

KONTEC DIRECT  
Short technical lectures  
in word & vision

Invitation  
with  
preliminary  
program

# KONTEC 2009

## 9th International Symposium "Conditioning of Radioactive Operational & Decommissioning Wastes"

including

9th Status Report of BMBF „Decommissioning  
and Dismantling of Nuclear Facilities“

**April 15 - April 17, 2009**



Organizer

## KONTEC

Gesellschaft für technische Kommunikation mbH

Fachgruppe "Stilllegung  
und Entsorgung" der



Kerntechnische  
Gesellschaft e.V.

## **Program Committee**

### **Chairman**

Prof.-Dr. Fr.-W. Bach                      Universität                      Hannover

### **Vice-Chairman**

Michael Szukala                      SNT                      Krefeld

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Dr. Peter Brennecke	BfS	Salzgitter
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Hans Genthner	KAH	Heidelberg
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Prof. Dr. Reinhard Odoj	FZJ	Jülich
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Wolfgang Pfeifer	WAK	Eggenstein-L
Rudolf-Josef Printz	FZJ	Jülich
Andreas Roth	HPA	Hamburg
Dr. Holger Spann	E.ON Kernkraft	Hannover
Dr. Helmut Steiner	KGG	Gundremmingen
Luis Valencia	FZK	Karlsruhe
Dr. Ralf Verseemann	RWE Power	Essen
Dr. Anton von Gunten	BKW FMB Energie AG	Mühleberg
Dr. Michael Weigl	FZK	Karlsruhe
Axel Weis	FZK	Karlsruhe

## Background

Starting with KONTEC '93, the initiators of the KONTEC symposium series have created an institution which is to convene regularly power plant operating experts, equipment manufacturing experts and service people as well as reviewers and authorities representatives for exchange of experiences. In the course of the KONTEC symposium series 1993, 1995, 1997 and 1999 in Hamburg and 2001, 2003 and 2005 in Berlin and 2007 in Dresden, KONTEC could be extended into an international symposium which adopted decommissioning as a new topic, thereby establishing KONTEC as an important instrument for the exchange of information and experiences for the experts of this branch of industry. Consequently, the KONTEC symposia provide a valuable contribution to the solution of the problems with the conditioning of radioactive operational and decommissioning wastes as well as the decommissioning of nuclear facilities.

As lately for KONTEC 2007 again approximately 600 international participants are expected for KONTEC 2009.

The growing complexity of the special field under discussion at KONTEC is again taken into account by a stronger involvement of international papers in the various topical sessions of KONTEC 2009 and the ensuing international dialogue.

The results of BMBF's r&d program "Decommissioning and Dismantling of Nuclear Facilities" will for the fourth time be presented at KONTEC 2009 (9th Status Report of BMBF and PTKA-WTE, its subordinate research unit). Such results reports will typically be assigned to the separate conference sessions.

## General Conference Arrangements

The KONTEC symposium series take place in spring every 2 years.

Together with the program committee all responsible persons for organisation, preparation and performance of the KONTEC are in permanent dialogue with representatives of this branch of industry in order to adjust the general framework as well as the content of the event to actual circumstances and requirements without delay. After three very successful events in 2001, 2003 and 2005 in Europe's biggest and most modern conference hotel, the ESTREL Residence and Conference Hotel Berlin, KONTEC 2007 moved to Dresden. The **MARITIM** Hotel & Internationales Congress Center Dresden provides an extremely sui-

table scope for a diversified and interesting KONTEC 2009. The more, Dresden offers an ideal basis for an appealing special program.

The symposium program of the separate sessions will again be presented as plenary sessions and poster sessions including "KONTEC *DIRECT*" which take place at the same time. The numerous plenary- and poster presentations give an extensive overview about experiences, requirements and innovations in the conditioning of radioactive operation and decommissioning wastes.

The papers presented on "Decommissioning and Dismantling of Nuclear Facilities" (9th Status Seminar of BMBF) will be fully integrated into KONTEC 2009. The Program will further be completed through technical papers from invited speakers on general topics. Conference proceedings on CD ROM will be available at the conference.

Conference languages are German and English (simultaneous interpretation German/ English and English/ German will be provided).

One further important feature of the symposium series is the technical exhibition which takes place in close proximity at the same time. On almost 1000 square metres of exhibition space, many exhibitors showcase all aspects of products and services related to this branch of industry and are at one's disposal for exchange of experiences.

„KONTEC *DIRECT*“

Short technical lectures in word & vision

„KONTEC *DIRECT*“ will provide the opportunity for a deepened and specific demonstration of a topic by the combination of posters in connection with a moderated short technical lecture.

For this purpose 2 open poster panels with approx. 30 seats at the maximum will be equipped. Times when to present the short technical lectures during the KONTEC 2009 will be selected by

KONTEC *DIRECT*  
Short technical lectures  
in word & vision

the program committee and will be allowed to the “KONTEC *DIRECT*” speakers. The speakers will do their presentation twice during the KONTEC 2009.

As far as possible there will be no simultaneous presentation of “KONTEC *DIRECT*” short technical lectures with the corresponding plenary session.

By „KONTEC *DIRECT*“ the original form of the KONTEC poster sessions will be enhanced and expanded because of the necessity of an ambitious and qualified preparation of a short technical lecture in word & vision as well as of the new and more attractive way of presentation. “KONTEC *DIRECT*” offers possibilities for presentation particularly to the new nuclear generation.

