

# NUCLEAR TECHNOLOGY & RADIATION PROTECTION

an international  
scientific journal

Vol. XXXV ♦ No. 3

## Contents

### Papers

- Kambiz Valavi, Ali Pazirandeh, Gholamreza Jahanfarnia*  
THREE-DIMENSIONAL TIME-DEPENDENT NEUTRON  
DIFFUSION SIMULATION USING AVERAGE CURRENT NODAL  
EXPANSION METHOD 189-200
- Surian Pinem, Tagor Malem Sembiring, Tukiran Surbakti*  
REACTIVITY INSERTION ACCIDENT ANALYSIS DURING  
URANIUM FOIL TARGET IRRADIATION IN THE  
RSG-GAS REACTOR CORE 201-207
- Umair Aziz, Zafar U. Koreshi, Shakil R. Sheikh, Hamda Khan*  
A STUDY OF CRITICALITY AND THERMAL LOADING IN  
A CONCEPTUAL MICRONUCLEAR HEAT PIPE REACTOR  
FOR SPACE APPLICATIONS 208-215
- Fedor F. Bryukhan, Grigoriy P. Barulin*  
ASSESSMENT OF TORNADO HAZARD IN THE  
NUCLEAR FACILITIES SITING AREAS 216-222
- Dalibor S. Arbutina, Aleksandra I. Vasić-Milovanović,  
Teodora M. Nedić, Aco J. Jančićević, Ljubinko B. Timotijević*  
POSSIBILITY OF ACHIEVING AN ACCEPTABLE RESPONSE  
RATE OF GAS-FILLED SURGE ARRESTERS BY SUBSTITUTION OF  
ALPHA RADIATION SOURCES BY SELECTION OF ELECTRODE  
MATERIAL AND THE ELECTRODE SURFACE TOPOGRAPHY 223-234
- Tomas Grisa, Daniel Sas, Lubomir Gryc*  
ON A MULTIDIMENSIONAL DATA PROCESSING METHOD  
FOR RADIATION PORTAL MONITORS 235-243
- Alexandros Clouvas, Fokion Leontaris, Stelios Xanthos*  
RADIATION PORTAL MONITORS RESPONSE TO GAMMA  
RADIATION AND TO THE DETECTION CAPABILITY OF ORPHAN  
RADIOACTIVE SOURCES: CONTRIBUTION OF THE STRASS PROJECT 244-252
- Rasha Ali El-Tayebany, Mohamed Helmy Hazzaa,  
Sameh Elsayed Shaban, Hekmat Mohammed El Begawy*  
OPTIMIZATION OF HPGe DETECTOR RESPONSE  
USING FAST AND RELIABLE METHOD 253-260
- Jelena M. Šaponjski, Dragana P. Šobić Šaranović,  
Djuro P. Macut, Tatjana V. Isailović, Nikola M. Bogosavljević,  
Darko D. Jovanović, Vera M. Artiko*  
THE ROLE OF SOMATOSTATIN RECEPTOR SCINTIGRAPHY  
IN THE DIAGNOSIS AND FOLLOW-UP OF THE PANCREATIC  
NEUROENDOCRINE NEOPLASMS 261-267
- Rupinderjeet Kaur, Deep Shikha, Supreet Pal Singh, Vimal Mehta*  
ENVIRONMENTAL RADON, ITS EXHALATION RATES  
AND ACTIVITY CONCENTRATION OF  $^{226}\text{Ra}$ ,  $^{232}\text{Th}$ , AND  $^{40}\text{K}$   
IN NORTHERN INDIA 268-282