

47th Annual meeting

Working Group
"Hot laboratories and remote handling"

Dimitrovgrad, Russia, 06 - 10 September 2010 2nd Announcement and Preliminary Program



SCOPE AND TOPICS

The Working Group 'Hot Laboratories and Remote Handling' was set up in 1963 to encourage the collaboration between European nuclear facilities in order to reach and preserve the high quality of their key competences. More recently, the Working Group expanded its objectives to serve as a global contact forum for all kinds of nuclear services.

The program of the 47th Annual Meeting to be held in Russia will revolve around the safety in an ageing hotlab environment. This will not be limited to sharing the best practice between hotlabs but it should also initiate a constructive discussion between hotlabs, safety authorities and regulators. Speakers from several official bodies are invited.

Others topics include setting up material test reactor experiments and the behavior of materials, the cost effective and safe transport of small quantities of radioactive materials for research purposes and handling of high-active reactor core components, radioisotopes and waste.



TECHNICAL SESSIONS AND PROGRAM

The Program of the 47th annual meeting, to be held in Russia, will include the following topics:

- Safety in an Ageing Hotlab Environment
- Research Reactor Experiments and Behavior of Materials
- Handling of Active Nuclear Reactor Core Components, Radioisotopes and Waste
- Transportation Issues
- Post Irradiation Examination Techniques

The meeting will be held in the Conference Hall aboard the VALERY CHKALOV ship and includes a one day visit to RIAR Facilities at Dimitrovgrad.

The meeting language is English. There will be oral presentations and a poster session. Each speaker will have 20 minutes for the oral presentation, including 5 minutes for questions. A dedicated poster session will held at the RIAR facilities in Dimitrovgrad. The size of the posters is limited to 135 cm x 87 cm.

A book of abstracts will be available at the meeting. The presenters are requested to submit a full version of their paper in MS-Word (or pdf) format and their PowerPoint presentations no later than August 10, 2010. Each manuscript should be 4 - 8 pages long approximately, including the title page, all tables, figures and references Instructions for authors can be found on www.sckcen.be/hotlab. Please email your contribution to hotlab2010@niiar.ru.

For young authors (<35 years), an award will be given by the members of the Working Group to the best technical paper and poster presented during the meeting. All papers will be published in the proceedings of the conference, on a CD, which will be mailed to the participants within two months after the meeting and available on the hotlab website: www.sckcen.be/hotlab.

PRELIMINARY PROGRAM

Monday, 06.09.2010

12:00 – 20:00 Boarding 20:00 - 21:00 Registration 20:00 - 21:30 Welcome drink

Tuesday, 07.09.2010

08:30 - 09:00 Welcome and Introductions

Session: Safety in an Ageing Hotlab Environment

09:00 - 09:20 Safety in French Ageing Hot Laboratories Hervé VISSEAUX (Autorité de Sureté Nucléaire, France)

09:20 - 09:40 Technical Experience Of The Belgian Regulatory Body Regarding Shielded Cells

Gérald Degreef (Nuclear Safety And Radiation Protection Inspection, Bel V, Belgium)

09:40 – 10:00 Title And Speaker To Be Announced (National Nuclear Laboratory- National Nuclear Installations Inspectorate, UK)

10:00 - 10:30 Coffee break

10:30 - 10:50 Ageing Management Based on the Tripod Philosophy Jeroen Minkema (NRG, the Netherlands)

10:50 - 11:10 Summary of the Workshop "Information Exchange on Below Scale Incidents in Hot Laboratories"

Didier Gavillet (Paul Scherrer Institute, Switzerland)

11:10 - 11:30 Hot Cells in a New Material Testing Reactor Frederic MINOT (CEA/DEN/CAD, France)

11:30 – 11:50 Recent developments in German Standards for Hot Cells and Radionuclide Laboratories
Hans-Christian Schneider (Karlsruhe Institute of Technology, Germany)

12:00 - 13:00 Lunch

Session Research reactor Experiments and Behavior of Materials

13:00 – 13:20 IAEA Activities on Spent Fuel Performance Assessment and Research HO JIN RYU (International Atomic Energy Agency, Austria)

13:20 – 13:40 Promotion of Hotlab/Research Reactor Techniques with Particular Reference to the Reactor Pressure Vessel Materials Examination E.A. Krasikov (Russian Research Centre "Kurchatov Institute", Russia)

13:40 - 14:00 Determination of Dimensional Evolutions for Irradiated Material with a Large Panel of Experimental Means Pierre Gavoille (CEA/DEN/DANS/DMN/SEMI/LCMI, France)

Session: Handling Active Nuclear Reactor Core Components, Radioisotopes and Waste

14:00 - 14:20 Presentation of CEA Nuclear Service Facilities for Spent Fuels and Nuclear Wastes.

