The International Expert Conference on Nuclear Technology

Key Topics

- Outstanding Know-How & Sustainable Innovations
- Enhanced Safety & Operation Excellence
- Decommissioning Experience & Waste Management Solutions

Programme

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# Programme Overview

## Tuesday ı May 10th 2016

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<th>Time</th>
<th>Industrial Exhibition</th>
<th>Opening Remarks</th>
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### Sessions
- **FOCS | Radiation Protection**
- **FOCS | Sustainable Reactor and Valuable**
- **FOCS | Challenges of the in Germany**
- **TOPS | Decommissioning – an International Survey**

## Wednesday ı May 11th 2016

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### Sessions
- **FOCS | Probability of, a Nuclear**
- **TECS | Reactor Physics,**
- **WORKS | Preserving**
- **TECS | Operation and Safety of**
- **TECS | Radioactive**

## Thursday ı May 12th 2016

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### Sessions
- **TOPS | Applying Innovative**
- **TECS | Know-How, New Build**
- **WORKS | Preserving**
- **TOPS | Fuel and Safety**
- **TOPS | Optimized Spent Fuel**
- **TECS | Decommissioning of**

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**Remarks**

*Hall 3H*

**Coffee Break**

*Hall 6*

**Lunch**

*Hall 13/14*
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**FOCS** = Focus Session  
**TOPS** = Topical Session  
**TECS** = Technical Session  
**WORKS** = Workshop  
**CAMP** = Campus  
**D** = Contributions in German  
**E** = Contributions in English  
**tsIE** = translated simultaneously in English  
**tsIE/D** = translated simultaneously in English/German
Plenary Session

Tuesday ı May 10th 2016
.isOpen {13:00 – 23:00} ı Hall 3

13:00 D/E Welcome and Opening Address
Dr. Ralf Güldner ı President of DAtF, Germany

Policy

13:20 D Speech
Jochen Flasbarth ı State Secretary at the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

13:40 D About Cores, Coal and Cash
H.E. Tomáš Jan Podivínský ı Ambassador of the Czech Republic in Berlin, Germany

14:00 E The Role of Nuclear Power in Delivering the UK’s Secure, Low Carbon, Affordable, Energy Future
Nick Leake ı Counsellor EU and Economic, British Embassy, Germany

Economy

14:20 D Managing Germany’s Energiewende
Ulrich Hartmann ı Executive Vice President, RWE Power AG, Germany

14:40 Coffee Break

15:00 E Strategies to a Balanced Energy Mix in Romania
Daniela Lulache ı CEO, Societatea Nationala Nuclearelectrica S.A. (SNN), Romania

Competence

15:20 D International Perspectives for the Young Generation
Eileen Langegger interviewed by Dr. Astrid Petersen ı Chairperson of the ENS Young Generation, Austria, Chairperson of KTG, Germany

15:40 E First Plasma Operation in the Fusion Experiment Wendelstein 7-X
Prof. Dr. Robert Wolf ı Head of Stellarator Heating and Optimisation Division, Max Planck Institute for Plasma Physics, Germany

All contributions translated simultaneously in English/German.
The DAtF-President and the KTG-Chairperson will lead through the programme.
Communications

16:00  Energy For Humanity – A New Voice for the Pro-nuclear Environmental Movement
Kirsty Gogan Alexander  Co-Founder & Director of „Energy for Humanity“, UK

16:20  Break

Waste Management

Different Approaches to Final Repositories in Europe

16:40  Key Note
Steffen Kanitz  Member of the German Bundestag, Germany

16:50  Panel
Dr. Thomas Ernst  Chairman of the Executive Board, Nagra, Switzerland
Hans Forssström  Senior Advisor, SKB, Sweden
Steffen Kanitz  Member of the German Bundestag, Germany
Mika Pohjonen  Sales Director, Posiva Oy, Finland

Moderator  John Shepherd  Editor-in-Chief, nuclear24, UK

Award Ceremony

17:50  Award of Honorary Membership of KTG to Dr. Wolfgang Steinwarz
Presented by  Dr. Astrid Petersen  Chairperson of KTG, Germany

Outside the Box

18:05  Risk Management
Capt. Manfred Müller  General Manager Flight Safety Research, Deutsche Lufthansa AG, Germany

18:35  Closing Remarks
Dr. Astrid Petersen  Chairperson of KTG, Germany

18:40  Break

19:00  Social Evening
– 23:00  DATF-Reception and Meet-and-greet in the Exhibition Area
Focus Session

- Probability of, Consequences of and Compensation for a Nuclear Accident in the EU
  11 May  |  09:00 – 12:00  |  Page 7

Topical Sessions

- The Fuel Cycle
  11 May  |  13:00 – 18:00  |  Page 15

- Applying Innovative Technology to VVER Plants
  12 May  |  08:30 – 13:00  |  Page 16

Technical Sessions

- Reactor Physics, Thermo and Fluid Dynamics
  11 May  |  09:00 – 12:00  |  Page 8

- Know-How, New Build and Innovations
  12 May  |  08:30 – 13:30  |  Page 17

Workshop

- Preserving Competence
  Part 1  |  11 May  |  09:00 – 11:50  |  Page 9
  Part 2  |  12 May  |  08:30 – 13:00  |  Page 10

Campus

- Nuclear Energy Campus
  11 May  |  10:30 – 15:30  |  Page 13
Probability of, Consequences of and Compensation for a Nuclear Accident in the EU

A (theoretical) large-scale nuclear accident in the EU raises several related issues, such as the probability of extensive off-site damage or issues of emergency preparedness and response. A focus will be put on the radiological and non-radiological impact of an accident, based on experience from Fukushima. Finally, consequences for legal compensation will be discussed.

Coordinator  Dr. Christian Raetzke  CONLAR Consulting on Nuclear Law, Licensing and Regulation, Germany

09:00 – 09:30 Improvements on French NPPs Following Fukushima Accident
Jean Barbaud  Délégué sûreté à l’international, EDF, France

09:30 – 10:00 Changes in the German Nuclear Emergency Preparedness and the European Perspective
Jan Pauly  PreussenElektra, Germany

10:00 – 10:30 Coffee Break

10:30 – 11:00 Organisation of the Disaster Control in the Vicinity of Nuclear Installations in Lower Saxony
Dr. Michael Gründel  Ministry of the Environment, Energy and Climate Protection of Lower Saxony, Germany

11:00 – 11:30 The Radiological and Non-Radiological Impact of the Fukushima Accident
Dr. Wolfgang Weiss  Former Head of Radiation Protection and Health at the Federal Office for Radiation Protection, Former Chair of UNSCEAR, Germany

11:30 – 12:00 The Fukushima Accident: Lessons Learned for Liability and Compensation
Ximena Vásquez-Maignan  Head, Office of Legal Counsel, OECD Nuclear Energy Agency, France
### Reactor Physics, Thermo and Fluid Dynamics

