





Environmental protection and radioactive waste management of scientific and industrial centers. Decommissioning of nuclear and radiation hazardous facilities.

September 23-24, 2020

PROGRAM

II International Scientific and Practical Conference, dedicated to the 60th anniversary of RADON FSUE "Environmental protection and radioactive waste management of scientific and industrial centers. Decommissioning of nuclear and radiation hazardous facilities»

SEPTEMBER, 23

10.00-10.15 Conference opening

Luzhetsky A.V. Director General

GENERAL SESSION

Chairman: *Vanina E.A.,* Doctor of Physical and Mathematical Science, Professor, Scientific Secretary RADON FSUE

Sorption and migration properties of clay 10.15-10.35 Kalmykov S.N. minerals in relation to various Corresponding member of the Academy of radionuclides Science, Professor, Head of Chemistry Faculty of Lomonosov Moscow State University **10.35-10.55** Concept of tritium-containing water Magomedbekov E.P. waste treatment Director of Institute of Modern Materials in Energetics and Nanotechnologies, D.Mendeleev University of Chemical Technology of Russia 10.55-11.25 Metal decontamination during **Doilnitsyn V.A.** decommissioning of radiation hazardous Head of Radioecology and Radiochemical facilities Engineering Technology Department, Saint Petersburg State Institute of Technology 11.25-11.45 Modern sorption materials for Milyutin V.V. purification of liquid radioactive waste Head of the Laboratory from cesium and strontium radionuclides A.N. Frumkin Institute of Physical Chemistry and Electrochemistry. The Russian Academy

of Science

11.45-12.15 Break

SECTION SESSION:

Chairman: **Seteikin A.Yu.**

Candidate of Physical and Mathematical Science, Head of Department RADON FSUE

12.15-12.30	Improving of cleaning technology for Kola NPP evaporator concentrate from radionuclides using «Thermoxide" sorbents	
12.30-12.45	Mobile facility for electro-chemical decontamination of metal surfaces	
12.45-13.00	Definition of radionuclides speciation for predicting of their migration behavior	
13.00-13.15	Pilot-industrial conditioning of spent ion-exchange resins	
13.15-13.40	3D Modeling of radionuclides migration at FSUE «RADON» site for safety assessment of near surface storage facilities	
13.40-13.55	Immobilization of liquid tritium- containing waste	
13.55-14.10	Technology of purification of radioactively contaminated soil by hydroseparation method with reagent treatment of the selected fraction	

A.E. Savkin RADON FSUE

Yurchenko A.Yu RADON FSUE

Romanchuk A.Yu. Lomonosov Moscow State University

Ostashkina E.E. RADON FSUE

Neuvazhaev G.D. Nuclear Safety Institute of the Russian Academy of Science

Muratov O.E. Public Council of State Corporation «Rosatom»

Mariakhin M.A. Joint Stock Company «A.A. Bochvar Hightechnology Research Institute of Inorganic Materials»

14.10-14.25 Break

SECTION SESSION

Chairman: Savkin A.E.

Candidate of Technical Sciences, expert of Project Office, FSUE RADON

- **14.25-14.40** Application of chlorella microalgae in systems of wastewater treatment from toxic and radioactive contamination
- **14.40-15.05** Assessment of the efficiency of radioactive waste processing at the incineration plant
- **15.05-15.20** Application of the hydrodynamic monitoring system to ensure the environmental safety of the deep geological liquid radioactive waste facility
- **15.20-15.45** Application of bentonite as a buffer material at radioactive waste repositories
- **15.45-16.00** Personal training in the field of nuclear facilities decommissioning

MartynovD.Yu.

A.N. Kostyakov Russian Scientific Research Institution of Hydraulic Engineering and Amelioration

Mamonov A.V.

JSC "SSC RIAR" Research Institute of Atomic Reactors

Kokorev O.N.Seversk Technological Institute. National Research Nuclear University

Tyupina E.A.

D.Mendeleev University of Chemical Technology of Russia

Maksimushkina A.V.