## Venue

MARITIM Hotel & Internationales Congress Center Dresden  
Ostra-Ufer 2  
01067 Dresden  
Deutschland, Germany

CC Dresden Big Hall	Plenary Session
CC Dresden Galleries of Halls 1-5	Postersessions (within the Technical Exhibition)
CC Dresden Gallery Hall 3+4	Panels for short technical lectures in the context of „KONTEC <i>DIRECT</i> “
CC Dresden Halls 1-5	Technical Exhibition

## Conference Counter

The conference counter will be located in the Foyer of the CC Dresden’s Hall level and will be opened as follows:

Tuesday	April 14, 2009	06.00 pm – 08.00 pm
Wednesday	April 15, 2009	08.00 am – 06.30 pm
Thursday	April 16, 2009	08.00 am – 06.30 pm

Opening  
session:

**Wednesday, April 15, 2009**

## **Plenary Session**

10.00 am

*Welcome and opening of the conference*

*Award for best paper, best "KONTEC DIRECT" short lecture and best poster from 2007*

Bach, Friedrich-W. Prof. Dr., Institute of Material Sciences, University of Hanover

10.10 am

*Welcome*

Meiswinkel, Hermann-Josef Prof. h. c. Dr., Federal Ministry for Education and Research BMBF

**Session 1:**

**Disposal of radioactive residues from nuclear facilities' operation and decommissioning**

## **Plenary Session**

Session  
Chairmen

Petzold, Günter Dr., RWE Power AG

Printz, Rudolf-Josef, Research Centre Jülich GmbH

10.20 am

*On-site solid radwaste treatment facilities for the Westinghouse AP1000 projects at Sanmen and Haiyang, PR China: plan of concept and selection of equipment*

Roth, Andreas, Hansa Projekt Anlagentechnik GmbH

Marr, Erich, Hansa Projekt Anlagentechnik GmbH

Krist, Klaus, Hansa Projekt Anlagentechnik GmbH

10.50 am

*Updating of waste acceptance requirements Konrad - Implementation of the waste-related collateral clauses from the plan approval order Konrad*

Brennecke, Peter Dr., Federal Office for Radiation Protection (BfS)

Kugel, Karin, Federal Office for Radiation Protection (BfS)

Steyer, Stefan, Federal Office for Radiation Protection (BfS)

11.20 am

*External disposal of residues using the example of 4 steam generators from the dismantling of the Nuclear Power Plant Stade*

Beverungen, Martin, GNS Gesellschaft für Nuklear-Service mbH

11.50 am

***Removal of pins and rollers from 105 control rods, dose rate measurements, activity calculations and packaging concept for the KKL-components***

Brack, Daniel, Nuclear Power Plant Leibstadt AG

Volmert, B. Dr., NAGRA

Wehnert, B., Engineering Company Thomas Schmidt

12.20 pm

***Operational experiences from the emptying of containers filled with liquid radioactive wastes***

Rieck, Ronald, NUKEM Technologies GmbH

12.40 pm

***New possibilities within the enlarged GNS plant location Duisburg***

Oehmigen, Steffen, GNS Gesellschaft für Nuklear-Service mbH

Westermann, Hans, GNS Gesellschaft für Nuklear-Service

mbH – plant location Duisburg

**“KONTEC DIRECT”**

**Short technical lectures in word & vision**

**Panel 1: Session 4**

11.50 am ***Measuring of high active emitters in solid radioactive waste for performance of requirements for long time disposal***

Sokcic-Kostic, Marina Dr., NUKEM Technologies GmbH

10 minutes for rebuilding

12.10 pm ***Development and validation of a concrete material model for the simulation of dynamic repository-design checks***

Neser, Aloyse Dr., WTI Wissenschaftlich-Technische Ingenieurberatung GmbH

10 minutes for rebuilding

12.30 pm ***Repository containers with optimized recovery of metallic residues***

Kleinkröger, Wolfgang, Siempelkamp Giesserei GmbH

**Panel 2: Session 3**

11.50 am ***Bioenergy complexes for transformation of contaminated territories into ecologically safe system***

Sharavarau, Georgii Dr., Joint Institute of Power and Nuclear Research

10 minutes for rebuilding

12.10 pm ***Container design for the safe handling and storage of low and intermediate level radioactive wastes***  
Jendras, Michael Dr., Institute of Material Sciences,  
University of Hanover

10 minutes for rebuilding

12.30 pm ***Test of technology of problem LRW cementation using porous concrete***  
Varlakov, Andrei, Moscow SIA "Radon"

10 minutes for rebuilding

12.50 pm ***Measures for radiation prevention and mitigation of lowradioactively contaminated surfaces by phytoremediation and following utilization of the loaded plant residual substances (PHYTOREST)***  
Willscher, Sabine Dr. und Merten, Dirk Dr., Institute of  
Geoscience, Friedrich-Schiller-University of Jena

01.00 pm

Lunch break

## **“KONTEC DIRECT”**

### **Short technical lectures in word & vision**

#### **Panel 1: Session 2**

02.10 pm ***Separation of consoles in the spent fuel storage pond (KWO)***  
Huber, Wolfgang, Siempelkamp Nukleartechnik GmbH

10 minutes for rebuilding

02.30 pm ***Decommissioning subsequent to HLLW-vitrification operation - specific technical and personnel measures to reduce operational costs at the interface between operation and decommissioning***  
Birringer, Karl-Josef, WAK Rückbau- und Entsorgungsgesellschaft mbH

***10 minutes for rebuilding***

02.50 pm ***PHADEC – Implementation of a process for decontamination on an industrial scale***  
Edler, Gerd, Babcock Noell GmbH and Steifensand, Mark-Konstantin, KGG Gundremmingen

10 minutes for rebuilding

03.10 pm ***Dismantling of massive concrete building structures in nuclear installations***  
Herold, Gunther, Institute of Solid Structure and Building Material Technology, University of Karlsruhe

**Panel 2: Session 4**

02.10 pm ***Measuring of high active emitters in solid radioactive waste for performance of requirements for long time disposal***  
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10 minutes for rebuilding

02.50 pm ***Repository containers with optimized recovery of metallic residues***  
Kleinkröger, Wolfgang, Siempelkamp Giesserei GmbH

**Session 2:**

**Decommissioning and dismantling of nuclear facilities**

**Plenary Session**

**Session  
Chairmen**

Helwig, Udo, VKTA Rossendorf e. V.  
Steiner, Helmut Dr., Nuclear Power Plants Gundremmingen BGmbH

02.00 pm

***Decommissioning and dismantling of Obrigheim Nuclear Power Plant - Overview -***  
Schmidt, Holger, EnBW Kernkraft GmbH, site Obrigheim