#### Thermal Hydraulic Experiments and Applications

**Chair** Dr. Andreas Schaffrath  
**Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany**

**09:00 – 09:30 Large-Scale Heat Transfer Experiments with Supercritical R134a Flowing Upward in a Circular Tube**

Florian Feuerstein  
**Karlsruhe Institute of Technology (KIT), Germany**

**09:30 – 10:00 Outline of Experimental Investigations on the Coolability of Debris Beds at the DEBRIS Test Facility, University of Stuttgart**

Simon Leininger  
**University of Stuttgart, Germany**

**10:00 – 10:30 Coffee Break**

**10:30 – 11:00 Analyzing Different HPCI Operation Modes Simulated with ATHLET-CD Regarding Possible Core Degradation Phenomena in Fukushima-Daiichi Unit 3**

Christoph Bratfisch  
**Ruhr-Universität Bochum, Germany**

**11:00 – 11:15 Mathematical Modelling for the Exchange of Thermal Radiation Between Fuel Rods in a PWR Fuel Assembly Storage**

Hassan Chahi  
**University of Applied Sciences Zittau/Görlitz, Germany**

### Neutron Kinetics Developments and Applications

**Chair** Dr. Winfried Zwermann  
**Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany**

**11:15 – 11:30 Nuclear Data Uncertainty Analysis for Fast Reactor Calculations**

Friederike Bostelmann  
**Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany**

**11:30 – 11:45 Nuclear Data Uncertainty Analysis of the Very High Temperature Reactor Critical Assembly Benchmark with XSUSA**

Friederike Bostelmann  
**Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany**

**11:45 – 12:00 The Concept of Low Power Thorium Reactor Facility with Thermal Neutrons**

Vladimir Knyshev  
**National Research Tomsk Polytechnic University, Russia**
Preserving Competence

Coordinator: Dr. Wolfgang Steinwarz | Siempelkamp Ingenieur und Service GmbH, Germany

Wednesday | Part 1

09:00 – 09:05 Welcome and Opening Address
Dr. Wolfgang Steinwarz | Siempelkamp Ingenieur und Service GmbH, Germany

Nina Neukam | Technische Universität Dresden, Germany
Responsible Professor: Prof. Dr. Uwe Hampel

09:20 – 09:35 On the Influence of Local Flow Structure on the Boiling Crisis
Thomas Geißler | Technische Universität Dresden, Germany
Responsible Professor: Prof. Dr. Uwe Hampel

09:35 – 09:50 Axial Fuel Rod Expansion Model in Nodal Code DYN3D for SFR Application
Evgeny Nikitin | Helmholtz-Zentrum Dresden-Rossendorf, Germany
Responsible Professors: Dr. Emil Fridman, Prof. Andreas Pautz

09:50 – 10:05 Theoretical and Experimental Investigations for Diagnosis of the Core State during Severe Accidents
Sebastian Schmidt | Zittau/Görlitz University of Applied Sciences, Germany
Responsible Professor: Prof. Dr. Alexander Kratzsch

10:05 – 10:35 Coffee Break

10:35 – 10:50 Analysis of SAM Coatings for Dropwise Condensation in Passive Safety Systems
Sebastian Unger | Technische Universität Dresden, Germany
Responsible Professor: Prof. Dr. Uwe Hampel

10:50 – 11:05 Airplane Crash Analysis: Semi-Hard Impact on Reinforced Concrete Structures
Moritz Lönhoff | TU Kaiserslautern, Germany
Responsible Professor: Prof. Dr. Hamid Sadegh-Azar
Workshop

Preserving Competence

11:05 – 11:20 Enhancement of ASTEC and COCOSYS Regarding Fission Product Release during MCCI
Kathrin Agethen  
Responsible Professor  
Ruhr-Universität Bochum, Germany
Prof. Dr. Marco K. Koch

11:20 – 11:35 Numerical Investigations on Disperse Multiphase Flows in Separation Filters
Emilia v. Fritsch  
Responsible Professors  
Karlsruhe Institute of Technology (KIT) / TU Dresden, Germany
Dipl.-Ing. Martin Brandauer, Prof. Dr. Sascha Gentes

11:35 – 11:50 Experimental Study of Centrifugal Pumps under Gas Entrainment Conditions
Thomas Schäfer  
Responsible Professor  
Helmholtz-Zentrum Dresden Rossendorf HZDR, Germany
Prof. Dr. Uwe Hampel

Thursday  Part 2

08:30 – 08:45 Micro-Reinforced High Performance Concrete for Aircraft Impact and Missiles
Sandro Zwecker  
Responsible Professor  
TU Kaiserslautern, Germany
Prof. Dr. Hamid Sadegh-Azar

08:45 – 09:00 Development of Computational Methods to Describe the Mechanical Behavior of PWR Fuel Assemblies
Andreas Wanninger  
Responsible Professor  
Technische Universität München, Germany
Prof. Dr. Rafael Macián-Juan

09:00 – 09:15 Spatially-Resolved Flow Measurement of Steam in the Subchannels of a Fuel Element Mock-Up during Dry-Out
Martin Arlit  
Responsible Professor  
Technische Universität Dresden, Germany
Prof. Dr. Uwe Hampel

09:15 – 09:30 Cybersecurity Risk Assessment Using DBSy Models and Attack Trees
Yuan Gao  
Responsible Professors  
AREVA GmbH, Germany
Karl Waedt, Prof. Dr. Jana Dittmann
Preserving Competence

**09:30 – 09:45** Experimental and Numerical Study of a Passive Flooding System
Nadine Kaczmarkiewicz  Technische Hochschule Deggendorf, Germany
Responsible Professor  Prof. Dr. Giuseppe Bonfigli

**09:45 – 10:00** Two-Phase Flow Studies in Complex Geometries
Martin Neumann  Technische Universität Dresden, Germany
Responsible Professor  Prof. Dr. Uwe Hampel

**10:00 – 10:30** Coffee Break

**10:30 – 10:45** Analysis of Natural-Circulation Systems with Nonlinear Instabilities Perspectively on Application of Bifurkation Analysis by Reduced Order Modelling
René Manthey  Technische Universität Dresden, Germany
Responsible Professor  Prof. Dr. Antonio Hurtado

**10:45 – 11:00** Investigation of the Condensation Process on Inclined Tubes as Part of Passive Heat Transfer Systems
Frances Viereckl  Technische Universität Dresden, Germany
Responsible Professor  Prof. Dr. Antonio Hurtado

**11:00 – 11:15** Towards the CFD Simulation of Spent Fuel Pool Accidents Resulting in Partially Uncovered Fuel Assemblies
Ronald Oertel  Helmholtz-Zentrum Dresden-Rossendorf, Germany
Responsible Professor  Dr. Eckhard Krepper

**11:15 – 11:30** Modeling of Particles Relocation in Degraded Cores of Light Water Reactors with Meltdown
Wael Hilali  Universität Stuttgart, Germany
Responsible Professor  Prof. Dr. Jörg Starflinger

**11:30 – 11:45** Using Gamma Radiation Measurements for Fuel Level Detection in PWR
Carsten Brachem  Technische Universität Dresden, Germany
Responsible Professor  Prof. Dr. Uwe Hampel

