Embedded Topical Meeting on Decommissioning and Remote Systems 2014

Held at the American Nuclear Society 2014 Annual Meeting

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Table of Contents

Monday, June 16, 2014, 1:00 P.M.

Opening Plenary
Session Organizer: Steven L. Tibrea (SRNL)
Chair: David C. Moody (Department of Energy SRS)

French Decommissioning Program and Feedback Experience and Lessons Learned 1
Jean-Guy Nokhamzon (CEA/SACLAY), invited

Establishing Final End-State for a Retired Nuclear Weapons Production Reactor; Collaboration Between Stakeholders, Regulators, and the Federal Government 5
Mary Flora, Christopher L. Bergren (SRNS), Angelia Adams (DOE-Savannah River)

Tuesday, June 17, 2014, 8:30 A.M.–10:15 A.M.

Capturing Best Practices and Other Lessons Learned
Session Organizer: Sue Aggarwal (NMNTI)
Cochairs: Robert Woodard (ZionSolutions), Stuart Walker (EPA)

The Key to Facility Hazard Identification 9
Paul G. Corrado (Retired)

The Decommissioning of AECL’s Heavy Water Upgrading Plant 10
Kerry Weisenberg, Roger Tremblay, Todd Willis (AECL)

Decommissioning an Active Historical Reactor Facility at the Savannah River Site 13
Mary Flora, Chris L. Bergren, Tony Long, John K. Blankenship (SRNS), Karen M. Adams (DOE-Savannah River)

Making Sure Things Don’t Fall Apart—Lessons Learned in Long Term SAFSTOR 16
Lynne Goodman, Daniel Breiding, Barry Muller (DTE Energy)

Robotics D&D
Session Organizer: Steve Tibrea (SRNL)
Chair: Richard L. Minichan (SRNS)

**Basic Decontamination Methodology of Robots and Robot Control Vehicles**
Shinji Kawatsuma (JAEA), Hajime Asama (Univ of Tokyo)  

**Seamless Remote Dismantling System for Major Components of Korean NPP**
Dongjun Hyun, Byung-Seon Choi, Jeikwon Moon (KAERI)  

**Assessing the State-of-the-Art of Remote Systems Technology for D&D Applications in the U.S. and the UK**
Laurie Judd, John Ritter (NVE), Ian Seed (Cogentus Ltd.), invited  

**Remote Platform for the Performance of Deactivation and Decommissioning Tasks**
Leonel E. Lagos, Peggy Shoffner, (Florida Intl Univ), Sam Maggio (Intl Climbing Machine)  

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**Tuesday, June 17, 2014, 10:30 A.M.–12:00 p.m.**

**International Decommissioning—I**
Session Organizer: James J. Byrne (Byrne & Assoc)  
Cochairs: Nadia Glucksberg, Jay Peters (Haley & Aldrich, Inc.)  

**“Passage” A Major Project for CEA: The Entire Decommissioning of a Nuclear Research Centre in Grenoble**
Jean Guy Nokhamzon (CEA/Saclay)  

**Chooz A and Unterweser Decontamination for Decommissioning Results**
Kayla Harper (AREVA Inc), Christian Topf (AREVA GmbH)  

**Cleansing and Dismantling of CEA-Saclay Nuclear Licensed Facilities; PROJECT PERIMETER**
Michel Jeanjacques, Corine Salmon, Lionel Mandard, Jean Louis Martin, John Gowman (CEA/DEN/MAR/DPAD/CPSA) Jouenne Patrick (CEA-DEN-DANS-DRSN-SAGD)  

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**Tuesday, June 17, 2014, 10:15 A.M.–12:00 P.M.**

**Remote Sensing and Robotic Platforms**
Session Organizer: Steve Tibrea (SRNL)  
Chair: Mitch Pryor (Univ of Texas, Austin)  

**Low-Cost Mobile Platform and Sensor Suite for Remote Radiation Surveying**
Blake Anderson, Andrew Sharp, Mitch Pryor (Univ of Texas, Austin)  

**Tactile MEMS-Based Sensor Element for Robotic Surgery**
Young Soo Park, Nachappa Gopalsami (ANL), Mohan S. Gundeti (Univ of Chicago Medicine)
Frequency-Based Visual Measurement of Suture Strain for Robotic Surgery
Young Soo Park (ANL), John Martell (Univ of Chicago Medicine), Pawel Dowrzanski, Thomas Elmer (ANL)

Use of Remote Systems for Testing Radiation Detection Devices
Michael J. Dalmaso, Matthew Kesterson, David Premo, Carl "Jake" Jacobs (SRNL)

Tuesday, June 17, 2014, 1:00 P.M.