02.30 pm

***Segmentation of the RPV internals at NPP Würgassen (KWW)***  
Duwe, Peter, E.ON Kernkraft GmbH, Nuclear Power Plant Würgassen  
Strobel, Reinhardt, AREVA GmbH

03.00 pm

***A comparative overview of waste management concepts for large components***  
Bauerfeind, Matthias Dr., TÜV NORD SysTec GmbH & Co. KG

03.30 pm	<p><b><i>Large components from decommissioning of nuclear power plants: comparison of storage of without segmentation with immediate segmentation and packaging</i></b></p> <p>Thierfeldt, Stefan Dr., Brenk Systemplanung GmbH  Cramer, T., Brenk Systemplanung GmbH  Rittscher, Dieter, EWN Energiewerke Nord GmbH</p>
04.00 pm	Coffee break
<b>Session 2:</b>	<p><b>Decommissioning and dismantling of nuclear facilities</b></p> <p><b>(continuation)</b></p> <p><b>Plenary Session</b></p>
Session Chairmen	<p>Helwig, Udo, VKTA Rossendorf e. V.  Steiner, Helmut Dr., Nuclear Power Plants Gundremmingen BGmbH</p>
04.30 pm	<p><b><i>Organization forms for dismantling nuclear facilities</i></b></p> <p>Hupe, Günter, RWE Power AG, site Mülheim-Kärlich</p>
05.00 pm	<p><b><i>Dismantling of biological shield (FZK/MZFR)</i></b></p> <p>Prechtl, Erwin, Research Centre Karlsruhe GmbH  Huber, Wolfgang Bruno, Siempelkamp Nukleartechnik GmbH  Eisenmann, Beata, Research Centre Karlsruhe GmbH  et. al.</p>
05.20 pm	<p><b><i>Decommissioning of the thermal and biological shield of the Rossendorf Research Reactor (RFR)</i></b></p> <p>Bochmann, Jens, Siempelkamp NIS Ingenieurgesellschaft mbH</p>
05.40 pm	<p>End of Plenary Session</p> <p><b>Postersession</b></p>
10.00 am - 06.00 pm	<p>Postersession of all sessions at the galleries of  CC Dresden halls 1-5 within the Technical Exhibition  (Poster titles see pages 19 - 25)</p> <p><b>Technical Exhibition</b></p>
10.00 am - 06.00 pm	<p>Accompanying Technical Exhibition in the CC Dresden halls 1-5  (List of Exhibitors as per 12/ 2008 see page 25)</p>

# Thursday, April 16, 2009

## Session 2:

## Decommissioning and dismantling of nuclear facilities

(continuation)

## Plenary Session

### Session Chairmen

Hildwein, Peter, Siempelkamp NIS Ingenieurgesellschaft mbH  
Spann, Holger Dr., E.ON Kernkraft GmbH

09.00 am

### *Prospects for the decommissioning*

Feinhals, Jörg Dr., TÜV NORD SysTec GmbH & Co. KG  
Birkholz, Wolfgang Dr., Innenministerium Mecklenburg-  
Vorpommern

09.30 am

### *Dismantling of highly contaminated HLLW-storage tanks - New experiences and challenges during the decommissio- ning of WAK*

Dux, Joachim, WAK Rückbau- und Entsorgungs-GmbH  
Fath, Oliver, WAK Rückbau- und Entsorgungs-GmbH  
Hendrich, Klaus, WAK Rückbau- und Entsorgungs-GmbH  
et. al.

10.00 am

### *Dismantling of the primary shielding of the compact sodium- cooled Nuclear Reactor Facility (KNK; Research Centre Kar- lsruhe)*

Koselowski, Eiko, Siempelkamp Nukleartechnik GmbH  
Minges, Jürgen, Research Centre Karlsruhe GmbH  
Brockmann, Klaus, Research Centre Karlsruhe GmbH

10.20 am

### *Disassembling of the steam dryer 3 (DT3) in the Nuclear Power Plant KWW Würzgassen*

Itzel, Manfred, Siempelkamp NIS Ingenieurgesellschaft mbH  
Protzer, Gerhard, Siempelkamp NIS Ingenieurgesellschaft mbH  
Duwe, Peter, E.ON Kernkraft GmbH, Nuclear Power Plant  
Würzgassen

10.40 am

### *The filling of the AVR-reactor vessel – technical and logistic execution*

Bisplinghoff, Bernhard Dr., WTI Wissenschaftlich-Technische Inge-  
nieurberatung GmbH  
Rahenbrock, A., WTI Wissenschaftlich-Technische Ingenieurbera-  
tung GmbH  
Wahlen, E., WTI Wissenschaftlich-Technische Ingenieurberatung  
GmbH

11.00 am

Coffee Break

**Session 2:**

**Decommissioning and dismantling of nuclear facilities**

**(continuation)**

## Plenary Session

Session  
Chairmen

Hildwein, Peter, Siempelkamp NIS Ingenieurgesellschaft mbH  
Spann, Holger Dr., E.ON Kernkraft GmbH

11.30 am

***Dismantling the Research Reactor FRJ-1 (MERLIN) back to the greenfield status - successes and obstacles in dismantling a research reactor in the megawatt class***

Stahn, Burkhard, Research Centre Jülich GmbH  
Printz, Rudolf-J., Research Centre Jülich GmbH  
Matela, Karel, Research Centre Jülich GmbH  
et. al.