**11:45 – 12:00** Experimental Investigation of Isothermal Stratified Flow Mixing in a Horizontal T Junction
Alexander Isaev  Universität Stuttgart, Germany
Responsible Professor  Prof. Dr. Eckart Laurien
Workshop

Preserving Competence

12:00 – 12:15 Numerical Simulation of Droplet Flows in a Pressurized Water Reactor Containment
Christian Kaltenbach | Universität Stuttgart, Germany
Responsible Professor | Prof. Dr. Eckart Laurien

12:15 – 12:30 Numerical Simulation of a Natural Convection Flow in the THAI+-Facility
Abdennaceur Mansour | Universität Stuttgart, Germany
Responsible Professor | Prof. Dr. Eckart Laurien

12:30 – 12:45 Development of an Experimental Set-up for Investigations of Pipe Leckage
Stefan Schmid | Universität Stuttgart, Germany
Responsible Professor | Prof. Dr. Eckart Laurien

12:45 – 13:00 Experimental Investigation of Different Static Mixers for the IKE/MPA Fluid-Structure-Interaction Facility
Mi Zhou | Universität Stuttgart, Germany
Responsible Professor | Prof. Dr. Eckart Laurien
Nuclear Energy Campus

The Nuclear Energy Campus leads through the world of radioactivity, nuclear technology and radiation protection with individual stations. There will be contact persons available at all of the themed stands to offer information in form of short talks, movies, demonstrations or experiments. Besides, information on study options and career perspectives within nuclear industry are provided.

Coordinator: Helge Gottschling | Young Generation Network, KTG, Germany

10:30 – 10:45 Welcome Speech and Introduction to Nuclear Campus
Helge Gottschling | Young Generation Network, KTG, Germany

10:45 – 11:45 Visit Stations of Nuclear Campus I
Tour in little groups

11:45 – 12:10 Nuclear Energy: An Environmentalist Perspective
Kirsty Gogan Alexander | Co-Founder & Director of “Energy for Humanity”, UK

12:10 – 13:10 Visit Stations of Nuclear Campus II
Tour in little groups

13:10 – 13:40 Lunch Break

13:40 – 14:40 Visit Stations of Nuclear Campus III
Tour in little groups

14:40 – 14:50 Short Presentation of KTG Young Generation
Yvonne Schmidt-Wohlfarth | Spokesperson of the Board, Young Generation Network, KTG, Germany

14:50 – 15:30 Round Table and Discussion: Future Career Perspectives within Nuclear Industry
Participants: Members of the KTG Young Generation Board

15:30 Individual Visit of the Industrial Exhibition, End of Campus
Stations of Nuclear Campus

1 Fuel Assembly Production: Technics and Perspective Worldwide
   Dr. Markus Schlenker  
   Elmer Loeprich  
   Sven Ostendorf  
   Dr. Hendrik Wiesel
   
2 Nuclear Power Plants Phase Out – From Operations to Dismantling
   Carsten George  
   Thomas Zimmermann

3 Safe Disposal – From Power Plant to Final Repository
   Burghard Rosen

4 View into the Future: Advanced Reactor Concepts of Nuclear Fission and Fusion
   Nico Bernt  
   Georg Greifzu

5 Radioactivity and Radiation Protection
   Sven Jansen  
   Jörg Hauptmann

6 Medical Diagnostics with Radioactive Molecules
   Prof. Dr. Janos Mester
The Fuel Cycle

Nuclear Power is not only about reactors. In fact, the nuclear fuel cycle requires just as much know-how, investments and decades of experience. Installations of the fuel cycle are concentrated in only a few countries and companies. The more interesting it is for the nuclear community as a whole to be aware of the diverse technologies and challenges related to uranium mining, conversion, enrichment, the trading of these services, used fuel recycling and fabrication of MOX fuel elements. The session will feature first-hand speakers from all these different elements of the nuclear value chain.

Coordinator  Dr. Stefan Nießen  Vice President Research & Innovation, AREVA GmbH, Germany

13:00 – 13:30  Closed or Open Fuel Cycle Capabilities? Strategic Choices and their Commercial, Regulatory, Financial, Research and Security Implications
Hergen Haye  Director, Nuclear Futures Limited, UK
previous UK Department of Energy and Climate Change

13:30 – 14:00  Uranium Mining: How Certain is Future Uranium Supply?
Christian Polak  AREVA Mines, France

14:00 – 14:30  Conversion
Pierre Durante  AREVA Front End, France

14:30 – 15:00  Enrichment
Olga Kudoyarova  TENEX, Russia

15:00 – 15:30  Coffee Break

15:30 – 16:00  Reprocessing: Decades of Experience and Still Progress
Eric Blanc  Former Deputy Head of La Hague, France

16:00 – 16:30  HLLW Vitrification An Important Step of the Nuclear Fuel Cycle
Hans Genthner  CEO, Kraftanlagen Heidelberg GmbH, Germany

16:30 – 17:00  MOX Fabrication: Experience and Challenges

17:00 – 17:30  PRISM Concept for the UK: Fast Reactors Close the Cycle
David J. Powell  Vice President, GE-Hitachi, UK

17:30 – 18:00  Trading: What Are the Current Market Trends?
Friedel Aul  CEO, Urangesellschaft mbH, Germany
Applying Innovative Technology to VVER Plants

This session has the objective to build new bridges between providers of innovative technologies and utilities operating VVER reactors and to foster an exciting exchange of information.

Coordinator  Dr. Martin Pache  
Ulf Benjaminsson

08:30 – 08:55  Introduction to VVER Technology: Concept and Actual Status of Implementation of Ukrainian Post-Fukushima Safety Upgrades
Oleksandar Markov  
NPP Operation Support Institute, Ukraine

08:55 – 09:20  Operator View: Future Need for Modifications for Lifetime Extension in VVER Plants
Sergiy Tarakanov  
Energoatom, Ukraine

09:20 – 09:45  Operator View: Experiences with the Implementation of Novel Waste Management Technologies in VVER Plants
Jussi-Matti Mäki  
Fortum Power and Heat Oy, Finland

10:00 – 10:30  Coffee Break

Dr. Thomas Lütsch  
TÜV SÜD, Germany
Sergey Butskikh  
Zarubyezh Atom Energo Stroy, Russia

10:55 – 11:20  Supplier View: Diversification of the VVER Fuel Market and Overcoming Challenges
Dr. Carina Önneby  
Westinghouse, Sweden

11:20 – 11:45  Supplier View: Examples and Experiences with Product Adaptations for VVER Reactors
Dr. Detlev Reichenbach  
AREVA, Germany

11:45 – 12:10  Supplier View: APROS Multipurpose Simulation Software for Improvement of Safety and Efficiency of VVERs
Kari Porkholm  
Fortum, Finland

12:10 – 12:35  Supplier View: Updating the RAW Management in Ukraine Considering the Particular Relevance for VVER
Dr. Hagen Jung  
NUKEM Technologies Engineering Services GmbH, Germany

