

NEA Nuclear Science Committee

Workshop "Enhancing Experimental Support for Advancements in Nuclear Fuels and Materials"

8-10 January, 2018

Draft Agenda

OECD Headquarters,
OECD Conference Center, Room CC15
2, rue André Pascal Paris, France

NEA Nuclear Science Committee (NSC)

Workshop "Enhancing Experimental Support for Advancements in Nuclear Fuels and Materials"

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DRAFT AGENDA

Workshop chair: **John Herczeg,** Chairman of the Nuclear Science Committee, Deputy Assistant Secretary, USDOE

Day 1

Monday, 8 January 2018

12:30 - 17:45 (with coffee break)

OPENING SESSION:

- William D. Magwood, IV, Director-General of the Nuclear Energy Agency (NEA)
- John Herczeg, Chairman of the Nuclear Science Committee, Deputy Assistant Secretary, USDOE

SESSION 1: INDUSTRY EXPERIENCE AND PERSPECTIVES IN FUEL AND MATERIALS EVOLUTION

Chair: Randy Stark, Director, Fuels & Chemistry, Electric Power Research Institute (EPRI), USA Co-chair: Phillip Finck, Senior Scientific Advisor, Idaho National Laboratory (INL), USA Speakers:

- Michel Maschi, Vice President EDF R&D Generation and Engineering, Électricité de France (EDF),
 France
- Ken Petersen, Vice President, Nuclear Fuels at Exelon Nuclear, USA
- Alexey Dolgov, Director of R&D Department, Joint-Stock Company TVEL, Russia
- Kevin Ledford, Senior Manager of Fuel Technology, Global Nuclear Fuel, USA
- Jonathan Wright, Manager Materials and Fuel Rod Design, Westinghouse Electric Company, USA
- Rostislav Štaubr, Nuclear Fuel Manager, Fuel Cycle Unit, ČEZ, Czech Republic
- **Hideyuki Teshima**, Deputy General Manager, Fuel and Core Engineering Department, Fuel Engineering Division, Mitsubishi Nuclear Fuel Co, Ltd., Japan
- Kazuo Kakiuchi, Senior Specialist, Toshiba Energy Systems & Solutions Corporation, Japan
- David Schrire, Specialist in Fuel Performance, Vattenfall Nuclear Fuel AB, Sweden

Panel discussion 16:30 - 17:45

Cocktail Reception (starting at 17:45)

Day 2 Tuesday, 9 January 2018

8:00 - 8:45

SESSION 1: INDUSTRY EXPERIENCE AND PERSPECTIVES IN FUEL AND MATERIALS EVOLUTION (CONT'D)

Chair: Randy Stark, Director, Fuels & Chemistry, Electric Power Research Institute (EPRI), USA Co-chair: Phillip Finck, Chief Scientist, Idaho National Laboratory (INL), USA

- Wrap-up discussion towards conclusions and actions
- Nicolas Waeckel, Corporate Expert on Fuel Design and International R&D, Engineering Division, Électricité de France (EDF), France
 "Nuclear fuel R&D facing new paradigms to address industrial needs"

8:45 - 12:00 (with coffee break)

SESSION 2: ADVANCES IN NUCLEAR SCIENCE: PROMISING FUEL TECHNOLOGIES, MODELLING AND VALIDATION METHODS, AND ASSOCIATED EXPERIMENTAL CHALLENGES

Chair: Kemal Pasamehmetoglu, Associate Laboratory Director, Idaho National Laboratory (INL), USA Co-chair: Alexander Tuzov, Director, Joint-stock Company "State Scientific Center - Research Institute of Atomic Reactors" (JSC SSC RIAR), Russia

Speakers:

- **Leonid Bolshov**, Scientific Leader, Academician, The Nuclear Safety Institute of Russian Academy of Sciences (IBRAE RAS), Russia
- Timothy Valentine, Director, Radiation Safety Information Computational Center, ORNL/RSICC, USA
- Carole Valot, Research Engineer
 Jean-Christophe Brachet, Research Engineer,
 Commissariat à l'énergie atomique et aux énergies alternatives (CEA), France
- Al Csontos, Technical Executive, Fuel Reliability & High-Level Waste, EPRI, USA
- Masaki Kurata, Senior Principal Researcher, Division Leader, Debris Characterization & Core Status Evaluation Division, Collaborative Laboratories for Advanced Decommissioning Science (CLADS), Japan Atomic Energy Agency (JAEA)