Jean-Yves Blanc (C.E.A, DEN/DADN, France)

14:20 - 14:40 Preparations & Examinations Necessary for Obtaining a License for Transporting Radiolysable Material Paul David Bottomley (ITU Karlsruhe, Germany)

14:40 - 15:00 FEEDBACK FROM TEN YEARS OF EXPERIENCE IN THE C11/C12 SHIELDED LINE IN THE ATALANTE FACILITY AT MARCOULE Gilles FERLAY (CEA, France)

15:00 - 15:30 Coffee break

15:30 - 15:50 KAERI's Hot Cell Experience Learned from DUPIC Fuel Fabrication Jung Won LEE (KAERI, Korea)

15:50 – 16:10 Chicade and the Control of Waste Package Alexandre Le Cocguen (CEA, France)

16:10 – 16:30 Design Considerations for Medical Isotope Production Facilities Michael Wade (Merrick & Company, USA)

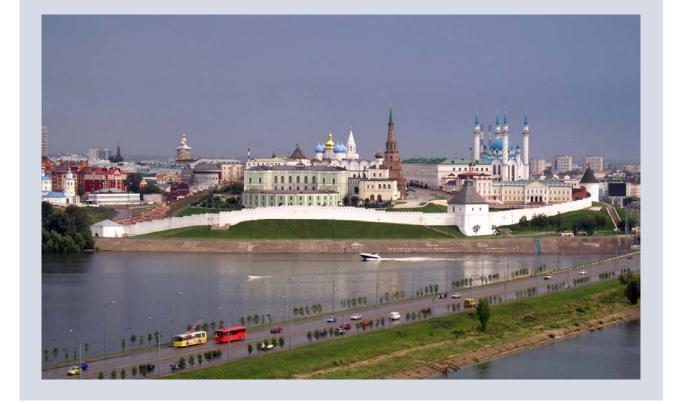
Session: Transportation Issues

16:30 – 16:50 NRI experience with LVR-15 experimental reactor spent fuel transport Radim Kopriva (NRI Rez plc, Czech Republic)

16:50 – 17:10 title to be announced Ann Leenaers (SCK CEN, Belgium)

18:00 - 19:00 Dinner

19:00 – 21:00 – Sightseeing tour of the city of Kazan.



Kazan

Wednesday, 08.09.2010

8:30 - 10:00 Trip to Dimitrovgrad

Dimitrovgrad



10:30 - 18:00 Tour of RIAR facilities.



Poster session RIAR

10:30-17:00

Establishment of maintenance method of exhaust valve on α -tight hot cell under ventilating condition

Yasutaka MIZUKOSHI (JAEA, Japan)

An integrated tool to repack and reprocess old solid Pu-based compounds in the LEFCA facility

Fabrice Mazaudier (CEA Cadarache, France)

Developmet concerned with analysis for quantitative composition distribution of surface deposits throughout the height of zirconium claddings operated in water-cooled nuclear reactors

Irina Smirnova (JSC "SSC RIAR", Russia)

Studying Helium Accumulation in Austenitic Steels for Evaluating Radiation Damage in Internals of Water-Moderated Water-Cooled Reactors Sergey Belozerov (JSC SSC RIAR, Russia)

EQUIPMENT TO WELD EXPERIMENTAL SAMPLES AND ITEMS OF NUCLEAR REACTOR CORES

Evgeny TABAKIN (JSC "SSC RIAR", Russia)

Development of experimental base for high-temperature gas reactor GT-MHR fuel research

Aleksandr Pokrovskij (JSC "SSC RIAR", Russia)

Development of Mechanical Test Techniques for Irradiated PWR Fuel Assembly Skeleton

Dosik KIM (KAERI, Korea)

Renewal of the shielded Electron Probe Microanalyser (EPMA) in the CEA LECA-STAR hot laboratory: safety and technical improvements Jerome Lamontagne (CEA, France)

Renovation of the metallographic hot cell in ITU Dimitrios Papaioannou (ITU, EC, Germany)

PIE Facilities for local and regional requirements Gabriel Ruggirello (CNEA, Argentina)

Development of Mechanical Test Techniques for Irradiated Fuel Cladding Seung-Je BAIK (KAERI, Korea)

Implementation of reconstitution technique for surveillance tests at Kiev Institute for Nuclear Research

Volodymyr Revka (Institute for Nuclear Research, Kiev, Ukraine)

12:30 - 14:30 - Lunch

17:00 - 18:00 Departure to Ulyanovsk

19:00 – 20:00 Dinner

20:00 – 21:00 Sightseeing tour of the city of Ulyanovsk



Ulyanovsk

Thursday, 09.09.2010

Section Post Irradiation Examination Techniques

09:00 – 09:20 X Ray Diffraction Micro-Analysis on Irradiated Fuels in LECA-STAR Facility
Christophe Valot (CEA, France)

