



DD&R Division Update

Summer 2011

Message from the Chair – Larry Zull

This has been a year of rapid changes for the nuclear industry. A year ago, things looked good for the industry, as Vogtle was clearing part of the site for Units 3 and 4, and other utilities were negotiating with reactor vendors and architect engineers for new nuclear power stations, Older reactors were receiving 20 year life extensions from the NRC, and DOE was receiving money from the American Recovery and Reinvestment Act to decommission and cleanup facilities at their sites. Then came the March 11 earthquake and tsunami, which affected the Fukushima Daiichi reactors. Cooling systems to the reactors were knocked out by the tsunami, causing fuel rods to overheat. There were subsequently explosions in the buildings housing four reactors, three of which had been operating at the time of the earthquake. Engineers are pumping water into the reactors to cool them as they work to restore the damaged cooling systems. Water is leaking from the pressure vessel surrounding reactor 1, most likely because of damage caused by exposed fuel rods that have melted. TEPCO said that it may take up to nine months to achieve a cold shutdown of the reactor.

Plans are to decommission the reactors. D&D technology developed in the US can help. The Japanese will most likely perform the D&D themselves, but will subcontract some of the work to companies outside of Japan. Public approval of nuclear power plants has also decreased, and the "Nuclear Renaissance" has slowed. The ANS meeting in Hollywood, FL will have two sessions on Fukushima, with some speakers from Japan. There

will also be a D&D session, along with the other sessions listed in the Preliminary Program.

It has been a great honor to serve as your Chair for 2010-2011; thank you for electing me! Mr. John Bowen will take over the Chair position after the Hollywood meeting. The next meeting will be in Washington, DC from Oct 30 to Nov3, 2011. Hope you can make it to either the Hollywood or Washington, DC meetings.

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Articles and photos about your facility could appear here. Please contribute!



### DDRD Governance News

The DD&R Division Executive Committee will welcome its Class of 2014 at the ANS Annual Meeting in Hollywood, Florida. Joining the committee are James Clark, Douglas Davis and Alastair MacDonald. The 2011-2012 division officers will begin their terms on June 26. They are: John Bowen, Chair; Nadia Glucksberg, Vice Chair / Chair Elect; and David Hillyer, Secretary / Treasurer. Larry Zull will serve in an ex officio capacity as the immediate Past Chair.

The Division also wishes to thank Andrea Hopkins and Frazier Bronson for their three years of service on the Executive Committee.

### Looking Ahead - DD&R 2012 Topical

DD&R 2012 is scheduled to coincide with the American Nuclear Society 2012 Annual Meeting; June 24 – 28 2012 in Chicago, IL. The meeting is being chaired by Mr. Pat Daly of Zion *Solutions* and the Technical Program Chair is Sue Aggarwal of New Millennium Nuclear Technologies International, Inc. The meeting will include a Technology Exhibit and a tour of the Zion Nuclear Station. The Call for Papers for DD&R 2012 is now available at <http://ddrd.ans.org/pdf/DDR2012-Call.pdf>. Abstracts can be submitted between October 1, 2011 and January 13, 2012. This meeting is a follow on to the very successful Topical Meetings in Denver in 2005, Chattanooga in 2007 and Idaho Falls in 2010.

For more information or to volunteer to help please contact either Sue Aggarwal – Technical Program Chair, Phone: (303) 984-5788 • E-mail: [saggarwal@nmnuclear.com](mailto:saggarwal@nmnuclear.com), Jim Byrne – Asst. Technical Program Chair Phone: (717) 676-6600 • E-Mail: [jbyrne4424@comcast.net](mailto:jbyrne4424@comcast.net) or Rob Woodard – Zion *Solutions* [rcwoodard@energysolutions.com](mailto:rcwoodard@energysolutions.com) (224) 789-4065

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### The 2011 DD&R Division Undergraduate Scholarship

Presented to

**David W. Kamerman**  
Idaho State University

David is a Nuclear Engineering major entering his senior year at Idaho State with a current 3.60 GPA. David's scholarship application focused on the reutilization aspect of nuclear fuel reprocessing. David plans to attend the 2011 Winter Meeting in Washington and participate in several DDRD activities.