International Decommissioning—II
Session Organizer: Mr. James J. Byrne (Byrne & Assoc)
Cochairs: Lynn Goodman (DTE Energy), Leonel Lagos (Florida Intl Univ),

Secondary Waste Treatment in the Decommissioning of German Nuclear Facilities
M. Brandauer (KIT), J. Starflinger (IKE), S. Gentes (KIT)

Strategies for Decommissioning the Fuel Storage and Reprocessing Complex at Chalk River Laboratories
Nancy Margaret Greencorn, Daniel Grondin (AECL), Jim Byrne (Byrne & Assoc)

Characterization of Facilities under Dismantling Process by Digital Autoradiography
Pascal Fichet, Anumaija Leskinen, Florence Goutelard (CEA)

Cleansing and Dismantling of CEA-Saclay Nuclear Licensed Facilities; LHA PROGRAM
Michel Jeanjacques (CEA-DENMAR-DPAD-CPSA), Isabelle Delaire (CEA-DEN-DANS-DRSN-SAGD)

Remote Handling
Session Organizer: Steve Tibrea (SRNL)
Chair: James S. Tulenko (Univ of Florida)

Target Transfer Arm Development, Testing, and Deployment
M. W. Noakes, D. R. Giuliano, E. C. Bradley (ORNL)

Internal Cleaning of Remote Offgas Components
Jeffrey T. Coughlin (SRNL)

Robots for Remote Handling of High-Activity Waste Filters
Celeste Peterson (Duke Energy, McGuire Nuclear Station), Kim S. Monti (iRobot Corp)

A Gantry Robot System for Remote Handling of 3013 Inner and Outer Cans
Kurt D. Peterson, John R. Gordon, Joel D. Jones (SRNL)

Tuesday, June 17, 2014, 2:45 P.M.
Robotics and Remote Operations in Hazardous Facilities
Session Organizer: Steve Tibrea (SRNL)
Chair: Luke T. Reid (SRNL)

Remote Inspection of the H-Canyon Air Exhaust Tunnel
Richard L. Minichan (SRNL)

Saltstone Grout Process Remote Inspection/Evaluation
Athneal D. Marzolf, Richard L. Minichan (SRNL)

Mercury Detection and Sampling of Waste Processing Tanks at the Savannah River Site
Kevin R. Hera, Athneal D. Marzolf (SRNL)

Saltstone Leachate System Valve Boring System
John R. Gordon, Richard L. Minichan (SRNS)

Wednesday, June 18, 2014, 3:00 P.M.–4:15 P.M.

Low-Level Radioactive Waste Management
Session Organizer: Sue Aggarwal (NMNTI)
Cochairs: Jean-Guy Nokhamzon (CEA/SACLAY), Mark Lewis (Energy Solutions)

Stuart Walker (EPA)

Methodology to Prepare the Decommissioning and the Radwaste Management of the ITER Test Blanket Systems
C. Decanis, K. Liger, J. Pamela, D. Canas (CEA)

Cleansing and Dismantling of CEA-Saclay Nuclear Licensed Facilities; LW PLANT PROGRAM
Michel Jeanjacques (CEA-DEN-MAR-DPAD-CPSA), Roger Serrano (CEA-DEN-MAR-DPADCP2A), Rebecca Glévarec, Sandrine Graebling, Laurence de Manquillé, Jacques Seeman (CEA-DEN-DANS-DRSN-SAGD)

Wednesday, June 18, 2014, 8:00 A.M.–9:15 A.M.

Nuclear Plants Decommissioning Projects
Session Organizer: Sue Aggarwal (NMNTI)
Cochairs: John Hayes (NRC), Dustin Miller (JGMS, Inc.)

SRNL Approach to Reducing Risk at 235-F
Jeffrey C. Griffin (SRNL)

Segmentation and Packaging of Reactor Internals at Zorita Power Plant
Alejandro Rodriguez, Juan Luis Santiago (ENREA)

Options for Decontamination for Decommissioning: Immediate or Deferred?
Kayla Harper (AREVA Inc), Christian Topf (AREVA GmbH)

Wednesday, June 18, 2014, 8:30 A.M.

