### **BREAKOUT SESSION**

**September 13** (Wednesday)

# Section "Radiation Ecology and Medicine"

**Afternoon session (14:00–16:00)** 

Conference hall of "Mayak" hotel

Chairpersons: A. Panitskiy (Kazakhstan), T. Kovács (Hungary)

| 1 | 30 <sup>th</sup> ANNIVERSARY OF THE INSTITUTE OF RADIATIO NSAFETY AND ECOLOGY. PAST, PRESENET, FUTURE OF SEMIPALATINSK TEST SITE  A.O. Aidarkhanov (Kazakhstan, branch IRSE NNC RK) | 14:00–14:15 |
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| 2 | TOWARDS VISUALIZING RADIOACTIVE SUBSTANCES IN THE GLOBAL RADIATION ENVIRONMENT USING AN INTEGRATED RADIATION IMAGING SYSTEM Yu. Sato (Japan, Japan Atomic Energy Agency)            | 14:15–14:30 |
| 3 | UPTAKE OF PLUTONIUM BY PLANTS WITH DIFFERENT SOIL MOISTURE S.N. Lukashenko (Russia, All-Russian Scientific Research Institute of Radiology and Agroecology)                         | 14:30–14:45 |
| 4 | EARTHWORMS AND THEIR ORGANS AS INDICATORS OF RADIOACTIVE CONTAMINATION T. Kovács (Hungary, Institute of Radiochemistry and Radioecology, University of Pannonia)                    | 14:45–15:00 |

| 5 | FEATURES OF THE NATURAL ENRICHMENT OF SUFACE AND GROUND WATERS WITH URANIUM ISOTOPES IN RIVER BASINS OF THE KYRGYZ TIENSHAN AND THE PAMIR-ALAY  T.B. Tuzova (Kyrgyzstan, Institute of Water Problems and Hydropower Engineering NAS KR) | 15:00–15:15 |
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| 6 | DEVELOPMENT OF A HARDWARE AND SOFTWARE SYSTEM TO SEARCH AND IDENTIFY GAMMA- EMITTING NUCLIDES BASED UPON COMPUTER-AIDED LEARNING I.S. Bredikhin (Russia, LLC "Gammatek")  | 15:15–15:30 |
| 7 | EFFECTS OF LOW IONIZING RADIATION DOSES ON THE COLONIC MICROFLORA AND GENE EXPRESSION IN LUNGS DURING THE EXPERIMENT  N.Zh. Chaizhunusova (Kazakhstan, Non-profit JSC "Semei Medical University")                                       | 15:30–15:45 |
| 8 | EFFECTS OF LOW IONIZING RADIATION DOSES ON MORPHOFUNCTIONAL CHANGES IN LUNGS AND THE SMALL INTESTINE DURING THE EXPERIMENT D.M. Shabdarbayeva (Kazakhstan, Non-profit JSC "Semei Medical University")                                   | 15:45–16:00 |

### **BREAKOUT SESSION**

**September 14** (Thursday)

# Section "Radiation Ecology and Medicine"

**Morning session (9:00–13:05)** 

Conference hall of "Mayak" hotel

Chairpersons: Ye. Mustafina (Kazakhstan), Yu. Sato (Japan)

| 9  | ASSESSMENT OF HEAVY METAL AND RADIONUCLIDE-<br>CONTAMINATED SURFACE WATER BODIES IN THE<br>SOUTH-WESTERN PART OF THE ALTAI TERRITORY<br>O.Yu. Korovina (Russia, I.I. Polzunov Altai State Technical<br>University) | 09:00-09:15 |
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| 10 | RADIOLOGICAL STATE OF BIG HOOFED ANIMALS INHABITING THE TERRIOTRY OF THE SEMIPALATINSK TEST SITE A.V. Panitskiy (Kazakhstan, branch IRSE NNC RK)   | 09:15-09:30 |
| 11 | EPR DOSIMETRY STUDY OF HIROSHIMA ATOMIC BOMB VICTIMS  K. Zhumadilov (Kazakhstan, L.N. Gumilyov ENU)  | 09:30–9:45  |
| 12 | FUNDAMENTALS TO DEVELOP A SUSTAINABLE MANAGEMENT OF LAND RESOURCES AND WATER BODIES IN THE FORMER STS AREA N.V. Larionova (Kazakhstan, branch IRSE NNC RK)   | 09:45–10:00 |

