

# NUCLEAR TECHNOLOGY & RADIATION PROTECTION

an international  
scientific journal

UDC 621.039+614.876:504.06  
ISSN 1451-3994

## 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

Ivan V. Aničin	University of Belgrade, Belgrade, Serbia
Francesco D'Auria	University of Pisa 2, Pisa, Italy
Goran Bačić	University of Belgrade, Belgrade, Serbia
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: simovicr@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:* Printing office of the Vinča Institute of Nuclear Sciences, 14-16, Mike Petrovića Alasa Str., 11306 Belgrade, Vinča, Serbia

*Circulation:* 500 copies

*Founder*  
Nuclear Society of Serbia

*Co-Founder*  
Radiation Protection Society of  
Serbia and Montenegro

*Publisher*  
Vinča Institute of Nuclear Sciences