12:35 – 13:00  Panel Discussion  
All Participants
Technical Session

Know-How, New Build and Innovations

Chair: Dr. Matthias Lamm  |  R&D Manager, AREVA GmbH, Germany

Innovation in Operation

08:30 – 09:00  From the Basic Load Cover to Covering Gaps Load
Prof. Dr. Helmut Alt  |  FH Aachen, Germany

09:00 – 09:30  Improving Automated Load Flexibility in Nuclear Power Plants (NPP)
Andreas Kuhn  |  AREVA GmbH, Germany

Neutronics for Next Generation Power Plants

09:30 – 10:00  Neutronics Source Modeling for Stellarator Power Reactors of the HELIAS-Type
André Häußler  |  Karlsruhe Insitute of Technology (KIT), Germany

10:00 – 10:30  Coffee Break

10:30 – 11:00  Neutronic and Fuel Performance Calculations for the ALLEGRO Reactor Using MCNP and the TRANSURANUS Code
Christian Herold  |  RWTH Aachen, Germany

Innovative Products and Technologies

11:00 – 11:30  AFCEN RCC-CW Code: Containment Tests and Monitoring
Dr. Burkhard Wienand  |  AREVA GmbH, Germany

11:30 – 11:45  The Pressure Equalization Ceiling of Pressurized Water Reactors
Dr. Dirk Ostermann  |  AREVA GmbH, Germany

11:45 – 12:00  Influence of Remaining Service Life on the Design of Nuclear Building Structures
Rüdiger Meiswinkel  |  MBI Bautechnik GmbH, Germany

12:00 – 12:15  Venting of Hydrogen with Selective Hydrogen Filters within the Depressurization System of the BWR in Gundremmingen
Dimitri-Dietrich Menschow  |  Westinghouse Electric Germany GmbH, Germany
Technical Session

Know-How, New Build and Innovations

12:15 – 12:30  Inspection of Inaccessible Areas the Heysham Case
   Helmut Jarisch  Westinghouse Electric Germany GmbH, Germany

12:30 – 12:45  Study of Potential Use of Augmented Reality in Nuclear Applications
   Dr. Felix Philipp Sassen  Westinghouse Electric Germany GmbH, Germany

12:45 – 13:00  Reducing False Alarms in Portal Monitors by Patented FastTrack-Algorithm
   Christian Günther  Mirion Technologies (RADOS) GmbH, Germany

Know-How

13:00 – 13:30  Education and Training in Nuclear Decommissioning Needs, Opportunities and Challenges
   Hans Guenther Schneider  European Commission, Belgium
Focus Sessions

- Radiation Protection
  10 May | 09:00 – 11:50 | Page 20

- Sustainable Reactor Operation Management – Safe, Efficient and Valuable
  10 May | 09:00 – 11:45 | Page 21

Topical Sessions

- Operational Experience
  11 May | 13:00 – 16:30 | Page 25

- Fuel and Safety
  12 May | 08:30 – 13:00 | Page 26

Technical Session

- Operation and Safety of Nuclear Installations, Fuel
  11 May | 08:15 – 19:15 | Page 22
**Radiation Protection**

Protection against ionizing radiation is an item touching us in various fields of our activities: operation of nuclear power plants, decommissioning, waste treatment and disposal, health care, etc. This session is organized to demonstrate the high importance of radiation safety culture as part of the overall safety culture. It concentrates on radiation protection as a task of occupational safety – but also of other areas of activities: industry dealing with naturally occurring radioactive materials and, more generally, natural background sources.

**Coordinator** Erik Baumann  
AREVA GmbH, Germany  
**Co-Coordinator** Dr. Angelika Bohnstedt  
Karlsruhe Institute of Technology (KIT), Germany

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
<th>Institution</th>
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<tbody>
<tr>
<td>09:00 – 09:20</td>
<td>Radiation Protection – Changes When Implementing the Guideline 2013/59 Euratom Compared to Established Radiation Protection Goals</td>
<td>Dr. Margot Horn</td>
<td>TÜV Rheinland Industrie Service GmbH, Germany</td>
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<tr>
<td>09:20 – 09:40</td>
<td>Hormesis – a Miracle in Reality? Discussion Required.</td>
<td>Jan-Christian Lewitz</td>
<td>General Manager, LTZ-Consulting GmbH, Germany</td>
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<tr>
<td>09:55 – 10:15</td>
<td>Radioactivity and Radiation Protection in NORM (Naturally Occurring Radioactive Materials) Industry – an Overview</td>
<td>Dr. habil. Rainer Gellermann</td>
<td>Nuclear Control &amp; Consult GmbH, Member of the SKK and the association, Germany</td>
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<tr>
<td>10:15 – 10:30</td>
<td>Coffee Break</td>
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<td>10:30 – 10:50</td>
<td>Has Radiation Protection been Adapted for Dismantling?</td>
<td>Andreas Jüterbock</td>
<td>Studsvik GmbH &amp; Co. KG, Germany</td>
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<tr>
<td>10:50 – 11:10</td>
<td>TECHREC WP3 – Development of EU Technical Recommendations for Monitoring Occupational Intakes of Radionuclides</td>
<td>Dr. George Etherington</td>
<td>Group Leader, Internal Dosimetry Radiation Hazards and Emergencies Department Centre for Radiation, Chemical and Environmental Hazards, Public Health UK PHE</td>
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<td>11:10 – 11:30</td>
<td>Fukushima – What is the Implication for Radiation Protection</td>
<td>Dr. Wolfgang Weiss</td>
<td>Former Head of the Department of Radiation Protection and Health of the Federal Office for Radiation Protection (BfS), Former Chair of UNSCEAR, Germany</td>
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</table>
Sustainable Reactor Operation Management – Safe, Efficient and Valuable

The market prices for generated electricity have decreased continuously in the last 4 years as a consequence of the “Energiewende”. This situation puts a lot of pressure also to the operation of NPPs in Germany to strive more than ever for Operational Excellence. Therefore the operational set-up of the plants has to be optimized continuously in all processes of the plant organization, for example maintenance, inspection, cyclic testing, ageing- and lifetime management, management systems, work preparations to guarantee safety, availability and improved competitiveness under challenging market conditions. Within this session examples for good practices in these fields will be presented and discussed.