The DDRD Scholarship Committee, chaired by Mark Campagna, was impressed by the highly qualified group of applicants, and encouraged by their interest in the DD&R field.

### ~~ New Member Benefit for 2012 ~~

The DD&R Division will provide a membership incentive at the beginning of 2012, during which the first 100 new members will receive a complimentary subscription to **RadWaste Solutions** magazine. Please encourage your colleagues and those working on projects in the nuclear decommissioning industry to join you in becoming a member of ANS and our DD&R Division, or if they were a member in 2010, encourage them to renew their membership in ANS and the DD&R Division.



# DD&R Division Update Summer 2011

## Welcome New Members A Year's Worth - April 2010 to May 2011

|                                   |                                                   |                                        |                                                |
|-----------------------------------|---------------------------------------------------|----------------------------------------|------------------------------------------------|
| <i>Mr. Ian C. Whitaker</i>        | <i>BATTELLE MEMORIAL INSTITUTE</i>                | <i>Mr. Jubal W. Collins</i>            | <i>DENUKE SERVICES</i>                         |
| <i>Mr. Charles Gribble</i>        | <i>CALIFORNIA EPA/DTSC</i>                        | <i>Ms. Julia R. Dinner</i>             | <i>CANDESCO</i>                                |
| <i>Mr. Ibrahim K. Toukan</i>      | <i>MIT</i>                                        | <i>Ms. Peggy Jo Gramer</i>             | <i>UNIVERSITY OF MICHIGAN</i>                  |
| <i>Mr. Kevin E. Arz</i>           | <i>MID COLUMBIA ENGINEERING, INC.</i>             | <i>Miss Kathleen M. O'Connell</i>      | <i>VIRGINIA COMMONWEALTH UNIVERSITY</i>        |
| <i>Mr. Paul M. Longsworth</i>     | <i>FLUOR</i>                                      | <i>Mr. Michael J. Perry, Jr.</i>       | <i>UNIVERSITY OF MASSACHUSETTS LOWELL</i>      |
| <i>Miss Jennifer M. England</i>   | <i>UNIVERSITY OF MISSOURI/COLUMBIA</i>            | <i>Mr. Lowell D. Pittman, Jr.</i>      | <i>BARTLETT NUCLEAR</i>                        |
| <i>Mr. Milton B. Whitfield</i>    | <i>HAYNES AND BOONE, LLP</i>                      | <i>Dr. Yuko Kani-Eino</i>              | <i>HITACHI, LTD</i>                            |
| <i>Mr. Geoffrey R. Bull</i>       | <i>U.S. ARMY</i>                                  | <i>Mr. Thomas M. Crabtree</i>          | <i>OREGON STATE UNIVERSITY</i>                 |
| <i>Mr. Josef P. Cox</i>           | <i>ENERGY NUCLEAR VERMONT YANKEE</i>              | <i>Mr. Ronald J. Unz</i>               | <i>INSTITUTE FOR CLEAN ENERGY TECHNOLOGIES</i> |