12.00 noon

***Deconstruction of the permanent disposal site "ALfR-flüssig" for liquid radioactive wastes in the Rheinsberg Nuclear Power Plant***

Gülow, Hartmut, Energiewerke Nord GmbH, plant location KKW Rheinsberg  
Möller, Jörg, Energiewerke Nord GmbH, plant location KKW Rheinsberg

### **"KONTEC DIRECT"**

#### **Short technical lectures in word & vision**

##### **Panel 1: Session 1**

11.20 am ***Elimination of radioactive waste from CERN accelerators***  
Magistris, Matteo, CERN

10 minutes for rebuilding

11.40 am ***Conditioning of core components of the KKW Obrigheim (NPP Obrigheim (KWO))***

Friske, Andreas, GNS Gesellschaft für Nuklear-Service GmbH

10 minutes for rebuilding

12.00 noon ***Plasma smelting an alternative process vs. incineration?***  
Schmidt, Jürgen, NUKEM Technologies GmbH

10 minutes for rebuilding

12.20 pm ***Application of in-situ techniques for the qualification of concrete shielding***

Steiner, Ralf, Research Centre Karlsruhe GmbH

**Panel 2: Session 3**

- 11.20 am ***Bioenergy complexes for transformation of contaminated territories into ecologically safe system***  
Sharavarau, Georgii Dr., Joint Institute of Power and Nuclear Research  
  
10 minutes for rebuilding
- 11.40 am ***Container design for the safe handling and storage of low and intermediate level radioactive wastes***  
Jendras, Michael Dr., Institute of Material Science, University of Hanover  
  
**10 minutes for rebuilding**
- 12.00 noon ***Test of technology of problem LRW cementation using porous concrete***  
Varlakov, Andrei, Moscow SIA "Radon"  
  
10 minutes for rebuilding
- 12.20 pm ***Measures for radiation prevention and mitigation of low-radioactively contaminated surfaces by phytoremediation and following utilization of the loaded plant residual substances (PHYTOREST)***  
Willscher, Sabine Dr. und Merten, Dirk Dr., Institute of Geoscience, Friedrich-Schiller-University of Jena

12.30 pm

Lunch break

**“KONTEC DIRECT”**

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**Panel 1: Session 2**

- 01.40 pm ***Separation of consoles in the spent fuel storage pond (KWO)***  
Huber, Wolfgang, Siempelkamp Nukleartechnik GmbH  
  
10 minutes for rebuilding
- 02.00 pm ***Decommissioning subsequent to HLLW-vitrification operation - specific technical and personnel measures to reduce operational costs at the interface between operation and decommissioning***  
Birringer, Karl-Josef, WAK Rückbau- und Entsorgungsgesellschaft mbH  
  
10 minutes for rebuilding

02.20 pm ***PHADEC – Implementation of a process for decontamination on an industrial scale***  
Edler, Gerd, Babcock Noell GmbH and Steifensand, Mark-Konstantin, KGG Gundremmingen

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Schmidt, Jürgen, NUKEM Technologies GmbH

10 minutes for rebuilding

02.40 pm ***Application of in-situ techniques for the qualification of concrete shielding***  
Steiner, Ralf, Research Centre Karlsruhe GmbH

**Session 2:**

**Decommissioning and dismantling of nuclear facilities**

**(continuation)**

**Plenary Session**

Session  
Chairmen

Helwig, Udo, VKTA Rossendorf e. V.

Steiner, Helmut Dr., Nuclear Power Plants Gundremmingen BGmbH

01.30 pm

***Dismantling of the test combustor for radioactive wastes in the Paul Scherrer Institut, Switzerland***

Schleuniger, Peter, Paul Scherrer Institute

01.50 pm	<p><b><i>Decommissioning of neutron generator facility and a tritium problem</i></b>          Knappik, Reinhard Dr., VKTA Rossendorf e. V.          Fleischer, Kersti Dr., VKTA Rossendorf e. V.          Kinal, Norman, Gamma-Service Recycling GmbH          et. al.</p>
02.10 pm	<p><b><i>Conceptual and organizational basic principles for disassembly, residues treatment and disposal for the dismantling of the Nuclear Power Plant Stade</i></b>          Bacmeister, Georg Dr., E.ON Kernkraft GmbH, Nuclear Power Plant Stade          Niebuhr, Stefan, E.ON Kernkraft GmbH, Nuclear Power Plant Stade          Schreiber, Jens, E.ON Kernkraft GmbH, Nuclear Power Plant Stade</p>
02.30 pm	<p><b><i>Decommissioning concept as integral part for the planning of new nuclear facilities in Switzerland using the example of the framework approval applications for the plants replacing Nuclear Power Plants Beznau and Mühleberg</i></b>          von Gunten, Anton Dr., BKW FMB Energie AG          Parmar, Y., Resun AG          Ritter, Max, NOK Nordostschweizerische Kraftwerke AG</p>
03.00 pm	Coffee Break
<b>Session 3:</b>	<p><b>Facilities and systems for the conditioning and packaging of operational and decommissioning wastes</b></p>
Session Chairmen	<p>Versemann, Ralf Dr., RWE Power AG          Weigl, Michael Dr., Forschungszentrum Karlsruhe GmbH</p>
03.30 pm	<p><b><i>Decontamination of radioactively contaminated concrete surfaces using an innovative laser-manipulator-system</i></b>          Lippmann, Wolfgang Dr., Technical University of Dresden          Hurtado, Antonio, Technical University of Dresden          Gentes, Sascha Prof. Dr., University of Karlsruhe          et. al.</p>
04.00 pm	<p><b><i>Metal matrix composites as cutting material for metal composite for the dismantling of nuclear facilities</i></b>          Schenk, Alexander, Institute of Material Science, University of Hanover          Bach, Friedrich-Wilhelm Prof. Dr., Institute of Material Science, University of Hanover</p>

