



# RPSD Newsletter

February, 2008

## **American Nuclear Society Radiation Protection and Shielding Division**

<http://rpsd.ans.org>

### **Message from the Chair**

**John C. Wagner**

Greetings fellow RPSD members!

Radiation Protection and Shielding is fundamental to nearly all aspects of nuclear science and engineering. Our membership boasts leaders in radiation shielding, modeling, detectors, therapy, homeland security, nuclear safeguards, space exploration, oil exploration, diagnostics, sources, and much more.

For 2008 RPSD continues to thrive. Our division has ~1300 members and our balance sheet is comfortably positive. We continue to offer an outstanding technical program, both at national meetings and our biennial topical meeting.

This coming April 13 – 18 we join with our European sister organization to offer the 11<sup>th</sup> International Conference on Radiation Shielding, ICRS-11, and the 15<sup>th</sup> Topical Meeting of the Radiation Protection & Shielding Division of ANS, See the description later in this newsletter. ICRS-11/RPSD2008 will take place in beautiful Callaway Gardens, Pine Mountain, Georgia, USA, a spectacular venue conveniently located only an hour from Atlanta, GA. This is the premier international radiation shielding event with 350 papers, 8 tutorial sessions, interesting tours to the world headquarters of Coca-Cola and CNN and more.

We also have exciting technical programs planned for the June ANS Annual Meeting in Anaheim, California, and November Winter Meeting in Reno, Nevada.

*Governance:* All RPSD members are invited to the RPSD Technical Program Committee Meeting and the RPSD Executive Committee Meeting on Monday, June 9, from 4-7 p.m, at the ANS Annual Meeting in Anaheim. Also, please vote in our spring election for RPSD officers and executive committee members. Our fine slate of candidates deserves your consideration and is a reflection of the outstanding technical quality and diversity of our division.

## **Meetings & Programs**

### **Charlotta Sanders, Technical Program Chairman**

#### **RPSD2008/ICRS-11, Callaway Gardens, Georgia, April 13-18, 2008**

Our biennial topical meeting is a collaboration of the Radiation Protection and Shielding Division (RPSD2008) and the 11th International Conference on Radiation Shielding (ICRS-11). This conference explores the scientific, technological, and engineering issues associated with particle and ionizing radiation shielding in its broadest context, including nuclear energy systems, accelerator facilities, space, and other radiation environments. This is one of the premier international radiation shielding events. The technical program will be comprised of short plenary sessions, parallel oral technical sessions, tutorials, and poster sessions. Over 350 papers have been submitted for oral and poster presentation. Of the papers, 43% are from North America, 30% from Europe, and 27% from Asia. The best papers from each session are eligible to be repeated or updated at “The Best of RPSD2008” sessions at the ANS Winter Meeting in Reno, Nevada, November 9-13, 2008.

Plan to stay the whole week! Friday will be devoted to hands-on tutorial sessions where you can actually run the codes that are the tools of radiation protection and shielding: NJOY, SCALE, Introduction to Monte Carlo (with MCNPX), Monte Carlo Burnup / Depletion with MCNPX, and Monte Carlo setup and visualization with MORITZ.

On Wednesday afternoon there will be “hands-on” tutorials on TRIPOLI, the foremost reactor modeling code in France, and FLUKA, Italy’s high-energy radiation modeling code. There will also be tutorials on radiation shielding and electron/gamma transport.

The conference will take place at the Mountain Creek Conference Center at Callaway Gardens in Pine Mountain, Georgia, USA. Pine Mountain is located 60 minutes southwest of Atlanta, Georgia. Callaway Gardens is a man-made landscape in a unique natural setting. Conceived and created by Cason J. Callaway and his wife Virginia Hand Callaway, Callaway Gardens is a wholesome family environment where all may find beauty, relaxation, inspiration, and a better understanding of the living world. With many of the native trees and shrubs in bloom, April is a great time to visit Callaway Gardens.

Please visit the conference website for additional details:

<http://icrs11.me.gatech.edu/>

*The deadline for early registration is March 1 and hotel rooms are going fast!*

The ICRS11/RPSD2008 organizing committee appreciates the two contributions, totaling \$4000, for student travel grants awards, from the Radiation Protection and Shielding Division. The committee has been able to solicit another \$3500 for travel grants from the Georgia ANS Section, the Health Physics Society, and Canberra. As a result 15 travel grants of \$500 have been awarded to assist students and young scientists to attend the meeting.

#### **ANS Annual Meeting, Anaheim, California, June 8 – 12, 2008**

The ANS Annual meeting is at the Disneyland Hotel, Anaheim, California, home of the “Magic Kingdom” and where the Disney theme parks began. Southern California also features great weather, beaches, and Hollywood, the movie capital of the world!

On Monday RPSD is planning a first for RPSD - a roundtable. Everyone is invited to give a short presentation on any Radiation Protection and Shielding topic of interest. The first topic will be analytical and experimental benchmarking, led by Richard Amato of Bettis Atomic Power Laboratory. What is a good benchmark? What cross sections need testing? Additional ten-minute time slots will be allotted on a first-come / first-serve basis. This is meant to be fast-paced, informal, and fun. RPSD also has sessions on computational modeling, detection technologies for homeland security, and general radiation protection and shielding topics.