Coordinator  Dr. Erwin Fischer  |  Member of the Management Board, E.ON Kernkraft GmbH, Germany

09:00 – 09:25  Maintenance Strategy, a Precondition for Operational Excellence
Burkhard Cramer  |  NPP Oskarshamn, Sweden

09:25 – 09:50  Reliable Inspection Concepts for Safety-Related Valves
Parkin Borsum  |  TÜV Süd, Germany

09:50 – 10:15  Aging Management – a Contribution to Held NPPs in Safe Condition
Dr. Frank Michel  |  Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany

10:15 – 10:30  Coffee Break

10:30 – 10:55  Post-Fukushima, Lessons Learned Resulting in Additional Safety Measures for NPPs
Dr. Andreas Strohm  |  EnBW Kernkraft GmbH, Germany

10:55 – 11:20  One.BFS – Operational Management System With Collected 120 Years of Experience
Gerhard Herz  |  E.ON Kernkraft GmbH, Germany

11:20 – 11:45  “Reactivity-Management”, a Measure to Prevent Unsafe Situations in Operating NPPs
Markus Luginger  |  NPP Isar, Germany
Technical Session

Operation and Safety of Nuclear Installations, Fuel

Spent Fuel Pool and Calculations

Chair Dr. Jürgen Sydow  Project Manager, TÜV NORD GmbH & Co.KG, Germany

08:15 – 08:30  Threshold Nuclear-Physical Processes in Multiplying Fuel-Rod Arrays and Systems with Thorium
Konstantin Savasichev  National Research Tomsk Polytechnic University, Russia

08:30 – 08:45  Development of Passive Spent Fuel Pool Cooling by Heat Pipes
Prof. Dr. Jörg Starflinger  University of Stuttgart, Germany

08:45 – 09:00  Advanced Cooling Tube – Mobile Heat Exchanger in the Shape of a Fuel Assembly for Spent Fuel Pool Cooling
Matthias Reuter  AREVA GmbH, Germany

09:00 – 09:15  Retrofitting a Spent Fuel Pool Spray System Against the Background of the Reactor Accident in Fukushima Daiichi
Christian Giesel  Westinghouse Electric Germany GmbH, Germany

09:15 – 09:45  Simulation of Hydrogen Combustion During Spray Operation with COCOSYS
Tobias Jankowski  Ruhr-Universität Bochum, Germany

09:45 – 10:00  Shielding and Criticality Analyses for Handling of a Quiver for Special Fuel Rods
Dr. Sven Tittelbach  WTI GmbH, Germany

10:00 – 10:30  Coffee Break

Simulation

Chair Dr. Thorsten Hollands  Safety Manager, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany

10:30 – 11:00  A Comparative Assessment of ATHLET-CD and MELCOR by Simulating the Experiment PHEBUS FPT1
Christian Bratfisch  Ruhr-Universität Bochum, Germany
Operation and Safety of Nuclear Installations, Fuel

11:00 – 11:30 Reducing In-Core Zinc Borate Precipitation After Loca in Pressurized Water Reactors
Dr. Holger Kryk | Helmholtz-Zentrum Dresden-Rossendorf, Germany

11:30 – 12:00 In-Core Zinc Borate Precipitations after LOCA in Pressurized Water Reactors – Past Experiences and Upcoming Investigations
Dr. André Seeliger | Hochschule Zittau/Görlitz, Germany

12:00 – 13:00 Lunch Break

Insights into Operational Experience

Chair Dr. Sven Tittelbach | WTI GmbH, Germany

13:00 – 13:30 The Periodic Safety Review 2016 of the NPP Brokdorf
Ralf Wohlstein | E.ON Kernkraft GmbH, Germany

13:30 – 13:45 Operational Experience of Siemens/KWU LWR Nuclear Power Plants – A Successful Story
Dr. Renate Kilian | AREVA GmbH, Germany

13:45 – 14:00 A Comprehensive Approach to Experience Based Learning by Combining Proactive and Reactive Learning within One Management System
Juliane Ahrens | SOL-VE GmbH, Germany
Hans Maimer | SOL-VE GmbH, Germany
Oliver Wendt | Vattenfall GmbH, Germany

14:00 – 14:30 Cleavage Fracture Assessment of Components under Transient Thermomechanical Loading
Johannes Tlatlik | Fraunhofer Institute for Mechanics of Materials, Germany

14:30 – 14:45 The Effect of Heat Treatments at Different Plastic States on the Isotropic Hardening Behavior of Austenitic Stainless Steel
Paul Wilhelm | AREVA GmbH, Germany

14:45 – 15:00 Selected Methods and Detail Solutions of the RPV: Water Level Measurement for Boiling Water Reactors
Frank Dräger | E.ON Kernkraft GmbH, Germany
Technical Session

Operation and Safety of Nuclear Installations, Fuel

15:00 – 15:30 Coffee Break

Safety, IT, Hazards and PSA

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<tr>
<td>15:30 – 16:00</td>
<td><strong>Modeling Attacks on Critical Infrastructure: A first Summary of existing Approaches</strong></td>
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<td>Robert Fischer</td>
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<td>Otto-von-Guericke University of Magdeburg, Germany</td>
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<td>16:00 – 16:30</td>
<td><strong>Nuclear Safety and Risk-based Cybersecurity Testing</strong></td>
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<td>Yuan Gao</td>
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<td>AREVA GmbH, Germany</td>
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<td>16:30 – 16:45</td>
<td><strong>Optimized Process for Whisker Removal from I&amp;C Boards</strong></td>
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<td>André Jurisch</td>
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<td>16:45 – 17:00</td>
<td><strong>Particulate Fission Product Wash-Down from Containment Walls and Installation Surfaces</strong></td>
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<td>Dr. Martin Freitag</td>
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<td>Becker Technologies GmbH, Germany</td>
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<td>17:00 – 17:30</td>
<td><strong>Temporary Transportation Openings in Reactor Buildings and Liner – Planning and Execution Aspects</strong></td>
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<td>Andre Oberste-Schemmann</td>
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<td>Westinghouse Electric Germany, Germany</td>
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<td>17:30 – 18:00</td>
<td><strong>Verification of the Earthquake Safety of Electrical Equipment</strong></td>
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<td>Dr. Marcus Ries</td>
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<td>Wölfel Beratende Ingenieure, GmbH Co KG, Germany</td>
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<td>18:00 – 18:15</td>
<td><strong>Application of the Reciprocity Theory to Calculate Organ Doses in Phantoms Immersed in Water</strong></td>
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<td>Dr. Mauritius Hiller</td>
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<td>Oak Ridge National Lab, USA</td>
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<td>18:15 – 18:30</td>
<td><strong>CRAFT – Control Room Accident Filtration</strong></td>
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<td>Marina Welker</td>
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<td>AREVA GmbH, Germany</td>
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<td>18:30 – 18:45</td>
<td><strong>Equipment Qualification: An Assessment for Nuclear Safety</strong></td>
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<td>Dr. Felix Zantow</td>
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<td>AREVA GmbH, Germany</td>
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<td>18:45 – 19:15</td>
<td><strong>Containment Event Tree for the Level 2 Probabilistic Safety Assessment of EU-ABWR-Comparison with the CET for ESBWR and Development of Selected Split Fractions</strong></td>
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<td>Özlem Yilmaz</td>
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<td>University of Stuttgart, Germany</td>
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Topical Session

Operational Experience

With worldwide over 15,000 reactor years a treasure of operating experience has now been compiled. Today, the technology is mature and safe, nevertheless additional margins on safety and economy can still be raised. In a few cases events and findings lead to further investigations and subsequent improvements, shared as within probably no other industry. For more than half a century, overall nuclear safety has therefore continuously improved by a factor of ten every ten years. This session is therefore devoted to some exemplary operational aspects, being prominent on the operator’s agendas of today.