National Research Nuclear University MEPhi

- **16.00-16.15** Existing problems of staff recruitment in the field of nuclear facilities decommissioning and preparation for decommissioning
- **16.15-16.30** Construction of three-dimensional information models of NF using modern methods of laser scanning on the example of FSUE RADON

Savin D.A.

National Research nuclear University MEPhi, «National Technical Center Nuclear Radiation Safety»

Lunov D. M.

Nuclear Safety Institute of the Russian Academy of Science

SEPTEMBER, 24

SECTION SESSION

Chairman: **Pitertsev M.Yu.** Chief of Project Office, FSUE RADON

09.00-09.25	Concept of development of plasma technology at FSUE «RADON»	Knyazev I.A. RADON FSUE
09.25-09.50	Cement compound as matrix for HLRW	Kapustin V.V. A.A. Bochvar High-technology Research Institute of Inorganic Materials
09.50-10.05	Development of information-analytical systems to improve the efficiency of activities in the field of radioactive waste management	Ilyasov D.F. Nuclear Safety Institute of the Russian Academy of Science
10.05-10.20	Software tool for automation of accounting and control procedure for solid radioactive waste received for disposal	Dzhamavov A.A. National Operator for Radioactive Waste Management, FSUE
10.20-10.35	Break	

SECTION SESSION

Chairman: **Milyutin V.V.** Doctor of Chemical Science, Head of the Laboratory A.N. Frumkin Institute of Physical Chemistry and Electrochemistry. The Russian Academy of Science

- **10.35-11.00** Monitoring of radioactivity in the environment of the Moscow Region
- **11.00-11.15** Advanced bentonite clay based materials for construction and recovery of engineering safety barriers
- **11.15-11.40** Radiation monitoring of natural radionuclides in oil and gas production enterprises and packaging for storage of radioactive waste containing natural radionuclides

Gordeev S.K. RADON FSUE

Ilina O.A. Bentonite Company

Ashrapov U.T.

The Institute of Nuclear Physics of the Academy of Sciences of the Republic of Uzbekistan

- **11.40-12.05** Methodological support for measuring radiation characteristics of waste
- **12.05-12.20** About a complex of works on the choice of a strategy for the management of accumulated radioactive waste of FSUE RADON
- **12.20-12.35** Characterization of standardized quality indicators of water (technological) mediums of water-cooled nuclear reactors. Decrease of liquid radioactive waste formation

12.35-13.05 Break

Sergeecheva Y.V.

Joint Stock Company «A.A. Bochvar Hightechnology Research Institute of Inorganic Materials»

Samoilov A.A. Nuclear Safety Institute of the Russian Academy of Science

Frolova T.N.

Shiprepairing Center «Zvyozdochka»

SECTION SESSION

Chairman: **Polkanov M.A.** Project Manager of RADON FSUE

- **13.05-13.20** Long-term probabilistic safety assessment of the near surface disposa lfacility for radioactive waste
- **13.20-13.45** Problems of radiation safety ensuring during long-term centralized storage of radioactive waste in the Republic of Belarus
- **13.45-14.10** CIRES, an optimized route for radioactive waste produced by decommissioning of nuclear facilities
- **14.10-14.35** Finnish experience in securing nuclear and radiation hazardous facilities during exceptional situations: case 2005 flooding at the Gulf of Finland
- **14.35-15.00** Innovation Center for Nuclear Knowledge of FSUE RADON as a priority of personnel policy and applied science of the Division of Final Stage of the Life Cycle
- **15.00-15.15** Advanced Innovations for Environmentally Safe and Efficient Waste Treatment Technologies for Decommissioning
- **15.15-15.30** Open discussion. Closing of the conference. Summarizing.

Gorbacheva N.V.

State Scientific Institution «The Joint Institute for Power and Nuclear Research – Sosny»

Kuzmina N.D.

State Scientific Institution «The Joint Institute for Power and Nuclear Research – Sosny»

Jean-Michel Boniface

HellenbergTimo Hellenberg International Ltd

Vanina Elena

Professor, Scientific Secretary of RADON FSUE

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Vanina Elena Professor, Scientific Secretary of RADON FSUE