Plan to stay for the whole meeting. On Wednesday and Thursday we will repeat the ICRS-11/RPSD2008 hands-on tutorials on NJOY, Introduction to Monte Carlo, and Monte Carlo Burnup / Depletion.

**MCD2009, Saratoga Springs, May 3-7, 2009**

Saratoga Springs, New York, will host 2009 Mathematics and Computation Topical Meeting at the Saratoga Hotel and Conference Center. <http://local.ans.org/ne-ny/>.

**RPSD2010, Las Vegas, NV, April 19-23, 2010 - Rob Hayes, NSTec**

Las Vegas will host the RPSD2010 topical meeting as a joint topical meeting with the Isotopes and Radiation Division (IRD). The RPSD executive board approved this venue in Boston's June meeting. The local organizing team is largely composed of the ANS local section in Las Vegas and they are delighted to be selected to host this world class technical conference. Tours of the Nevada Test Site and Yucca Mountain are expected along with other venues. One sponsor has been identified already and more are expected. Given the stature of this conference historically and the planned venue, this could be one of the more well-attended conferences in RPSD history with the added scope of our sister division (IRD). The publication plan is expected to closely resemble that of the Carlsbad conference as would the Technical Program.

**ANS 6 Standards Report  
Bill Hopkins, Standards Chair**

1. Based on feedback from the RPSD newsletter poll on resurrecting ANS-6.4.3, "Gamma-Ray Attenuation Coefficients & Buildup Factors for Engineering" as an official ANSI standard, Jeff Ryman has agreed to chair a new working group for this. Dick Faw has also agreed to join Jeff in this project. A new PINS form is in the works. Contact Jeff at [rymanjc@excite.com](mailto:rymanjc@excite.com)
2. F. Arzu Alpan has reconstituted the working group for ANS-6.1.2, "Neutron and Gamma-Ray Cross Sections for Nuclear Radiation Protection Calculations for Nuclear Power Plants" (revision of ANSI/ANS-6.1.2-1999). The project has had its PINS forms approved and a new draft standard is in development.
3. Nolan Hertel and his working group are reviewing a new revision of ANS-6.1.1-200X, "Dose Conversion Coefficients."

## RPSD Officers and Committees

### Officers:

John Wagner, ORNL, Chair (2008), [wagnerjc@ornl.gov](mailto:wagnerjc@ornl.gov)  
John S. Hendricks, LANL, Vice-Chair/Newsletter (2008), [jxh@lanl.gov](mailto:jxh@lanl.gov)  
Erik Shores, LANL Secretary (2008), [eshores@lanl.gov](mailto:eshores@lanl.gov)  
F. Arzu Alpan, Treasurer (2008), [alpanfa@westinghouse.com](mailto:alpanfa@westinghouse.com)

### Executive Committee: (year term expires)

Charlotta Sanders, YMP (2008), [charlotta\\_sanders@ymp.gov](mailto:charlotta_sanders@ymp.gov)  
Jeremy Sweezy, LANL (2008), [jsweezy@lanl.gov](mailto:jsweezy@lanl.gov)  
Man-Sung Yim, NCSU (2008), [yim@ncsu.edu](mailto:yim@ncsu.edu)  
Robert Hayes, Bechtel-Nevada, (2009), [hayesrb@nv.doe.gov](mailto:hayesrb@nv.doe.gov)  
Jennifer Tanner, PNL (2009), [Jennifer.tanner@pnl.gov](mailto:Jennifer.tanner@pnl.gov)  
Larry Townsend, University of Tennessee (2009), [ltownsen@tennessee.edu](mailto:ltownsen@tennessee.edu)  
David R. Anderson (2010), [d.anderson@snet.net](mailto:d.anderson@snet.net)  
Everett L. Redmond II (2010), [elr@nei.org](mailto:elr@nei.org)  
X. George Xu (2010), [xug2@rpi.edu](mailto:xug2@rpi.edu)

### Standing and Special Committee Chairs:

RPSD 2008 Atlanta – Nolan Hertel, Georgia Tech, [nolan.hertel@me.gatech.edu](mailto:nolan.hertel@me.gatech.edu)  
Membership – Charlotta Sanders, YMP, [Charlotta\\_sanders@ymp.gov](mailto:Charlotta_sanders@ymp.gov)  
Honors and Awards – Dave Court, LANL, [david.court@pentagon.af.mil](mailto:david.court@pentagon.af.mil)  
Scholarship – John Poston, TAMU  
Program – Charlotta Sanders, YMP, [charlotta\\_sanders@ymp.gov](mailto:charlotta_sanders@ymp.gov)  
Benchmarks – Dick Amato, BAPL, [amators@bettis.gov](mailto:amators@bettis.gov)  
Standards – Bill Hopkins, Bechtel, retired, [wchopkins@insightbb.com](mailto:wchopkins@insightbb.com)  
Bylaws – Eric Shores, LANL, [eshores@lanl.gov](mailto:eshores@lanl.gov)  
Nominating – Andrew Hodgdon, AREVA, [andrewhodgdon@comcast.net](mailto:andrewhodgdon@comcast.net)  
ANS Board Liaison – Herb Fontecilla

**New Opportunity:** Web-Site Committee Chair needed – please contact John Hendricks, [jxh@lanl.gov](mailto:jxh@lanl.gov)