04.30 pm	<p><b><i>The curse of "old" building materials - PAH's also in nuclear decommissioning</i></b>  Fleck, Sabine, VKTA Rossendorf e. V.  Steinbach, Petra Dr., VKTA Rossendorf e. V.</p>
04.50 pm	<p><b><i>New facilities for the treatment of radioactive liquid wastes</i></b>  Oldiges, Olaf, GNS Gesellschaft für Nuklear-Service mbH  Koischwitz, Ingmar, GNS Gesellschaft für Nuklear-Service mbH</p>
05.10 pm	<p><b><i>Use of resin hot high force compaction for the treatment of bead resins from pressurised water reactors: Description of a process advancement from problem until successful implementation</i></b>  Roth, Andreas, Hansa Projekt Anlagentechnik GmbH  Lange, Rüdiger, Hansa Projekt Anlagentechnik GmbH  Centner, Baudouin, Suez-Tractebel S.A.</p>
05.30 pm	<p><b><i>Equipment and Handling in the "HOT CELL - Group 3 Waste" - a part of the new Solid Waste Management and Storage Facilities at Ignalina Nuclear Power Plant (INPP)</i></b>  Grittmann, Jörg, Siempelkamp Nukleartechnik GmbH  Rausch, Johannes, NUKEM Technologies GmbH</p>
05.50 pm	<p><b>End of Plenary Session</b></p> <p><b>Postersession</b></p>
09.00 am - 06.00 pm	<p><b>Postersession of all sessions at the galleries of CC Dresden halls 1-5 within the Technical Exhibition</b>  (Poster titles see pages 19 - 25)</p> <p><b>Technical Exhibition</b></p>
09.00 am - 06.00 pm	<p><b>Accompanying Technical Exhibition at the CC Dresden halls 1-5</b>  (List of Exhibitors as per 12/ 2008 see page 25)</p>
08.00 pm	<p><b>Special evening event „KONTEC 2009 banquet“ in the CC Dresden</b></p>

# Friday, April 17, 2009

## Session 4:

### Transport, interim and final storage of non-heat generating wastes (i.e. Konrad)

#### Plenary Session

Session  
Chairmen

Blenski, Hans-Jürgen, GNS Gesellschaft für Nuklear-Service mbH  
Kröger, Heinz Dr., TÜV NORD EnSys Hannover GmbH & Co. KG

09.00 am

*Actual state of the erection of the final storage Konrad*  
Kunze, Volker Dr., Federal Office for Radiation Protection (BfS)

09.20 am

*E.ON Kernkraft's view regarding the necessary steps for a successful commissioning of the emplacement of radioactive waste in Konrad*

Herzog, Friedrich, E.ON Kernkraft GmbH  
Engelking, Daniel, E.ON Kernkraft GmbH

09.40 am

*Inspection of container construction for the final storage Konrad: experiences und prospects from the BAM point of view*  
Völzke, Holger Dr., BAM Federal Agency for Materials Research and Testing  
Noack, Volker, BAM Federal Agency for Materials Research and Testing  
Nieslony, Gregor, BAM Federal Agency for Materials Research and Testing  
et. al.

10.00 am

*Type Tests of Casks for the Final Storage Konrad*  
Berthold, Martin Dr., GNS Gesellschaft für Nuklear-Service mbH  
Blenski, Hans-Jürgen, GNS Gesellschaft für Nuklear-Service mbH

10.20 am

Coffee Break

## Session 4:

### Transport, interim and final storage of non-heat generating wastes (i.e. Konrad)

**(Continuation)**

#### Plenary Session

Session  
Chairmen

Brennecke, Peter Dr., Federal Office for Radiation Protection (BfS)  
Geiser, Heinz Dr., GNS Gesellschaft für Nuklear-Service mbH

11.00 am

*Approval process for the transport of large components from the decommissioning of nuclear facilities*

Nitsche, Frank Dr., Federal Office for Radiation Protection (BfS)  
Fasten, Chr., Federal Office for Radiation Protection (BfS)  
Bruhn, P., Federal Office for Radiation Protection (BfS)

11.20 am

***Implementing the collateral clauses of water law as provisions for the quality assurance***

Kugel, Karin, Federal Office for Radiation Protection (BfS)  
Steyer, Stefan, Federal Office for Radiation Protection (BfS)  
Boetsch, Wilma, Institut für Sicherheitstechnologie (ISTec) GmbH et. al.

11.40 am

***Confirmation of characteristics relevant for final storage***

Kröger, Heinz Dr., TÜV NORD EnSys Hannover GmbH & Co. KG  
Bandt, Gabriele Dr., TÜV NORD EnSys Hannover GmbH & Co. KG  
Steyer, Stefan, Federal Office for Radiation Protection (BfS)  
et. al.

12.00 noon

***The waste package documentation against the background of the opening of the final storage Konrad***

Dullau, Rainer Dr., WTI Wissenschaftlich-Techn. Ingenieurberatung GmbH  
Klößner, Johann, WTI Wissenschaftlich-Techn. Ingenieurberatung GmbH  
Uekötter, Stefanie, GNS Gesellschaft für Nuklear-Service mbH  
et. al.

12.20 pm

***Assessment Methods for Transport and Storage Containers with Higher Content of Metallic Recycling Material - Safety analysis and development of a KONRAD reference target***

Zencker, Uwe, BAM Federal Agency for Materials Research and Testing  
Weber, Mike, BAM Federal Agency for Materials Research and Testing  
Droste, Bernhard Dr., BAM Federal Agency for Materials Research and Testing  
et. al.

12.40 pm

***Summary***

***Award for best paper, best "KONTEC DIRECT" short lecture and best poster from 2009\****

Bach, Friedrich-W. Prof. Dr., Institute for Material Science,  
University of Hanover

01.10 pm

***End of Plenary Sessions***

\* As already for the preceding KONTEC conferences, again all technical paper contributions will be evaluated and the best paper, the best short lecture and the best poster will be nominated and awarded.

Unlike during KONTEC 2007 when such evaluation was non-recurring made by the whole auditorium, for KONTEC 2009 the evaluation will be made in the well-proven way by the members of the program committee, especially the session chairmen.

The nomination of each the best paper, best short lecture and best poster for KONTEC 2007 was announced with presenter's

name and photo in the April issue (4/2007) of the atw – Internationale Zeitschrift für Kernenergie.

The award ceremony for the KONTEC 2007 winners will be held at the beginning of the KONTEC 2009 on Wednesday, April 15, 2009, as from 10.00 am.

The evaluation, nomination and award of each the best paper, best short lecture and best poster for KONTEC 2009 will be performed at the end of KONTEC 2009 on Friday, April 17, 2009 as from approx. 12.40 pm.