| <i>Mr. Kevin C. Leonard</i>       | <i>EXELON NUCLEAR</i>                             | <i>Mr. Michael C. Hollister</i>        | <i>ABZ, INC.</i>                               |
| <i>Mr. Lawrence Curtis, Jr.</i>   | <i>WRPS</i>                                       | <i>Mr. Thomas B. Axley, Jr., P.E.</i>  | <i>TVA</i>                                     |
| <i>Mr. Jay Peters</i>             | <i>HALEY &amp; ALDRICH</i>                        | <i>Mr. Bradley K. Portier</i>          | <i>FLUOR</i>                                   |
| <i>Mr. Philip G. McDermott</i>    | <i>UNDERWATER CONSTRUCTION CORP.</i>              | <i>Mr. Philippe Gros-Gean</i>          | <i>ONET TECHNOLOGIES</i>                       |
| <i>Mr. Dustin G. Miller</i>       | <i>ENERCON SERVICES INC</i>                       | <i>Mr. Robert B. Roberts</i>           | <i>U.S. NAVY</i>                               |
| <i>Mr. Steven K. Bleistein</i>    | <i>STAUBLI CORPORATION</i>                        | <i>Mr. Noel J. Gonzalez, Jr., P.E.</i> | <i>FRANKLIN'S KITE LLC</i>                     |
| <i>Mr. Kelly J. McGrath, P.E.</i> | <i>GDF SUEZ NA</i>                                | <i>Mr. Mark T. Young</i>               | <i>UNIVERSITY OF UTAH</i>                      |
| <i>Mr. Howard G. Stevens</i>      | <i>STUDSVIK</i>                                   | <i>Ms. Keri R. Campbell</i>            | <i>UNIVERSITY OF NEVADA/LAS VEGAS</i>          |
| <i>Mr. Michael T. Ring</i>        | <i>GEORGIA INSTITUTE OF TECHNOLOGY</i>            | <i>Mr. Corey Keith</i>                 | <i>UNIVERSITY OF NEVADA LAS VEGAS</i>          |
| <i>Mr. Iain L. Macdonald</i>      | <i>YRM ARCHITECTS</i>                             | <i>Mr. Tim R. McKinsey</i>             | <i>PAUL C. RIZZO ASSOCIATES</i>                |
| <i>Mr. Mal Guymon</i>             | <i>GOOGLE</i>                                     | <i>Mr. Nicholas D. Bauer</i>           | <i>TEXAS A&amp;M UNIVERSITY</i>                |
| <i>Mr. M. Tyson Krieger</i>       | <i>IDAHO STATE UNIVERSITY</i>                     | <i>Mr. Alexander J. Dixon</i>          | <i>UNIVERSITY OF CALIFORNIA - BERKELEY</i>     |
| <i>Mr. Jeffrey A. Deeds</i>       | <i>ENERGYSOLUTIONS</i>                            | <i>Miss Claire Dinkel</i>              | <i>NOVA MACH. PROD.-DIV OF C/W FLUOR</i>       |
| <i>Mr. Joshua T. Jones</i>        | <i>OHIO STATE UNIVERSITY</i>                      | <i>Mr. Bruce R. Shelander, Jr.</i>     | <i>UNIVERSITY OF TENNESSEE-KNOXVILLE</i>       |
| <i>Mr. Bhavik N. Patel</i>        | <i>THERMOFISHER SCIENTIFIC</i>                    | <i>Ms. Whitney L. West</i>             | <i>NAC INTERNATIONAL</i>                       |
| <i>Miss Kaitlen M. Sheres</i>     | <i>MISSOURI UNIV. OF SCIENCE &amp; TECHNOLOGY</i> | <i>Dr. Nicholas Evans</i>              | <i>LOUGHBOROUGH UNIVERSITY</i>                 |
