

## Contents

### *Papers*

- Boris R. Bergelson, Alexander S. Gerasimov,  
Georgy V. Tikhomirov*  
OPTIMIZATION OF THE SELF-SUFFICIENT THORIUM FUEL  
CYCLE FOR CANDU POWER REACTORS 3
- Foudil Zeggar, Amrane Halilou, Brahim Meftah,  
Mohamed Y. Mokeddem, Fathi Letaim, Anis Bousbia-Salah*  
FUEL DEPLETION CALCULATION IN MTR-LEU NUR REACTOR 11
- Ahmed Khedr*  
THERMAL-HYDRAULIC FORTRAN PROGRAM FOR STEADY-STATE  
CALCULATIONS OF PLATE-TYPE FUEL RESEARCH REACTORS 19
- Vladan Ljubenov, Rodoljub Simović, Srpko Marković, Radovan D. Ilić*  
PHOTON SCATTERING AND REFLECTION IN MEDICAL  
DIAGNOSTIC ENERGY DOMAIN 31
- Srboljub J. Stanković, Radovan D. Ilić, Miloš Davidović,  
Milojko Kovačević, Dragomir Davidović*  
INFLUENCE OF PACKAGING CONFIGURATION WITH KOVAR  
LID ON RADFET RESPONSE TO PROTON IRRADIATION 37
- Koviljka Stanković, Miloš Vujisić*  
INFLUENCE OF RADIATION ENERGY AND ANGLE OF INCIDENCE  
ON THE UNCERTAINTY IN MEASUREMENTS BY GM COUNTERS 41
- Dušan Novković, Laslo Nadjdjerdj, Aleksandar Kandić,  
Ivana Vukanac, Mirjana Djurašević*  
EXPERIMENTAL TESTING OF THE DIGITAL MULTICHANNEL  
ANALYZER FOR GAMMA SPECTROMETRY MEASUREMENTS 43
- Kirill E. Ivanov, Nikolai N. Ponomaryev-Stepnoi, Boris S. Stepenov,  
Yury A. Teterin, Anton Yu. Teterin, Vladimir V. Kharitonov*  
LOCALIZATION OF THE GAMMA-RADIATION SOURCES USING  
THE GAMMA-VISOR 47
- Franz Meyer, Ferdinand Steger, Roland Steininger*  
DECOMMISSIONING OF THE ASTRA RESEARCH  
REACTOR – DISMANTLING THE AUXILIARY SYSTEMS AND  
CLEARANCE AND REUSE OF THE BUILDINGS 54