Coordinator: Dr. Ludger Mohrbach – VGB PowerTech e.V., Germany

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<tr>
<td>13:00 – 13:30</td>
<td>Open Phase Events – Facts and Challenges from a NPP Operator’s Perspective</td>
<td>Christian Reisenberger</td>
<td>Kernkraftwerk Isar, Germany</td>
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<tr>
<td>13:30 – 14:00</td>
<td>Robustness of Lightning Protection in German Nuclear Power Plants</td>
<td>Prof. Dr.-Ing. Alexander Kern</td>
<td>FH Aachen, Germany</td>
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<tr>
<td>14:00 – 14:30</td>
<td>Repair Concepts for PWR Fuel Assembly Guide Pins</td>
<td>Andreas Lemm</td>
<td>AREVA GmbH, Germany</td>
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<tr>
<td>14:30 – 15:00</td>
<td>Long-term Operation of NPP: Key Issues in Safety Assessment</td>
<td>Dr. Urs Weidmann</td>
<td>KNS Eidgenössische Kommission für Nukleare Sicherheit, Switzerland</td>
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<tr>
<td>15:00 – 15:30</td>
<td>Coffee Break</td>
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<tr>
<td>15:30 – 16:00</td>
<td>Grid Services from Nuclear Power Plants</td>
<td>Markus Bresler</td>
<td>E.ON Kernkraft GmbH, Germany</td>
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<td>16:00 – 16:30</td>
<td>New VGB Standard “Professional Leadership Behaviour”</td>
<td>Dr. Christian Mönning / Dr. Tim Büscher</td>
<td>RWE Power, Germany</td>
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<td>Eckhard Nithack / Jörg Ritter</td>
<td>EnKK, Germany</td>
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Topical Session Fuel and Safety

The Topical Session Fuel and Safety addresses current research issues and developments in Nuclear Reactor Safety. After an overview two topics are considered in depth. These are criteria for Loss of Coolant (LOCA) Analyses and investigations of heat removal from spent fuel pools. The presentation will be given by nuclear stakeholders from industry, research and TSO reflecting inter alia the view of the German Reactor Safety Commission (RSK) and the progress made the last years.

Coordinators

Dr. Andreas Schaffrath  Head of Division Reactor Safety Research, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany
Prof. Dr. Marco K. Koch  Ruhr-Universität Bochum, Germany
Dr. Tatiana Salnikova  AREVA GmbH, Germany

08:30 – 09:00  Current Research Topics and Further Development in Nuclear Reactor Safety
Uwe Stoll  AREVA GmbH, Germany

09:00 – 09:30  RSK Amendment of Acceptance Criteria for the Analysis of LOCA
Matthias Brettner  Physikerbüro Bremen, Germany

09:30 – 10:00  A New Criterion for the Evidence of the Core Coolability at LOCA
Dr. H.-G. Sonnenburg  Gesellschaft für Anlagen- und Reaktorsicherheit gGmbH, Germany

10:00 – 10:30  Coffee Break

10:30 – 11:00  AREVA Verification Methodology of New Embrittlement Criterion
Dietmar Deuble  AREVA GmbH, Germany

11:00 – 11:30  Regulatory Requirements with Respect to Spent Fuel Pool-Cooling
Dr. Christoph Pistner  Öko-Institut e.V., Germany

11:30 – 12:00  Experimental Studies on Residual Heat Removal from Evaporating Fuel Spent Fuel Pools
Christine Partmann  Technische Universität Dresden, Germany

12:00 – 12:30  Experimental and Analytical Investigation of the Performance of Heat Pipes for Residual Heat Removal from Spent Fuel Pools
Prof. Dr. Jörg Starflinger  Universität Stuttgart, Germany
Claudia Graß  Technische Hochschule Georg Simon Ohm, Germany
Dr. Andreas Schaffrath  Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany
Dr. Markus Pöhlmann  AREVA GmbH, Germany

Leo Ornot  AREVA GmbH, Germany
Key Topic ı Decommissioning Experience & Waste Management Solutions

Focus Session

- Challenges of the New Search for a HLW-Repository in Germany
  10 May ı 09:00 – 12:00 ı Page 28

Topical Sessions

- Decommissioning – an International Survey
  10 May ı 09:00 – 11:30 ı Page 29

- German Decommissioning and Waste Management – News and Beyond
  11 May ı 13:30 – 16:00 ı Page 33

- Optimized Spent Fuel Management from Fuel Pond to Final Repository
  12 May ı 08:30 – 12:00 ı Page 34

Technical Sessions

- Radioactive Waste Management and Storage
  11 May ı 09:00 – 17:00 ı Page 30

- Decommissioning of Nuclear Installations
  12 May ı 08:30 – 12:45 ı Page 35
Challenges of the New Search for a HLW-Repository in Germany

In the public perception, the search for a repository for high-level radioactive waste is dominated by the coverage on the Commission “storage of high-level radioactive waste” which should prepare a site selection process by mid-2016. During the work of the so called “Repository Commission”, research in the field of disposal meanwhile has not stopped. Numerous other projects, some of them presented and discussed in this focus session, illuminate the various aspects related to final disposal and site selection processes and provide an important basis for the start of the new German site selection process.

Coordinator Stefan Weber  Project Manager RAW Management, GNS Gesellschaft für Nuklear-Service mbH, Germany

09:00 – 09:30  The Work of the Commission “Storage of High-Level Radioactive Waste”: An Interim Conclusion
Michael Sailer  CEO Öko-Institut, Co-Chair of Working Group 3 of the Repository Commission, Germany

09:30 – 10:00  Site Selection in Switzerland: Content and Contribution of the Technical-Scientific Work
Dr. Piet Zuidema  Member of Management Board of NAGRA, Switzerland

10:15 – 10:30  Coffee Break

10:30 – 11:00  The Project ENTRIA (Options for the Disposal of Radioactive Waste: Interdisciplinary Analyzes and Development of Valuation Bases): Overview and Selected Interim Results
Prof. Klaus-Jürgen Röhlig  TU Clausthal, Speaker of the ENTRIA Project, Germany

11:00 – 11:30  Site Selection – How Can Repositories in Different Host Rocks be Compared?
Dr. Klaus Fischer-Appelt  Department Head “Final Disposal”, Gesellschaft für Anlagen- und Reaktorsicherheit (GRS) gGmbH, Germany

11:30 – 12:00  Where To Dispose of the Radioactive Waste? The Population Has a Say.
Dr. Michael Aebersold  Head of Section Disposal of Radioactive Waste, Bundesamt für Energie BFE, Switzerland

This session will be held in German with simultaneous English translation.
Decommissioning – An International Survey

Decommissioning of nuclear power plants is state of the art in a lot of countries. International guidance in case of safety standards is given from the International Atomic Energy Agency, the safety guide for decommissioning of nuclear power plants, research reactors and other nuclear fuel cycle facilities will be finalized in 2016 and be presented as introduction of the session. Depending on national boundary conditions decommissioning strategies varies from country to country. Additionally countries are in different stages in performing decommissioning activities. The international survey applies to projects in USA, Spain, Switzerland and Germany. While Switzerland is in the planning phase, USA, Spain and Germany have already ongoing decommissioning projects.