| <i>Mr. Henry A. Sammerson</i>     | <i>AREVA</i>                                      | <i>Mr. John K. Dang</i>                | <i>VIRGINIA COMMONWEALTH UNIVERSITY</i>        |
| <i>Mr. George M. Fekete</i>       | <i>UNIVERSITY OF FLORIDA</i>                      | <i>Ms. Adrienne B. Smith, P.E.</i>     | <i>NUTHERM INTERNATIONAL, INC.</i>             |
| <i>Mr. Nicholas R. Porter</i>     | <i>THREE RIVERS COMMUNITY COLLEGE</i>             | <i>Miss Elizabeth A. Mohan</i>         | <i>UNIVERSITY OF MASSACHUSETTS-LOWELL</i>      |
| <i>Mr. Tashi P. McSweeney</i>     | <i>THREE RIVERS COMMUNITY COLLEGE</i>             | <i>Mr. Nelson D. Lopez</i>             | <i>VIRGINIA COMMONWEALTH UNIVERSITY</i>        |
| <i>Miss Jau Moua</i>              | <i>AREVA NP</i>                                   | <i>Dr. Wheeler Conover</i>             | <i>SOUTHEAST KENTUCKY CTC</i>                  |
| <i>Mr. Joe Ferrell</i>            | <i>BABCOCK &amp; WILCOX NUCLEAR ENERGY</i>        | <i>Mr. Justin G. Marsh</i>             | <i>UNIVERSITY OF NORTH CAROLINA</i>            |
| <i>Mr. Joseph A. Bugica</i>       | <i>BABCOCK &amp; WILCOX</i>                       | <i>Mr. Jordan E. Gladden</i>           | <i>TRANSWARE ENTERPRISES</i>                   |
| <i>Mr. Rob W. Hale</i>            | <i>OLDENBURG GROUP INC.</i>                       | <i>Mr. Steven V. Heard</i>             |                                                |
| <i>Mr. Adam H. Borez</i>          | <i>USEC</i>                                       | <i>Mr. James Pai</i>                   | <i>NGP ENERGY TECHNOLOGY PARTNERS</i>          |
| <i>Mr. Aidan M. Boyle</i>         | <i>UNIVERSITY OF WISCONSIN-MADISON</i>            | <i>Mr. Rock P. Neveau</i>              | <i>SAFETY &amp; ECOLOGY HOLDINGS</i>           |
| <i>Mr. Benjamin S. Jessup</i>     | <i>ABZ, INC.</i>                                  | <i>Mr. John J. Flynn</i>               | <i>TRI NUCLEAR CORP</i>                        |
| <i>Ms. Carol W. Jenkins</i>       | <i>BLUEGRASS CONCRETE CUTTING, INC.</i>           | <i>Mr. Gaurav Pant, P.E.</i>           | <i>THE SHAW GROUP</i>                          |
| <i>Mr. Adam M. Langbehn</i>       | <i>IDAHO STATE UNIVERSITY</i>                     | <i>Mr. Corey Munz</i>                  | <i>ENERGY</i>                                  |
| <i>Dr. Evaristo J. Bonano</i>     | <i>SANDIA NATIONAL LABORATORIES</i>               | <i>Mr. Matthew F. Aubert</i>           | <i>NEW MEXICO JUNIOR COLLEGE</i>               |
| <i>Mr. Curtis A. King</i>         | <i>PACIFIC NORTHWEST NATIONAL LABORATORY</i>      | <i>Mr. Brandon D. Stuckey</i>          | <i>N/A</i>                                     |
| <i>Mr. Michael E. Ginzler</i>     | <i>ENERGY</i>                                     | <i>Mr. John Enger, P.E.</i>            | <i>SHAW GROUP</i>                              |