| STUDY OF CONCENTRATIONS OF HEAVY ELEMENTS AND RADIONUCLIDES IN ENVIRONMENTAL COMPARTMENTS OF ALMATY CITY M.V. Krasnopyorova (Kazakhstan, RSE "Institute of Nuclear Physics")                 | 10:00-10:15   |
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| REDISTRIBUTION PATTERN OF RADIONUCLIDE<br>CONTAMINATION IN ECOSYSTEM COMPONENTS<br>OF STS WATER BODIES<br>A.K. Aidarkhanova (Kazakhstan, branch IRSE NNC RK)                                 | 10:15–10:30   |
| DEVELOPMENT OF A SERIES OF SCINTILLATION COCKTAILS TO DETERMINE TRITIUM A.V. Mikhailov (Russia, All-Russian Scientific Research Institute of Radiology and Agroecology)                      | 10:30–10:45   |
| RESEARCH INTO THE CURRENT RADIOLOGICAL STATE OF AIR AND MONITORING OF STS AND ADJACENT AREA OBSERVATIONS D.V. Turchenko (Kazakhstan, branch IRSE NNC RK)                                     | 10:45–11:00   |
| Coffee break   | 11:00-11:20   |
| TESTING A HYDROGEOLOGICAL DECONTAMINATION METHOD FOR PROCESS PIPELINES AT DEPOSITS OF UNDERGROUND URANIUM LEACHING IN BOREHOLES P.A. Blynskiy (Kazakhstan, "Institute of High Technologies") | 11:20–11:35   |
| TRITIUM REDISTRIBUTION IN THE "WATER – SOIL – AIR" SYSTEM  L.V. Timonova (Kazakhstan, branch IRSE NNC RK)  | 11:35–11:50   |
|  | AND RADIONUCLIDES IN ENVIRONMENTAL COMPARTMENTS OF ALMATY CITY M.V. Krasnopyorova (Kazakhstan, RSE "Institute of Nuclear Physics")  REDISTRIBUTION PATTERN OF RADIONUCLIDE CONTAMINATION IN ECOSYSTEM COMPONENTS OF STS WATER BODIES A.K. Aidarkhanova (Kazakhstan, branch IRSE NNC RK)  DEVELOPMENT OF A SERIES OF SCINTILLATION COCKTAILS TO DETERMINE TRITIUM A.V. Mikhailov (Russia, All-Russian Scientific Research Institute of Radiology and Agroecology)  RESEARCH INTO THE CURRENT RADIOLOGICAL STATE OF AIR AND MONITORING OF STS AND ADJACENT AREA OBSERVATIONS D.V. Turchenko (Kazakhstan, branch IRSE NNC RK)  Coffee break  TESTING A HYDROGEOLOGICAL DECONTAMINATION METHOD FOR PROCESS PIPELINES AT DEPOSITS OF UNDERGROUND URANIUM LEACHING IN BOREHOLES P.A. Blynskiy (Kazakhstan, "Institute of High Technologies")  TRITIUM REDISTRIBUTION IN THE "WATER – SOIL – AIR" SYSTEM |

| 19 | CURRENT LEVELS OF CONTAMINATION OF WATER BODIES OF DIFFERENT TYPES WITH RADIONUCLIDES   | 11:50–12:05 |
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|    | AT STS  Zh.Ye. Tleukanova (Kazakhstan, branch IRSE NNC RK)  |             |
| 20 | MEASUREMENT OF HEAVY METALS CONCENTRATION IN THE AIR OF AKMOLA REGION A. Zhumalina (Kazakhstan, L.N. Gumilyov ENU)  | 12:05–12:20 |
| 21 | APPLICATION OF THE NEUTRON-ACTIVATION ANALYSIS TO DETERMINE THE ELEMENTAL COMPOSITION OF SAMPLES Ye.K. Sokolenko (Kazakhstan, RSE "Institute of Nuclear Physics") | 12:20–12:35 |
| 22 | CONTENT OF CHEMICAL ELEMENTS IN SUSPENDED AIR PARTICLES OF UST-KAMENOGORSK CITY  N.Zh. Mukhamediyarov (Kazakhstan, branch IRSE NNC RK)                            | 12:35–12:50 |
| 23 | RESEARCH INTO THE AERIAL UPTAKE OF HTO VAPORS<br>BY PEPPER AND EGGPLANT<br>Ye.N. Polivkina (Kazakhstan, branch IRSE NNC RK)                                       | 12:50–13:05 |
| _  | Lunch   | 13:05–14:00 |

### **BREAKOUT SESSION**

**September 14** (Thursday)

# **Sections "Radiation Ecology and Medicine"**

**Afternoon session (14:00–16:00)** 

Conference hall of "Mayak" hotel

Chairpersons: N. Larionova (Kazakhstan), T. Tuzova (Kyrgyzstan)

| 24 | FEATURES OF CONTAMINATION WITH GAMMA-<br>EMITTING RADIONUCLIDES IN AREAS ADJACENT<br>TO THE "EXPERIMENTAL FIELD" TEST LOCATION<br>Ye.V. Mustafina (Kazakhstan, branch IRSE NNC RK) | 14:00–14:15 |
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| 25 | RESEARCH IN THE BASIN OF A TRANSBOUNDARY KARABALTA RIVER IN THE "KYRGYZSTAN- KAZAKHSTAN" SECTION M.A. Severinenko (Kazakhstan, RSE "Institute of Nuclear Physics")                 | 14:15–14:30 |
| 26 | DEVELOPMENT OF A PEDESTRIAN GAMMA SPECTROMETRIC SURVEY SOFTWARE I.P. Dorozhkin (Kazakhstan, branch IRSE NNC RK)  | 14:30–14:45 |
| 27 | ECOLOGICAL AND GENETIC ASSESSMENT OF THE CONSEQUENCES OF RADIATION INFLUENCE ON CONTAMINATED AREAS (SECOND REPORT)  A. Bigaliyev (Kazakhstan, Al-Farabi KazNU)                     | 14:45–15:00 |

| 28 | PORTABLE HIGH RESOLUTION GAMMA SPECTROME-<br>TER AUTOMATICALLY IDENTIFYING RADIONUCLIDES<br>I.V. Pokrovskiy (Kazakhstan, "Pribory Kazakhstan" Ltd.)  | 15:00–15:15 |
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| 29 | RESEARCH INTO THE IMPACT OF A RADIATION FACTOR ON STRUCTURA LAND ANATOMIC INDICATORS OF PLANTS UNDER CONDITIONS OF A SIMULATED EXPERIMENT  Ye.S. Sysoyeva (Kazakhstan, branch IRSE NNC RK) | 15:15–15:30 |
| _  | Coffee break   | 16:00–16:20 |