Coordinator Dr. Ralf Versemann | RWE Power AG, Germany

09:00 – 09:25 Decommissioning of Nuclear Power Plants – Actual Guidance from the International Atom Energy Agency
John Rowat | International Atomic Energy Agency (IAEA)

09:25 – 09:50 Lessons Learned and Implemented for Decommissioning of three YANKEE Reactors
Robert Bonner | AECOM Nuclear & Environment
Matthew J. Marston | AECOM Nuclear & Environment

09:50 – 10:15 Successful Dismantling of the José Cabrera Reactor Vessel and Internals
Joseph Boucau | Westinghouse Electric Company
Per Segerud | Westinghouse Electric Company
Alejandro Rodríguez | ENRESA

10:15 – 10:30 Coffee Break

10:30 – 11:00 Decommissioning in Switzerland – Legal Framework and Planned Procedure for NPP Mühleberg
Stefan Klute | BKW Energie AG, Switzerland

11:00 – 11:30 Decommissioning in Germany – How Well We Are Prepared for the Future?
Dr. Erich Gerhards | E.ON Kernkraft GmbH, Germany
Radioactive Waste Management and Storage

Characterisation

09:00 – 09:30 Measurement for Radioactive Waste or Recyclables to be Released From the Control Area of Nuclear Facilities
Dr. Marina Sokcic-Kostic  NUKEM Technologies Engineering Services GmbH, Germany

09:30 – 10:00 Radiological Characterization of Mosaik® Casks with an Inhomogeneous Activity Distribution
Dr. Andreas Havenith  Aachen Institute for Nuclear Training GmbH (AiNT), Germany

10:00 – 10:30 Coffee Break

10:30 – 10:45 Monte-Carlo Based Study of the Depth-Dose Rate Curve for Employees in an Underground Nuclear Waste Disposal Facility
Hector Sauri Suarez  Karlsruhe Institute of Technology (KIT), Germany

10:45 – 11:00 Experimental Validation of Radionuclide Inventories Calculation of Irradiated Fuel Rod Components
Ron Dagan  Karlsruhe Institute of Technology, Germany

Treatment

11:00 – 11:15 Quantity and Management of Graphite/Carbon Brick from High Temperature and Research Reactors in Germany
Sabine Dörr  DBE TECHNOLOGY GmbH, Germany

11:15 – 11:30 Synthesis of Functionalized Zeolite for Radioactive Cesium Removal and its Thermal Stability Study
Dr. Keun-Young Lee  Korea Atomic Energy Research Institute, Republic of Korea
Technical Session

Radioactive Waste Management and Storage

11:30 – 12:00 Shield Test of Fuel Inspection Hot Cell (FIHC) Structures and Embedded Parts with Sealed Co-60Source: Execution and Results
Jan Christian Lewitz LTZ Consulting GmbH, Germany

12:00 – 13:00 Lunch Break

13:00 – 13:30 Process of Radioactive Mercury Treatment and Handling for Elimination under Safety-Standards – Prometheus
Dr. John Kettler et al. Aachen Institute for Nuclear Training GmbH, CEO, Forschungszentrum Jülich GmbH, Germany

Storage

13:30 – 13:45 Accelerations Acting on a Nuclear Transport Package During a Routine Transport on the Road
Dr. Jörn Becker GNS Gesellschaft für Nuklear-Service mbH, Germany

13:45 – 14:15 Safe but Simple Transportation of Casks Loaded with High Level Radioactive Waste Down to Host Rock
Dr. Peter Leister Germany

14:15 – 14:30 Federal Approval of Legacy Waste Containers for the Konrad Repository – Strategies and Challenges
Matthias Dittrich BAM Bundesanstalt für Materialforschung und -prüfung, Germany

14:30 – 15:00 Safety Regulations and Implementation in the Development of New Transport and Storage Casks for All Kinds of Active Waste
Norbert Schmidt AREVA NC, France

15:00 – 15:30 Coffee Break

15:30 – 16:00 Distribution of Dismantled Material to Disposal Routes with Respect to the Concept Decay Storage
Dr. Georg Bacmeister E.ON Technologies GmbH, Germany

This session can be held in German with simultaneous English translation.
Radioactive Waste Management and Storage

16:00 – 16:15  Direkte Endlagerung von Transport-und Lagerbehältern (DIREGT) – Status Quo und Perspektiven –
Dr. Astrid Jussofie  GNS Gesellschaft für Nuklear Service mbH, Germany

16:15 – 16:45  Strategies for Final Disposal of HLW in German Clay Formations
Dr. André Lommerzheim  DBE TECHNOLOGY GmbH, Germany

16:45 – 17:00  Planning of the Delivery Process of Repository-Commpatible Waste Packages with the Aid of the Konrad Final Disposal IT Platform
Dr. Martin Imhäuser  GNS Gesellschaft für Nuklear-Service mbH, Germany
German Decommissioning and Waste Management – News and Beyond

There were many challenges coming from the different decommissioning projects in Germany as soon as they gathered pace. Industry has turned out resourceful and innovative though dealing with that challenges as they appear. This session shows innovative products and business schemes to deal with the decommissioning and waste management challenges on a daily basis.

Coordinator Thomas Seipolt ı Managing Director, NUKEM Technologies Engineering Services GmbH, Germany

13:30 – 14:00 Radiological Characterization at Different Decommissioning Stages
Detlef Beltz ı TÜV Nord Ensys Hannover GmbH & Co. KG, Germany

14:00 – 14:30 Calculation of Activated Parts Radiological Conditions
Luc Schlömer ı WTI GmbH, Germany
Prof. Dr.-Ing. Peter Phlippen ı WTI GmbH, Germany
Bernard Lukas ı EnBW Kernkraft GmbH, Germany

14:30 – 15:00 Radiological Characterization of Activated Components
Tba

15:00 – 15:30 Coffee Break

15:30 – 16:00 Radiological Waste Handling at Brunsbüttel NPP
Tba

This session will be held in German with simultaneous English translation.
## Optimized Spent Fuel Management from Fuel Pond to Final Repository

The management of spent fuel assemblies from nuclear power plants so far has been mainly oriented towards the requirements of the various forms of interim storage due to a lack of appropriate final repositories. While the status “free from nuclear fuel” is an important precondition for the actual dismantling of already or soon to be shut down nuclear power plants, a thoroughly elaborated and comprehensive disposal chain can provide a sustainable contribution to a safe and economic operation of the globally planned new build projects in the long run as well as to the power plants running for an extended life-time. During this Topical Session the various approaches and objectives in different countries shall be examined as well as new technical concepts and regulatory frameworks.