## Postersession

09.00 am -  
01.00 pm

**Postersession of all sessions at the galleries of CC Dresden halls 1-5 within the Technical Exhibition**

(Poster titles see pages 19 - 25)

## Technical Exhibition

09.00 am -  
01.00 pm

**Accompanying Technical Exhibition at the CC Dresden halls 1-5**

(List of Exhibitors as per 12/ 2008 see page 25)

01.30 pm

**End of the conference**

## Postersessions Sessions 1-4 at the galleries of CC Dresden halls 1-5

April 15, 2009      10.00 am – 06.00 pm

April 16, 2009      09.00 am – 06.00 pm

April 17, 2009      09.00 am – 01.00 pm

### Session 1

Box 1:

(also as short lecture)

***Elimination of radioactive waste from CERN accelerators***

Magistris, Matteo, CERN

Algoet, Y., CERN

Ulrici, Luisa, CERN

Box 2:

(also as short lecture)

***Conditioning of core components of the KKW Obrigheim (NPP Obrigheim (KWO))***

Friske, Andreas, GNS Gesellschaft für Nuklear-Service mbH

Radzuweit, Jörg, GNS Gesellschaft für Nuklear-Service mbH

Huber, Siegfried, EnBW Kernkraft GmbH, site Obrigheim

- Box 3:** (also as short lecture)  
***Plasma smelting an alternative process vs. Incineration?***  
 Schmidt, Jürgen, NUKEM Technologies GmbH
- Box 4:** (also as short lecture)  
***Application of In-situ Techniques for the Qualification of Concrete Shielding***  
 Steiner, Ralf, Research Centre Karlsruhe GmbH, HDB  
 Reichert, M., Research Centre Karlsruhe GmbH, HDB  
 Rittmeyer, Cornelia, Dr., Research Centre Karlsruhe GmbH HDB
- Box 5:** ***Dismantling Stage - Final Characterization Process for Radioactive Materials***  
 Vico del Cerro, Elena, ENRESA  
 Quirós Gracián, Maria, ENRESA  
 Leganés Nieto, Jose Luis, ENRESA
- Box 6:** ***The drum inspection system FAME as an instrument for data collection for the waste package documentation***  
 Risch, Ralph, WTI Wissenschaftlich-Technische Ingenieurberatung GmbH  
 Doppler, Th., WTI Wissenschaftlich-Technische Ingenieurberatung GmbH
- Box 7:** ***Cementation of radioactive wastes***  
 Schmidt, Jürgen, NUKEM Technologies GmbH
- Box 8:** ***Waste Grouting for solidifying of conditioned Waste***  
 Slametschka, Rainer, NUKEM Technologies GmbH

## **Session 2**

- Box 9:** (also as short lecture)  
***Separation of consoles in the spent fuel storage pond (KWO)***  
 Gentes, Sascha Prof. Dr., Universität Karlsruhe, Institute of Technology and Management in Construction Operation  
 Huber, Wolfgang Bruno, Siempelkamp Nukleartechnik GmbH  
 Bothe, Hinrich, EnBW Kernkraft GmbH, Standort Obrigheim
- Box 10:** (also as short lecture)  
***Decommissioning Subsequent to HLLW-Vitrification Operation - Specific Technical and Personnel Measures to Reduce Operational Costs at the Interface between Operation and Decommissioning***  
 Birringer, Karl-Josef, WAK Rückbau- und Entsorgungsgesellschaft mbH  
 Reinelt, J., WAK Rückbau- und Entsorgungsgesellschaft mbH

- Box 11:** (also as short lecture)  
***PHADEC – Implementation of a process for decontamination on an industrial scale***  
Edler, Gerd, Babcock Noell GmbH/ KGG Gundremmingen  
Steifensand, Mark-Konstantin, Babcock Noell GmbH/ KGG  
Gundremmingen
- Box 12:** (also as short lecture)  
***Dismantling of massive concrete building structures in nuclear installations***  
Herold, Gunther, Institute of Solid Structure and Building Material Technology, University of Karlsruhe  
Hörenbaum, Werner, Institute of Solid Structure and Building Material Technology, University of Karlsruhe  
Müller, Harald S., Institute of Solid Structure and Building Material Technology, University of Karlsruhe
- Box 13:** ***Microbial impact on heavy metal/radioisotope sequestration***  
Kothe, Erike Prof. Dr., Inst. of Microbiology, Friedrich-Schiller-Uni. of Jena  
Zeggel, Lars, Inst. of Microbiology, Friedrich-Schiller-Uni. of Jena  
Zellmer, Anja, WISUTEC GmbH  
et. al.
- Box 14:** ***Safety aspects of Belgonucléaire Dessel MOX Plant decommissioning in Belgium: experience from a German MOX-facility and recent improvements***  
Kohlgarth, Elke Dr., TÜV NORD EnSys Hannover GmbH & Co. KG  
Baumann, Roland, Siemens Energy  
Libon, Henri, Belgonucléaire  
et. al.
- Box 15:** ***Nuclear Dismantling and its Concrete Hurdles - Construction of a Facility for the Disassembly and Clearance Measurement of Concrete Structures from the Nuclear Field***  
Stahn, Burkhard, Research Centre Jülich GmbH  
Printz, Rudolf-Josef, Research Centre Jülich GmbH  
Matela, Karel, Research Centre Jülich GmbH
- Box 16:** ***The clearance procedure applied to the demolition of a building of the Rossendorf Isotope Production Facility***  
Grahner, Thomas, VKTA Rossendorf e. V.  
Kniest, Steffen, Siempelkamp Nukleartechnik GmbH  
Bochmann, Jens, Siempelkamp NIS Ingenieurgesellschaft mbH

