

NUCLEAR TECHNOLOGY & RADIATION PROTECTION

an international
scientific journal

UDC 621.039+614.876:504.06
ISSN 1451-3994

Founder
Nuclear Society of Serbia

Co-Founder
Radiation Protection Society of
Serbia and Montenegro

Publisher
Vinča Institute of Nuclear Sciences

Previous Editors

Naim Afgan (1981-1989)
Milena Mataušek (1995-2000)

Editor-in-Chief

Rodoljub D. Simović Vinča Institute of Nuclear Sciences, Belgrade, Serbia

Editorial Board

Olivera F. Ciraj-Bjelac Vinča Institute of Nuclear Sciences, Belgrade, Serbia
Barry D. Ganapol University of Arizona, Tucson, Ariz., USA
Vladan L. Ljubenov International Atomic Energy Agency, Vienna, Austria
Miodrag J. Milošević Public Company Nuclear Facilities of Serbia, Belgrade, Serbia
Domiziano Mostacci University of Bologna, Bologna, Italy
Milan P. Pešić Vinča Institute of Nuclear Sciences, Belgrade, Serbia
Yury A. Teterin Russian Research Centre "Kurchatov Institute", Moscow, Russia

Advisory Editorial Board

Francesco D'Auria University of Pisa 2, Pisa, Italy
Petar D. Beličev Vinča Institute of Nuclear Sciences, Belgrade, Serbia
Tome Bosevski Macedonian Academy of Sciences and Arts, Skopje, FYRM
Vujo Drndarević University of Belgrade, Belgrade, Serbia
Philippe Fougeras Cadarache Research Centre, Cadarache, France
Janos Gado KFKI Atomic Energy Research Institute, Budapest, Hungary
Ehud Greenspan University of California, Berkeley, USA
Masood Iqbal PINSTECH, Islamabad, Pakistan
Tatjana Jevremović University of Utah, Salt Lake City, USA
Gordana Joksić Vinča Institute of Nuclear Sciences, Belgrade, Serbia
Myung-Hyun Kim Kyung Hee University, Yongin-si, Korea
Stathis Kossionides NCSR "Demokritos", Aghia Paraskevi, Greece
Boris B. Lončar University of Belgrade, Belgrade, Serbia
James McLaughlin University College Dublin, Dublin, Ireland
Miodrag Mesarović Energoprojekt Entel, Belgrade, Serbia
Vincenzo Molinari University of Bologna, Bologna, Italy
Georghe Negut National Agency for Radioactive Waste, Mioveni, Romania
Nebojša B. Nešković Vinča Institute of Nuclear Sciences, Belgrade, Serbia
Dragoslav R. Nikezić University of Kragujevac, Kragujevac, Serbia
Predrag V. Osmokrović University of Belgrade, Belgrade, Serbia
Vladimir M. Pavlovych Kyiv Institute for Nuclear Research, Kyiv, Ukraine
Imre Pazsit Chalmers University of Technology, Göteborg, Sweden
Maria Ranogajec-Komor Ruder Bosković Institute, Zagreb, Croatia
Jordan Stamenov Bulgarian Academy of Sciences, Sofia, Bulgaria
Djordje Tomašević NECSA, Pretoria, South Africa
Peter K. N. Yu City University of Hong Kong, Kowloon, Hong Kong
Dejan Žontar Jozef Stefan Institute, Ljubljana, Slovenia

The journal Nuclear Technology & Radiation Protection is published four times a year on March, June, September, and December by the Vinča Institute of Nuclear Sciences, P. O. Box 522, 11001 Belgrade, Serbia.

The editing of the journal is supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia and by the Public Company Nuclear Facilities of Serbia.

All correspondence should be addressed to: Rodoljub SIMOVIĆ, Editor-in-Chief, Nuclear Technology & Radiation Protection, Vinča Institute of Nuclear Sciences • Address: P. O. Box 522, 11001 Belgrade, Serbia • Phone: (381-11)340-87-18 • Fax: (381-11)244-74-57 • E-mail: simovic@vinca.rs

Technical editor: Vladimir Živković • Proof readers: Mina Ilić, Jelena Salai, Suzana Bogojević, Isidora Bačić, and Bojana Antić • Computer work: Sanja Denčić • Cover design: Milijana Steljić • Front cover painting: Stojan Čelić, Earth (1981, detail)

Printed by: Department of Printing Engineering, Faculty of Technology and Metallurgy, University of Belgrade, Karnegijeva 4, 11220 Belgrade, Serbia

Circulation: 200 copies