### Coordinators

- Dr. Jürgen Skrzyppek
- Michael Köbl
  - GNS Gesellschaft für Nuklear-Service mbH, Germany

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**08:30 – 09:00**

**Spent Fuel Management in Switzerland**

Dr. Tony Williams

- Head Nuclear Fuel Department, Axpo Power AG, Switzerland

**09:00 – 09:30**

**Dry Instead of Wet – Paradigm Change in Korea**

Dr. Yong Deog Kim

- Senior Researcher, KHNP, Korea

**09:30 – 10:00**

**Spent Fuel Management and Storage Strategy in Belgium**

Luc Janssen / Joost Kerkhofs

- Manager Backend Nuclear Fuel Cycle, Synatom, Belgium

**10:00 – 10:30**

**Coffee Break**

**10:30 – 11:00**

**Free from Nuclear Fuel – A Solution for Non Standard Fuel Rods**

Bernhard Kühne

- Divisional Director Projects, GNS Gesellschaft für Nuklear-Service mbH, Germany

**11:00 – 11:30**

**Experiences and Perspectives of Wet Storage**

Leo Ornot

- Director Office and Development, AREVA GmbH, Germany

**11:30 – 12:00**

**Experience in Organizing and Implementing the Decommissioning of Ignalina Nuclear Power Plant with RBMK 1500 Reactors**

Darius Janulevičius

- Director General, Ignalina Nuclear Power Plant, Lithuania

Saulius Urbonavičius

- Advisor to Director General, Ignalina Nuclear Power Plant, Lithuania
Technical Session

Decommissioning of Nuclear Installations

Decommissioning of Nuclear Installations I

Chair: Pascal Brüggemann | Senior Engineer, NUKEM Technologies Engineering Services GmbH, Germany

08:30 – 08:45
Optimization of Waste Management during Decommissioning of NPP with Special Focus on Metal Recycling Aspects
Dr. Frank Charlier | RWTH Aachen - NET, Germany

08:45 – 09:00
Radiological Analyses for Final Disposal of Decommissioning Waste
Dr. Aliki van Heek | NRG, Netherlands

09:00 – 09:30
Applications of Underwater-Robotics in Nuclear Power Plants
Gunnar Heinzler | AREVA GmbH, Germany

09:30 – 10:00
Remote Dismantling and Packaging of the RPV and Thermal Shield at the Obrigheim NPP
Karsten Schmidt | Energiewerke Nord GmbH, Germany

10:00 – 10:30 Coffee Break

Decommissioning of Nuclear Installations II

Chair: Dr. Bernhard Wiechers | Westinghouse Electric Germany GmbH, Germany

10:30 – 10:50
New Approaches in Cutting Zirconium Alloy Components of Nuclearfacilities – Results of an BmBF-Research Project
Pascal Brüggemann | NUKEM Technologies Engineering Services GmbH, Germany

10:50 – 11:05
Quantitative Radiological Characterization of Waste: Integration of Gamma Spectrometry and Passive/Active Neutron Assay
Dr. Filippo Gagliardi | Nucleco S.p.A., Italy

This session can be held in German with simultaneous English translation.
Technical Session

Decommissioning Experience & Waste Management Solutions

Thursday ı May 12th 2016
ı 08:30 – 12:45 ı Room: Hall 13/14

Decommissioning of Nuclear Installations

11:15 – 11:30 Dismantling of High-Activity Effluents Tanks Inside Buildings 105 and 122 of the Site of Belgoprocess at Dessel in Belgium
Jean-Pierre Lahaye ı Tractebel Engineering, Belgium
Antoine Van Elewyck ı Tractebel Engineering, Belgium

11:30 – 12:00 Typical Activities at JRC-ITU Hot Cells in Preparation for Storage or Decommissioning of High Activity Facilities
Dr. Paul David Bottomley ı European Commission, Germany

12:00 – 12:15 Effects of Waste Classification Changes in Russian Legislation on Planned Waste Treatment Center
Dr. Frank Scheuermann ı NUKEM Technologies Engineering Services GmbH, Germany

12:15 – 12:30 Entstehung, Behandlung und Entsorgung von radioaktiven Abwässern während des Rückbaus im Kernkraftwerk Stade
Michael Klein ı E.ON Kernkraft GmbH, Kernkraftwerk Stade, Germany

12:30 – 12:45 Erfahrungen aus dem Rückbau Kernkraftwerk Obrigheim
Jörg Klasen ı EnBW Kernkraft GmbH, Germany

This session can be held in German with simultaneous English translation.
Programme Committee

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AREVA GmbH

Dr. Erich Gerhards
E.ON Kernkraft GmbH

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RWE Power AG

Stefan Weber
GNS Gesellschaft für Nuklear-Service mbH

Christopher Weßelmann
atw – International Journal for Nuclear Power

Christian Wößner
DATF
Registation Counter

### Opening hours

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<tr>
<th>Day</th>
<th>Dates</th>
<th>Opening Times</th>
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<td>Monday</td>
<td>9 May 2016</td>
<td>15:00 – 18:00</td>
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<tr>
<td>Tuesday</td>
<td>10 May 2016</td>
<td>08:00 – 18:00</td>
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<tr>
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<td>11 May 2016</td>
<td>08:00 – 17:00</td>
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Exhibition

### Opening hours

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<tbody>
<tr>
<td>Tuesday</td>
<td>10 May 2016</td>
<td>09:00 – 23:00</td>
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<tr>
<td>Social Evening</td>
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<td>19:00 – 23:00</td>
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<tr>
<td>Wednesday</td>
<td>11 May 2016</td>
<td>09:00 – 18:00</td>
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Media Check

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<td>07:00 – 12:00</td>
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Catering

A buffet lunch will be served in the exhibition area on Tuesday and Wednesday for all participants.

Coffee Breaks will also be provided in the exhibition area.

### Breaks

**Tuesday, 10 May 2016**

10:15 – 10:30 Coffee Break
12:00 – 13:00 Lunch
14:40 – 15:00 Coffee Break
16:20 – 16:40 Break
19:00 – 23:00 Social Evening

**Wednesday, 11 May 2016**

10:00 – 10:30 Coffee Break
12:00 – 13:00 Lunch Break
15:00 – 15:30 Coffee Break

**Thursday, 12 May 2016**

10:00 – 10:30 Coffee Break
Further Information

Date
10 – 12 May 2016

Venue
CCH – Congress Center Hamburg
Am Dammtor / Marseiller Straße
20355 Hamburg, Germany

Information
➤ www.nucleartech-meeting.com

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Host
DAtF
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(Organiser)
Robert-Koch-Platz 4
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➤ amnt@inforum-gmbh.de
➤ www.kernenergie.de
The International Expert Conference on Nuclear Technology

Jahrestagung Kerntechnik
Annual Meeting on Nuclear Technology

Key Topics
- Outstanding Know-How & Sustainable Innovations
- Enhanced Safety & Operation Excellence
- Decommissioning Experience & Waste Management Solutions

16–17 May 2017
Estrel Convention Center Berlin
Germany

Save the Date

www.nucleartech-meeting.com
Floor Plan

Main Entrance

Press Office
Counter

Hall 6

Exhibition Area
Catering
Media Check
Registration
Cloakroom
Press Office

Hall 8
Hall 7

Hall 13/14
Hall 15
Hall 12

First Floor
Our global, fifty years of experiences means we can reliably, efficiently:
• Solve complex radioactive waste challenges
• Provide spent fuel handling and storage solutions
• Deliver decommissioning innovation and efficiency
• Develop bespoke monitoring systems