- Box 17:** *The use of rare earth elements in the control and optimization of processes in bioremediation of areas heterogeneously contaminated with radionuclides*  
Merten, Dirk, Inst.of Geoscience, Friedrich-Schiller-Uni. of Jena  
Lorenz, Ch., Inst. of Geoscience, Friedrich-Schiller-Uni.. of Jena  
Kothe, Erike Prof. Dr., Insti.of Microbiology, Friedrich-Schiller-University of Jena  
et. al.
- Box 18:** *Dismantling of FRJ-2 – possibilities for disposal of waste*  
Klöckner, Johann, WTI Wissenschaftlich-Technische Ingenieurberatung mbH  
Olbrich, T., WTI Wissenschaftlich-Technische Ingenieurberatung mbH
- Box 19:** *The online-manual-system "iProM" as a tool for the efficient process design for dismantling and decommissioning*  
Pattberg, Günter, Westinghouse Electric Germany GmbH  
Erfle, Robert, Document Systems Consulting GmbH
- Box 20:** *Enlarging the passage way between fuel element- and reactor pool incl. installation of a partition in the Nuclear Power Plant Stade*  
Gese, Conrad, sat. Kerntechnik GmbH  
Ambos, Frank, sat. Kerntechnik GmbH  
Kemp, Lutz-Hagen, E.ON Kernkraft GmbH
- Box 21:** *Decommissioning of the Obrigheim NPP - Dismantling of the monitored Area*  
Bender, Joachim, EnBW Kernkraft GmbH, site Obrigheim
- Box 22:** *Decommissioning of the Obrigheim NPP - Preparatory Works*  
Husfeldt, Martin, EnBW Kernkraft GmbH, site Obrigheim
- Box 23:** *Disassembly of the structural coating of the fuel element cooling pond in the Nuclear Power Plant Würgassen*  
Spieker, Matthias, E.ON Kernkraft GmbH, Nuclear Power Plant Würgassen  
Albers, Marco, STUDSVIK GmbH & Co. KG
- Box 24:** *A decision-backup-system for the dismantling of building structures in nuclear facilities*  
Zeihner, Marco, IABG Industrieanlagen Betriebsgesellschaft mbH
- Box 25:** *Remediation of the old environmental liabilities in the Nuclear Research Institute Rez plc - situation at the end of 2008*  
Kovarik, Petr, Nuclear Research Institute Rez plc  
Podlaha, Josef, Nuclear Research Institute Rez plc  
Svoboda, Karel, Nuclear Research Institute Rez plc

**Box 26:** *Safetec-Tool – introduction of a concept for the handling and evaluation of measuring data from the dismantling of nuclear facilities*

Hüttmeier, Max, Safetec GmbH  
Fleischhacker, Jürgen, Safetec GmbH  
Henning, Swen, Safetec GmbH

**Box 27:** *Decommissioning and dismantling of the research reactor FRJ-2 and its auxiliary and secondary devices*

Dohmen, Willi, Research Centre Jülich GmbH  
Damm, G. Dr., Research Centre Jülich GmbH

### **Session 3**

**Box 28:** *Review of advanced methods for treating radioactive contaminated water*

Dubourg, Michel Dr., Carbonne 14

**Box 29:** *The optimization of sorption filters connection for NPP evaporator concentrate cleaning from cesium radionuclides*

Savkin, Alexander E., Moscow SIA "Radon"  
Arustamov, A. E., Moscow SIA "Radon"  
Kornev, V. I., Moscow SIA "Radon"  
et. al.

**Box 30:** *(also as short lecture)  
Bioenergy complexes for transformation of contaminated territories into ecologically safe system*

Sharavarau, Georgii Dr., Joint Institute of Power and Nuclear Research  
Miniuk, Z., Joint Institute of Power and Nuclear Research

**Box 31:** *Solid Radwaste Treatment Plant at Chernobyl NPP*

Pietsch, Thomas, NUKEM Technologies GmbH

**Box 32:** *Waste treatment complex (ABK) Leningrad*

Freiberg, Uwe, NUKEM Technologies GmbH

**Box 33:** *Application of „Six Sigma“ for the development of a recipe for the continuous, external cementation of concentrates for the project NPP Ling Ao, Phase II, in China*

Fehrmann, Henning, Westinghouse Electric Germany GmbH  
Vogt, U., Westinghouse Electric Germany GmbH

**Box 34:** *Start up and optimization of a cementation facility for the project NPP Ling Ao, Phase II, in China: experiences made during the facility's trial operation, advancement and optimization of the facility's system configuration and operation mode for the continuous, external cementation of resins, concentrates and filter cartridges*

Wendt, Sven, Hansa Projekt Anlagentechnik GmbH  
Fehrmann, Henning, Westinghouse Electric Germany GmbH

**Box 35:** *(also as short lecture)*  
*Container design for the safe handling and storage of low and intermediate level radioactive wastes*

Jendras, Michael Dr., Institute of Material Science, University of Hanover

Bach, Friedrich-Wilhelm Prof. Dr., Institute of Material Science, University of Hanover

Hassel, Thomas Dr., Institute of Material Science, University of Hanover

**Box 36:** *(also as short lecture)*  
*Test of Technology of Problem LRW Cementation using Porous Concrete*

Varlakov, Andrei, Moscow SIA "Radon"

Germanov, A. V., Moscow SIA "Radon"

Barinov, A. S., Moscow SIA "Radon"

et. al.

**Box 37:** *(also as short lecture)*  
*Measures for radiation prevention and mitigation of lowradioactively contaminated surfaces by phytoremediation and following utilization of the loaded plant residual substances (PHYTOREST)*

Willscher, Sabine Dr., Institute of Waste Management and Contaminated Sites, Technical University of Dresden

Merten, Dirk, Institute of Geoscience, Friedrich-Schiller-University of Jena

Büchel, Georg Prof. Dr., Institute of Geoscience, Friedrich-Schiller-University of Jena

et. al.