## 2011 Winter Meeting News

The 2011 Winter Meeting program is shaping up. The program committee and volunteer session organizers have identified a number of interesting topics, and are receiving and reviewing papers now. If one of these areas interests you, please feel free to contact the division.

### *Draft Session Title and Chair*

**Best of DD&R 2010** - Jim Byrne. Invited papers presenting a range of subjects from the 2010 Topical.

**Decommissioning of Small Modular Reactors** - Mark Campagna. As interest deepens in this industry segment, it's not too early to think about the end of the lifecycle.

**ARRA Program Successes** - Mark Campagna and Dennis Ferrigno. Lessons learned and challenges overcome by the DOE in managing its many ARRA-funded projects.

**Radium Girls and the D&D of their Legacy** - Jay Peters and Stuart Walker. A interesting look into this little-known, yet critically important aspect of our industry.

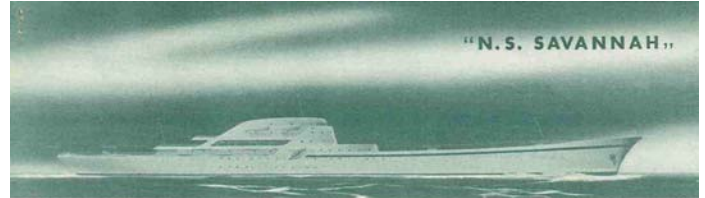
**FUSRAP Sites** - David Hillyer. The complexity of these Manhattan Project legacy sites continues to provide great topic matter for discussion.

**License Termination** - John Parkyn. A panel discussion and tutorial on this complex and often challenging phase of decommissioning.

**Fukushima Daiichi** - John Gunning. An overview of the event sequence and known conditions, with proposed possible decommissioning paths.

**General DD&R** - Nadia Glucksberg. Don't let the title fool you - there's always some new to be learned in the complex field of commercial D&D.

## Extra - Curriculars



### **A DD&R Division Special Event for the 2011 Winter Meeting**

Less than an hour north of the Omni Shoreham Hotel, in the Canton section of the Port of Baltimore, lies the ANS Nuclear Historic Landmark, N.S. SAVANNAH. The world's first nuclear-powered merchant ship will be the host site for one of the DDRD technical sessions during the winter meeting. Bus transportation to and from the hotel with lunch will be available for a price of \$25. Details will be posted to the ANS website after the paper-reviews are completed in late July. Also look for information in the preliminary program when it is published.



**Welcome Aboard!**



# **ANS Embedded Topical on Decommissioning, Decontamination and Reutilization and Technology Expo**



**Sponsored by the ANS Decommissioning, Decontamination & Reutilization Division**

**June 24-28, 2012 · Chicago, IL · Hyatt Regency Chicago**

## ***“Decommissioning – New Approaches”***

### **CONFERENCE PURPOSE**

The ANS Topical DD&R Meeting is a forum for the discussion of the social, regulatory, scientific, and technical aspects of decontamination, decommissioning, and reutilization, and waste management. The 2012 conference program will include commercial, government, and international project updates as well as present project management, technology, and regulatory developments in the areas of decommissioning, waste management, site closure and legacy management. The conference will be embedded in the ANS National Meeting for 2012 which will provide Technical sessions and opportunities beyond those in the decommissioning area.

In addition to a comprehensive technical program, there will be a Technology Expo, technical tours, and numerous fun activities and opportunities for attendees and guests to enjoy Chicago at its finest.

### **IMPORTANT DATES**

SUBMISSION OF SUMMARIES: October 1, 2011-January 13, 2012

AUTHOR NOTIFICATION OF ACCEPTANCE: By March 2, 2012

REVISED SUMMARIES DUE: March 16, 2012

### **MEETING OFFICIALS**

#### **General Chair**

Patrick Daly, *General Manager, ZionSolutions*

#### **Technical Program Chair**

Sue Aggarwal, *President, New Millennium Nuclear Technologies International*

#### **Assistant Technical Program Chair**

James Byrne, *Principal, Byrne & Assoc., LLC*

### **INSTRUCTIONS FOR AUTHORS**

Contributors are invited to submit abstracts on the conference topics list. The abstract should contain sufficient detail to allow the merit of the paper to be judged. The Technical Program Committee will decide whether the paper will be presented at a technical session or as a poster.

### **FORMAT**

Authors are now REQUIRED to use the ANS Template and “Guidelines for TRANSACTIONS Summary Preparation” provided on the ANS Web site.

Summaries must be submitted electronically using Adobe Acrobat (PDF) files and original Microsoft Word documents and the ANS Electronic Paper Submission and Review System. Summaries not based on the ANS Template will be REJECTED.

