



## American Nuclear Society Robotics and Remote Systems Division

Summer 2016 RRS Division Newsletter

Registration is now open for your ANS Divisions Topical Meeting D&RS 2016 which will be held in Pittsburgh, PA USA from July 31 to August 4, 2016 Registration information is at <http://drs.ans.org/>.

D&RS 2016 is a joint effort of the Decommissioning and Environmental Science (DES) and Robotics and Remote Systems (RRS) Divisions. This meeting serves as a forum for the discussion of the social, regulatory, scientific, and technical aspects of decontamination, decommissioning, reutilization, waste management and the use of remote technology. The 2016 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. DR&S 2016 is co-sponsored by 11 International professional societies. The keynote speakers and panelists for the Opening Plenary are listed below.

### Keynotes:

- Danny Roderick - Westinghouse
- Bill Magwood - NEA
- Monica Regalbutto - DOE Robotics Program

### Panelists:

- Robin Murphy - TAMU
- Jorgen Pederson - RE2
- David Allard - PA Bureau of Radiation Protection
- Pam Collins - Exelon Zion
- Alejandro Tomas Rodriguez Fernandez - Westinghouse Spain/UK D&D
- Pete Leombruni (Asia D&D Needs) - Westinghouse

In addition the Final Plenary will feature:

Mike Casey - FENOC – “Three Mile Island Unit 2 today and future plans”

Desmond Chan - Bechtel National, Inc. – “Chornobyl Thirty Years After”

Michael Siemann - Nuclear Energy Agency – “NEA Expert Working Group Report on Fukushima Waste Management and Decommissioning R&D”

Sheldon Lefkowitz - Pentek – “PENTEK machines at Fukushima and thinking outside the box”

Rod Rimando- Department of Energy, Office of Environmental Management – “Use of Remote Technology in Hazardous Environments”

Steve Larson - PlantDecommissioning.com – “Overbooking Decommissioning”

RRSD will be sponsoring a Monday PM panel session on The Robot Operating System (ROS) led by Brian O'Neil of Los Alamos National Laboratory and including key guest speakers in the development and use of ROS Morgan Quigley of the Open Source Robotics Foundation and Paul Hvass of Southwest Research Institute.

There will also be a Thursday AM workshop on ROS and its use. Since 2009, ROS has become the de facto standard framework underlying a broad range of robotics applications from industrial machining operations to autonomous vehicles. This workshop is intended to be an introduction for those who are interested in learning more about ROS. The workshop will address the following questions:

- What is ROS?
- What are the benefits and limitations of ROS?
- Can I use ROS in my application?
- How do I get started with ROS?

The workshop includes a presentation that answers to these questions, outlines domain-relevant use cases, and culminates in hands-on ROS programming exercises. Participants can expect to leave the workshop with the knowledge they need to get started with ROS in their own applications. Participants will have the opportunity to develop ROS applications on their laptop during the workshop. Participants will have access to instructions for setting up their computer prior to the workshop. And organizers will provide "office hours" during the conference and prior to the workshop for anyone needing technical assistance. Note anyone interested in learning about ROS may participate and will walk away with a better understanding of its capabilities, but those with a prepared laptop, familiarity with Ubuntu, and some programming background will have the extra benefit of hands on experience.

There is also a comprehensive technical program, a Technology Expo, technical tours, and numerous networking activities and opportunities for attendees and guests. More information can be found on the D&RS 2016 website: <http://drs.ans.org/>. Check back often for updates!

For more information or any questions about the meeting please contact Jim Byrne at [jbyrne4424@comcast.net](mailto:jbyrne4424@comcast.net) or Mark Noakes at [noakesmw@ornl.gov](mailto:noakesmw@ornl.gov).

#### RRSD Executive Committee Meeting

There will be a meeting of the RRSD Executive Committee on Thursday following the ROS workshop, held in the same meeting room.