09:20 – 09:40 Application of Neutron Radiography in Post Irradiation Examination of Fast Reactor Fuel Pins Sergey Porollo (IPPE, Russia)

09:40 – 10:00 RIAR Research Reactors and Material Science Complex for Implementation of Innovative Projects of GEN IV Nuclear Power Engineering Vladimir Risovany (JSC "SSC RIAR", Russia)

10:00 – 10:20 Equipment and Methods for Post-Irradiation Examinations of Materials in the IRM Hot Cells Leonid Sinelnikov (IRM, Russia)

10:20 - 10:40 Coffee break

10:40 – 11:00 The modern equipment for the preparation and testing of radioactive materials in Hot Cells

Irina Protasova (Melytek, Russia)

11:00 – 11:20 Development of high resolution X-ray CT technique for the irradiated fuel pellet

Kozo KATSUYAMA (JAEA, Japan)

11:20–11:40 Crack Resistance and Hydride Reorientation Determination of Irradiated Fuel Cladding

Robert Zubler (PSI, Switzerland)

11:40 – 12:00 High Burn-up Fuel and Materials Challenges Matthias Martin (PSI, Switzerland)

12:00 - 13:00 Lunch

13:00 – 13:20 RIAR's Stands and Fuel Test Methods to Justify Safe Handling of Different Reactors SNF Sergey Pavlov (JSC SSC RIAR, Russia)

13:20 – 13:40 title to be announced Kenneth Rosenberg (Idaho National Laboratory, USA)

13:40 – 14:00 X-ray solutions from BRUKER for research and development, process and quality control in industry Vasily Pribora (Bruker, Russia)

14:00 – 14:20 Laser Induced Breakdown Spectroscopy Characterizations of Hydrogen in Zirconium Alloys LIONEL GOSMAIN (CEA, FRANCE)

14:20 – 14:40 Laser Ablation Mass Spectrometry on Highly Radioactive Samples Michael Granfors (Studsvik Nuclear AB, Sweden)

14:40 – 15:00 title to be announced Adam Robinson (Idaho National Laboratory, USA)

15:00 – 15:20 Remote Equipment in the Material Testing Hot Laboratories at FSUE "Prometey"

V. Kohonov (FSUE "Prometey", Russia)

15:20 - 15:50 Coffee break

15:50 – 16:20 Closing Remarks. Awarding of the Best Poster and Best Presentation

16:20 – 17:00 Sightseeing tour 17:00 – 23:00 Conference Dinner

Friday, 10.09.2010

8:00 – 9:30 – Departure

REGISTRATION AND FEE

Please complete the attached *Registration and Accommodation form* and return it by email or fax before 15 June 2010.

VENUE AND ACCOMMODATION

All the participants will be accommodated in separate comfortable cabins aboard the three-deck VALERY CHKALOV ship.

A special rate of **130-180 Euro** is offered for a cabin per night if payed before June 15, 2010 and **150-200 Euro** accordingly if payed after June 15. This rate covers a cabin, three meals a day and the sightseeing tours.

Payment of accommodation is to be made no later than July 15.

For the reservation and payment of accommodation you can use the *Registration and Accommodation form*.

Accompanying persons. Accompanying persons are welcome. For each accompanying person a payment of 60 % of accommodation fee is ask. For that fee accommodation is provided in the same cabin as chosen by the conference participant who invited him/her. The fee furthermore includes all meals, welcome reception, conference dinner, transportation from/to the airport and participation in the sightseeing tours.

Valery Chkalov



TRANSPORTATION

RIAR representatives will arrange transportation for participants arriving at Samara airport. Every participant should therefore inform the organizers about their itinerary (flight number and time of arrival) no later than two weeks before the meeting.

VISA SUPPORT INFORMATION

RIAR can provide visa support to the conference attendees through the Russian Ministry of Foreign Affairs. Participants who want to make use of this service should fill out the *Visa Support Information form*.

The official invitation letter will be sent directly per telex to the indicated Russian Embassy. The confirmation receipt will be e-mailed to the participant. After obtaining this document the participant can apply to the Embassy to get visa*.

* To get a visa, one needs an official invitation from the Ministry of Foreign Affairs of the Russian Federation, which is the basic document when you are applying for business visa. RIAR can provide visa support that is to process an Invitation Letter through the Ministry of Foreign Affairs of the RF. This official invitation costs 80 Euros (not including the consular fee). RIAR can send its invitation but RIAR invitation will not be the basis for granting a visa.

Organizing Committee

Vladimir Risovany (Chairman, RIAR) Ann Leenaers (Co-Chair, SCK•CEN) Yury Goncharenko (RIAR) Svetlana Shipulina (RIAR) Elena Agybayeva (RIAR)

All documents related to the meeting can be downloaded from http://www.sckcen.be/HOTLAB