### **GUIDELINES FOR SUMMARIES**

Please submit summaries describing work that is NEW, SIGNIFICANT, and RELEVANT to the nuclear decommissioning industry. ANS will publish all accepted summaries in the Topical Meeting Proceedings for the meeting. Papers are presented either orally or via a poster at the meeting, and presenters are expected to register for the meeting.

Completed papers may be published elsewhere, but the summaries become the property of ANS. Under no circumstances should a summary or full paper be published in any other publication prior to presentation at the ANS meeting. It is the author’s responsibility to protect classified or proprietary information.

### **CONTENT:**

1. Introduction: State the purpose of the work.
2. Description of the actual work: Must be NEW and SIGNIFICANT.
3. Results: Discuss their significance.
4. Appendixes: If any, must be called out in the text. Equations, figures, and tables are listed with letters corresponding to each respective appendix.
5. References: If any, must be closely related published works. Minimize the number of references.
6. Do not present a bibliographical listing.

### **LENGTH:**

1. Use at least 450 words, excluding tables and figures.
2. Use no more than 900 words, including tables and figures.
3. Count tables and figures as 150 words each. Use no more than three tables or figures.
4. Limit title to ten words; limit listing authors to three or fewer if possible.
5. Exclude references from word count.

### **PAGE CHARGE**

ANS charges \$25 per final printed page (prorated) in the Topical Meeting Proceedings. Authors should be prepared to provide their purchase order numbers when submitting their summaries electronically.

### **WHERE TO SUBMIT A SUMMARY FOR REVIEW**

Submit summaries via the ANS website ([www.ans.org/meetings](http://www.ans.org/meetings)). If you experience problems submitting your abstract via the web, please notify Ellen Leitschuh (708-579-8253 - [eleitschuh@ans.org](mailto:eleitschuh@ans.org)).

### **FINAL SUMMARY PREPARATION FOR PUBLICATION IN CONFERENCE TRANSACTIONS**

After the Technical Program Committee reviews the submissions, authors of accepted summaries will receive instructions for preparation of final summaries. Summaries will be included on the proceedings CD, which will be distributed at the beginning of the conference.

### **FOR MORE INFORMATION CONTACT**

Sue Aggarwal - Technical Program Chair  
Phone: (303) 984-5788 · E-mail: [saggarwal@nmnuclear.com](mailto:saggarwal@nmnuclear.com)

Jim Byrne - Asst. Technical Program Chair  
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### **DD&R WEBSITE**

<http://ddrd.ans.org>

# **ANS Embedded Topical on Decommissioning, Decontamination and Reutilization and Technology Expo**

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## **CONFERENCE TOPICS**

### **PROJECT TRACK**

DOE Projects

Commercial Nuclear Plants Decommissioning Projects

International Decommissioning

EPA/DoD Projects

Fast Reactor Decommissioning Projects

Site and building remediation/rehabilitation

NORM/UMT/Smaller Non-Reactor Issues/Projects

Stakeholder Involvement

### **TECHNOLOGY TRACK**

Low Level Radioactive Waste Management

Groundwater issues Monitoring and remediation

Waste Management Technology Developments

Decommissioning and Decontamination Technology Developments

Final Status Survey & Radiation Measurement Technology Developments

Other Innovative technologies and feedback experience

MARSSIM/Site Release/LTP/FSS

Dose Modeling/RESRAD/D&D

Regulatory Infrastructure for Technology Development

### **REGULATORY, LESSONS LEARNED TRACK**

Capturing Best Practices and Other Lessons Learned

Project Infrastructure & Regulatory Criteria

Environmental Issues in Decommissioning

State Regulatory Issues that can Affect Decommissioning

Long-Term Surveillance and Maintenance of DOE and Commercial Facilities

Regulatory Infrastructure Long Term Surveillance and Maintenance of Sites

SAFSTOR, Entombment and Spent Fuel Storage

Reutilization of Closed Sites/Facilities

Stakeholder Involvement/Public Relations

Records Management

Contracts Management