#### **Session 4**

**Box 38:** *(also as short lecture)*  
*Measuring of High Active Emitters in Solid Radioactive Waste for Performance of Requirements for Long Time Disposal*

Sokcic-Kostic, Marina Dr., NUKEM Technologies GmbH

Schultheiss, Roland, NUKEM Technologies GmbH

Box 39:

(also as short lecture)

***Development and validation of a concrete material model for the Simulation of dynamic repository-design checks***

Neser, Aloyse Dr., WTI Wissenschaftlich-Technische Ingenieurberatung GmbH

Vallentin, R., WTI Wissenschaftlich-Technische Ingenieurberatung GmbH

Schreiber, D., GNS Gesellschaft für Nuklear-Service mbH

Box 40:

(also as short lecture)

***Repository containers with optimized recovery of metallic residues***

Kleinkröger, Wolfgang, Siempelkamp Giesserei GmbH

Quade, Ulrich, Siempelkamp Nukleartechnik GmbH

Schreiber, D., GNS Gesellschaft für Nuklear-Service mbH  
et. al.

Box 41:

***Use of large diameter wells for low and intermediate radioactive waste storage***

Tkachenko, Alexey, Moscow SIA "Radon"

Dmitriev, S., Moscow SIA "Radon"

Litinsky, Y., Moscow SIA "Radon"

## **Technical Exhibition at the CC Dresden halls 1-5**

April 15, 2009      10.00 am – 06.00 pm

April 16, 2009      09.00 am – 06.00 pm

April 17, 2009      09.00 am – 01.00 pm

Exhibitors

(as per 12/2008)

ANT Applied New Technologies AG

AREVA NP GmbH

AUTOMESS GmbH

BABCOCK NOELL GmbH

BERTHOLD TECHNOLOGIES GmbH & Co. KG

BIG Entsorgungstechnologien GmbH

Braun Industrie Service GmbH

DBE Technology GmbH

Delta-Vertrieb GmbH/ Sperlan Protection

Distra Industrie Service GmbH

Eisenwerk Bassum mbH

ENS Nuklear Services GmbH

Evonik Energy Services GmbH

Forschungszentrum Jülich GmbH

Forschungszentrum Karlsruhe GmbH

Forschungszentrum Karlsruhe GmbH - BMBF (PTKA-WTE)

Gamma-Service Recycling GmbH  
 GNS Gesellschaft für Nuklear-Service mbH  
 Hansa Projekt Anlagentechnik GmbH  
 Hilti Corporation  
 HOCHTIEF Construction AG  
 IABG Industrieanlagen-Betriebsgesellschaft mbH  
 Institut für Werkstoffkunde der Leibniz Universität Hannover  
 Kjellberg Finsterwalde Plasma und Maschinen GmbH  
 Kraftanlagen Heidelberg GmbH  
 LTZ Consulting  
 nuclitec GmbH  
 NucTecSolutions GmbH  
 NUKEM Energy GmbH  
 PEDI AG  
 RADOS Technology GmbH  
 S.E.A. GmbH  
 Saphymo GmbH  
 sat. Kerntechnik GmbH  
 Siempelkamp Nukleartechnik GmbH  
 STUDSVIK GmbH & Co. KG  
 TÜV NORD GRUPPE  
 TÜV SÜD Industrie Service GmbH  
 Tyrolit Hydrostress AG  
 VKTA Rossendorf e. V.  
 Voith Industrial Services Energy  
 Westinghouse Electric Germany GmbH

## Participation Terms

Venue

MARITIM Hotel & Internationales Congress Center Dresden

<u>MARITIM Hotel:</u>	<u>Internationales Congress Center Dresden:</u>
Devrientstraße 10-12	Ostra-Ufer 2
01067 Dresden	01067 Dresden
Deutschland	Deutschland

Organizer  
and  
Coordination  
of event

Kontec – Gesellschaft für technische Kommunikation mbH  
 Tarpenring 6, D-22419 Hamburg  
 Telephone: 040/ 527 48 28, Fax: 040/ 50 79 88 34  
 e-mail: info@kontec.de  
 Internet: www.kontec2009.de

Conference  
Fee

regular participants	€ 630,- plus VAT*
students <sup>1)</sup>	€ 150,- plus VAT*
retirees <sup>1)</sup>	€ 250,- plus VAT*

The conference fee is due with the registration.

1) a proof is requested (i. e. photocopy of student or pensioner/  
retiree card)

**Please register early!**

For registration until February 15, 2009 a fee discount is granted, the early bird fee then is only:

regular participants

€ 575,- plus VAT\*

retirees

€ 200,- plus VAT\*

The conference fee comprises simultaneous translation of the plenary papers in English, headseats for the duration of the conference, break drinks, snacks, lunches on April 15 and April 16, 2009, conference/ participation documents as well as one copy of the conference proceeding on CD ROM.

For the participation in the special evening event „KONTEC 2009 banquet“ in the CC Dresden on Thursday, April 16, 2009, at 08.00 pm  
an extra fee of

€ 10,- plus VAT\*

will be charged.

Accompanying person € 65,- plus VAT\*

(Only participation in the special evening event „KONTEC 2009 banquet“)

Cancellation

Registration change for an alternative participant must be done in writing and will be free of charge. **Cancellation must be made in writing before March 20, 2009 and will carry a 70,- plus VAT\* administration charge.** It is regretted that no refunds will be made after March 20, 2009.

Invoice  
Address

Please make sure to state your correct invoice address on your registration form. A subsequent, if need be, amendment/ rewriting of an invoice will be charged with a fee of € 15,- plus VAT.

Payment

The participation fees can be paid by bank transfer or by credit card (VisaCard, American Express, EUROCARD/MASTERCARD) as shown on the registration form included in this brochure. In case of a short-term registration the fees can also be settled by credit card or cash payment on-site at the KONTEC 2009 registration desk.

Please note that no cash or crossed cheques will be accepted. In case of foreign bank transfer please make sure that Kontec GmbH will not have to bear any additional fees. Such additional fees for foreign bank transfer, if need be, must be carried by the participant.

## Accommodation

Block bookings for KONTEC 2009 are agreed with the **conference hotel** as well as with several other nearby hotels with various price categories.

Please make your room reservation online by using the link under "hotel reservation" on [www.kontec2009.de](http://www.kontec2009.de). You will find details about all selected hotels including prices and room availability. After completion of your online reservation process you will receive a reservation confirmation by email or telefax directly from your selected hotel.

\* 19% VAT

Program subject to alteration.

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