings of the International Workshop on Spallation Materials Technology, Oak Ridge, Tennessee, April 23–25 1996, Oak Ridge National Laboratory Report, CONF-9604151, 1996.
[2] F. Carsughi, L.K. Mansur, W.F. Sommer, H. Ullmaier, Proceedings of the Second International Workshop on Spallation Materials Technology, Ancona, Italy, September 19–22 1997, Forschungszentrum Jülich Report, Jül-3450.
[3] W.F. Sommer, H. Ullmaier, L.K. Mansur (Eds.), Proceedings of the Third International Workshop on Spallation Materials Technology, Santa Fe, New Mexico, April 29–May 4 1999, Los Alamos National Laboratory Report, LA-UR-00-3892.
[4] Y. Dai, L.K. Mansur, G.S. Bauer, H. Ullmaier, S. Maloy, Proceedings of the Fourth International Workshop on Spallation Materials Technology, Schruns, Austria, October 8–13 2000, J. Nucl. Mater. 296 (2000) 1.
[5] L.K. Mansur, G.S. Bauer, Y. Dai, J.D. Hunn, S.A. Maloy, H. Ullmaier, Proceedings of the Fifth International Workshop on Spallation Materials Technology, Charleston, USA, May 19–24 2002, J. Nucl. Mater. 318 (2003) 1.

K. Kikuchi
M. Kawai
L.K. Mansur
G.S. Bauer
Y. Dai
S.A. Maloy

0022-3115/$ - see front matter
doi:10.1016/j.jnucmat.2005.03.004