

# Contents

№ 1 (103)-2022

## Articles

- Borodkin P. G., Khrennikov N. N.** Recommendations for Improved Computational-Experimental Evaluation of Radiation Load Parameters on VVER Reactor Type Equipment ..... 5
- Kuryndin A. V., Kirkin A. M., Liashko I. A.** On the Need for Development of Problem-Oriented Software to Support Regulatory Decision-Making in the Field of Atomic Energy Use ..... 19

## Legal Documents

- Recommendations on Creating of a List of Radionuclides to be Controlled in Conditioned Radioactive Wastes at Nuclear Fuel Cycle Facilities. **RB-004-21** ..... 32
- Recommendations on Development of Quality Assurance Programs for Operation of Nuclear Power Plants and Nuclear Research Installations. **RB-009-21** ..... 38
- Recommendations on the Scope and Content of the Integrated Survey Report for Ships and Other Floating Vessels with Nuclear Reactors, and Nuclear Maintenance Ships during Operating Lifetime Extension. **RB-033-22** ..... 77
- Provision on the Contents of the Annual Safety Analysis Report for Ships and other Floating Vessels with Nuclear Reactors, Maintenance Ships and Coastal Infrastructure Facilities. **RB-067-21** ..... 85
- Recommendations on Safety Ensuring in Return of the Irradiated Fuel Assemblies Processing Products to the Supplier Country. **RB-092-21** ..... 100
- Recommended Methods for Calculation of Parameters Necessary to Develop Standards for Permissible Discharges of Radioactive Substances into Water Bodies. **RB-126-21** ..... 109

## International Information

- List of International Organizations' Documents Approved in 2021–2022 ..... 133

# NUCLEAR AND RADIATION SAFETY JOURNAL

Research & Practice Quarterly Journal

Official Journal

Published since 1998

**№ 1 (103)-2022**

## EDITORIAL BOARD

**A. V. Ferapontov**, Ph. D. in Engineering Sciences, Rostekhnadzor, Moscow

**E. G. Kudryavtsev**, Ph. D. in Chemical Sciences, Rostekhnadzor, Moscow

**M. I. Miroshnichenko**, Rostekhnadzor, Moscow

## EDITORIAL TEAM

### Editor-in-Chief

**A. A. Khamaza**, Ph. D. in Engineering Sciences, SEC NRS, Moscow

### Deputy Editor-in-Chief

**R. B. Sharafutdinov**, Ph. D. in Engineering Sciences, SEC NRS,  
Moscow

### Members of the Editorial Team

**E. G. Bugaev**, Doctor of Engineering, SEC NRS, Moscow

**O. Yu. Kavun**, Doctor of Engineering, SEC NRS, Moscow

**A. V. Kuzmin**, Ph. D. in Physical & Mathematical Sciences,  
Scientific institution "JIPNR – Sosny", Belarus National Academy  
of Sciences, Minsk, Republic of Belarus

**A. M. Martirosyan**, State Committee under the Government  
of the Republic of Armenia on Nuclear Safety Regulation,  
Yerevan, Republic of Armenia

**I. P. Sokolov**, Doctor of Chemistry, Professor, SEC NRS, Moscow

**A. A. Stroganov**, Ph. D. in Physical & Mathematical Sciences,  
SEC NRS, Moscow

**A. P. Khomyakov**, Doctor of Engineering, Professor, Ural Federal  
University named after the First President of Russia B. N. Yeltsin,  
Yekaterinburg

**U. Stoll**, Global Research for Safety (GRS), Reactor Safety  
Commission (RSK), Garching by Munich,  
Federal Republic of Germany

### Executive Editor

**A. V. Balalayevnikov**, SEC NRS, Moscow

### Executive Secretary

**T. V. Sinitsyna**, SEC NRS, Moscow

## Founder

Scientific and Engineering Centre  
for Nuclear and Radiation Safety  
(SEC NRS)

## Publishing Editor

*N. R. Bolshakova*,  
SEC NRS, Moscow

## Editors

*T. A. Krasotina, D. R. Lukyanova*,  
SEC NRS, Moscow

## Desktop Publishing

*A. N. Lukyanov*,  
SEC NRS, Moscow

ISSN 2218-8665 (print)

ISSN 2218-869X (online)

[nrs-journal.ru](http://nrs-journal.ru)

© "Nuclear and Radiation Safety"

SEC NRS, 2022

No materials published in the journal  
"Nuclear and Radiation Safety"  
may be reproduced without prior  
permission of the publisher