Robotics and Automation Research Topics
Session Organizer: Steve Tibrea (SRNL)
Chair: Mark W. Noakes (ORNL)

3D Printing High Temperature Materials for Nuclear Industry Applications
William J. Sames (ORNL/Texas A&M), Ryan R. Dehoff (ORNL), Sean M. McDeavitt (Texas A&M)

3D-Printed Hydraulic Manipulator Development
M. Noakes, B. Richardson, L. Love, R. Lind, P. Lloyd, B. Post (ORNL)

Integration of Compliance and Collision Detection Algorithms for Industrial Systems
Andy Zelenak (Univ of Texas, Austin), Kyle Schroeder (Arizona State Univ), Mitch W. Pryor (Univ of Texas, Austin)

3D Object Recognition and Pose Estimation for Remote Materials Handling
Brian E. O’Neil (LANL), Mitchell Pryor (Univ of Texas, Austin)

Wednesday, June 18, 2014, 9:30 A.M.–12:00 P.M.

Final Status Survey and Radiation Measurement Technology
Session Organizers: Sue Aggarwal (NMNTI), James J. Byrne (Byrne & Assoc)
Cochairs: James J. Byrne (Byrne & Assoc), Roger Trambley (AECL)

U.S. EPA Superfund Counts Per Minute (CPM) Electronic Calculator
Stuart Andrew Walker (EPA)

Development of a Movable Laboratory for Clean-Up or Post-Accident Monitoring—SMaRT Project
Vincent Goudeau, Didier Dubot (CEA)

Revision 2 to the Multi-Agency Radiation Survey and Site Investigation Manual
(MARSSIM)
Kathryn K. Snead (EPA), David P. Alberth (U.S. Army), Nidal Azzam (EPA), Ramachandra Bhat (U.S. Air Force), Steven Doremus (U.S. Navy), Mark Fuhrmann (NRC), W. Alexander Williams (DOE)

U.S. EPA Superfund Radiation Risk Assessment: A Community Toolkit
Stuart Walker, Melissa Greer Dreyfus (EPA), Dain Thorpe (Howard Univ)

The Optimization of Site Remediation and Final Status Survey of Decommissioning Project of KAERI
Sang Bum Hong, Bum Kyung Seo, Doo Seoung Hwang, Jei Kwon Moon (KAERI)

Wednesday, June 18, 2014, 10:15 A.M.

Remote Systems—I
Session Organizer: Steve Tibrea (SRNL)
Chair: Eric M. Kriikku (SRNL)

IMU-Based Motion Capture System for Rehabilitation and Sport Activities
Andrzej Nycz, Ethan Farquhar, M. Nance Ericson, Randall F. Lind (ORNL)

Development and Testing of a Glove Port Mounted Camera and Light
Daniel Krementz (SRNL)

Integrated Remote Handling Design for CERN’s MEDICIS Radioactive Isotope Facility
Keith Kershaw, Stefano Marzari, Jean-Louis Grenard (CERN)

Spatial Interface for User-Centered Robotic Teleoperation
Jack L. Thompson, Mitch Pryor (Univ of Texas, Austin)

Wednesday, June 18, 2014, 1:00 P.M.

Remote Systems—II
Session Organizer: Steve Tibrea (SRNL)
Chair: Michael J. Dalmaso (SRNL)

Shield-Plug Mounted Hot Cell Manipulator
G. Doepler, M. Close (PaR Systems), M. Noakes, E. Bradley (ORNL)

Implementation of Flexible Automation for Neutron Radiography Applications
Joseph Hashem (Univ of Texas, Austin/LANL), Mitch Pryor, Sheldon Landsberger (Univ of Texas, Austin), James Hunter (LANL)
Development of an Aerial Robotic Platform for Remote Sensing and Monitoring of Nuclear Power Facilities
G. Friesmuth, N. Richardson, A. Barzilov, W. Yim (UNLV)

Evaluating Automation for Material Reduction in Gloveboxes Using Plutonium Surrogates
Clinton Peterson, Mitchell Pryor, Sheldon Landsberger (Univ of Texas, Austin)

Wednesday, June 18, 2014, 2:45 P.M.

Remote Systems—III
Session Organizer: Steve Tibrea (SRNL)
Chair: Thomas A. Nance (SRNS)

Microcomputer Servomotor Positioning
J. D. Shewmaker (Univ of Tennessee), M. W. Noakes, A. M. Aaron (ORNL)

Throughput Measures for Remote Handling Devices in PRIDE
Dongseok Ryu, Jonghui Han, Kiho Kim, Ilje Cho (KAERI)

Vision-Based Self-Learning Teleoperation Control System
Andrzej Nycz (ORNL), William R. Hamel (Univ of Tennessee)

Augmented Teleautonomy for Mobile Robot Navigation
Young Soo Park, Xiaorui Zhao (ANL)

Simulation of Teleoperation Aided by Augmented Virtual Fixtures
Young Soo Park, Leighton Roberts (ANL)