Marie Moatti, Executive, Fuel Economy and Safety, Nuclear Fuel Division, Électricité de France (EDF), France

Panel Discussion 11:15 - 12:30

Day 2 Tuesday, 9 January 2018 (cont'd)

SESSION 3: TECHNICAL SUPPORT ORGANISATIONS' PERSPECTIVES FOR OPERATION OF CURRENT AND INNOVATIVE FUEL AND MATERIALS

13:30 - 16:30 (with coffee break)

Chair: Jean-Christophe Niel, Chair of the Committee on the Safety of Nuclear Installations (CSNI), Director-General, Institut de Radioprotection et de Sûreté Nucléaire (IRSN), France

Speakers:

- Mirela Gavrilas, Director, Division of Safety Systems, Nuclear Regulatory Commission (NRC), USA
- Kunio Onizawa, Director, Planning and Coordination Office, Sector of Nuclear Safety Research and Emergency Preparedness, Japan Atomic Energy Agency Nuclear Safety Research Center (JAEA), Japan
- Valery Pivovarov, Leading Scientist, Rostehnadzor, Russia
- Olivier Marchand, Deputy Head of Department, Department of management of incidents and accidents, Institut de Radioprotection et de Sûreté Nucléaire (IRSN), France

Panel Discussion 15:30 - 16:30

INTERMEDIATE SESSION

16:30 - 17:00

Carlo Vitanza, NEA Consultant, "Sharing experience with NEA Joint Projects"

SESSION 4: EXPERIMENTAL INFRASTRUCTURE: PERSPECTIVES IN ADVANCED INSTRUMENTATION AND EXPERIMENTAL TECHNIQUES TO SUPPORT FUEL DEVELOPMENT

17:00 - 17:30

Chair: Hamid Ait Abderrahim, Deputy Director-General, Belgian Nuclear Research Centre (SCK.CEN), Belgium

Co-chair: Nicolas Waeckel, Corporate Expert on Fuel Design and International R&D, Engineering Division, Électricité de France (EDF), France

Speakers

• Alexander Tuzov, Director, Research and Science Joint-stock Company "State Scientific Center - Research Institute of Atomic Reactors" (JSC SSC RIAR), Russia

Day 3 Wednesday, 10 January 2018

SESSION 4: EXPERIMENTAL INFRASTRUCTURE: PERSPECTIVES IN ADVANCED INSTRUMENTATION AND EXPERIMENTAL TECHNIQUES TO SUPPORT FUEL DEVELOPMENT (CONT'D)

08:00 - 12:30 (with coffee break)

Chair: Hamid Ait Abderrahim, Deputy Director-General, Belgian Nuclear Research Centre (SCK.CEN), Belgium

Co-chair: Nicolas Waeckel, Corporate Expert on Fuel Design and International R&D, Engineering Division, Électricité de France (EDF), France

Speakers:

- Rory Kennedy, Director of the US DoE Nuclear Science User Facilities (NSUF) Program, Idaho National Laboratory (INL), USA
- **Scott Holcombe**, Manager, Research and Development Department, Institute for Energy Technology/The Halden Reactor Project (IFE/HRP), Norway
- Alexey Izhutov, Deputy Director, Research and Science
 Joint-stock Company "State Scientific Center Research Institute of Atomic Reactors" (JSC SSC RIAR), Russia
- Gilles Bignan, User Facility Interface Manager, Jules Horowitz Research Reactor (JHR)
 Project, Commissariat à l'énergie atomique et aux énergies alternatives (CEA), France
 - **Konstantin Koshcheev,** Chief Specialist, Science and Innovation Development Department, Joint-stock Company "Institute of Nuclear Materials" (JSC INM), Russia
- Phillip Finck, Senior Scientific Advisor, Idaho National Laboratory (INL), USA

Panel Discussion 11:20 - 12:30

Day 3 Wednesday, 10 January 2018 (cont'd)

CLOSING SESSION 13:30 – 15:30

Chair: John Herczeg, Chair of the Nuclear Science Committee, Deputy Assistant Secretary, USDOE

- Fiona Rayment, Executive Director, Nuclear Innovation and Research Office (NIRO)
 National Nuclear Laboratory (NNL), UK
 Daniel Iracane, Deputy Director-General and Chief Nuclear Officer, NEA
 "Towards Nuclear Innovations 2050 (NI2050)"
- Conclusions by session chairs and workshop chair and discussion
- **William D. Magwood, IV**, Director-General of the Nuclear Energy Agency (NEA) Closing remarks

