



# ANS NEWSLETTER

MAY 2007

J.C. WAGNER, EDITOR

RADIATION PROTECTION AND SHIELDING DIVISION

<http://rpsd.ans.org>

## Message from the Chair

Andrew Hodgdon, Chair  
Sends warm regards in Haiku.  
Hertel's students helped.

RPSD is  
Boston, DC, Atlanta.  
Technical programs.

MCNP, SCALE  
Tripoli Tutorials.  
Come with your laptop.

Pine Mountain, Georgia  
International Shielders.  
April 2008

Bring a companion.  
Meet, talk, run, bike, walk, relax.  
See birds of prey.

Meetings take planning  
Division members welcome.  
Monday, June 25.

Annual meeting  
Executive Committee.  
Meets June 25 too.

Read this Newsletter  
Show it to an acquaintance.  
They might be surprised.

Wagner, Hendricks, Shores  
Alpan, Anderson, Redmond,  
Xu. Now elected.

Ray Klann will retire  
and I become "most recent."  
Exofficio.

## Up-Coming Programs & Meetings (John Hendricks, Program Committee Chair)

### ANS Annual Meeting, Boston, June 2007 - Eight RPSD Sessions

The Annual Meeting of the American Nuclear Society in Boston, Massachusetts, June 24–28, features 1 panel, 2 tutorials, 1 invited session, and 4 contributed sessions with 52 papers. The sessions are:

- Safety and Security of Radiation Sources (panel)
- Detection Technologies for Homeland Security Applications
- Radiation Protection and Shielding – General
- Radiation Protection and Shielding – Detectors
- Computational Medical Physics Radiation Modeling
- Computational Resources for Radiation Modeling.

### *Tutorials*

The Monte Carlo tutorials (at the ANS Winter Meeting in Albuquerque, November 2006, and the RPSD2006 Topical Meeting in Carlsbad) were very popular. These RPSD sessions are free and participatory—participants set up and run problems on laptops. Codes can be obtained in advance from RSICC: <http://rsicc.ornl.gov/>. A number of laptops will be available as community terminals for those who do not bring their own. The tutorials are:

- *Monte Carlo Burnup* – Boston – Burnup calculations with MCNPX
  - *Monte Carlo Tutorial* – Boston – Introductory MCNP(X)
- These sessions are held on the final day (Thursday) of these meetings.  
Contact John Hendricks for further details ([jxh@lanl.gov](mailto:jxh@lanl.gov); tel: 505-667-6997).

### ***Technical Programs Meeting***

The RPSD Technical Program committee meeting (all division members welcome) will be in the Hyannis Room, 4 p.m., Monday, June 25, at the Boston ANS Meeting.

### **ANS Winter Meeting, Washington, November 2007**

The Winter Meeting of the American Nuclear Society in Washington D.C., November 11–15, 2007, already has 8 sessions proposed and is accepting papers at <http://ANS.org>. There will be special sessions and hands-on tutorials for both the TRIPOLI Monte Carlo code, the French computational tool used to design much of the French nuclear industry, and the SCALE code system of nuclear data, criticality, Monte Carlo and deterministic codes from Oak Ridge National Laboratory. The sessions and tutorials are:

- Radiation Protection and Shielding – General
- Detection Technologies for Homeland Security
- Computational Resources for Radiation Protection and Shielding
- Computational Resources – TRIPOLI (invited papers)
- The SCALE Code System (invited papers)
- Monte Carlo TRIPOLI Tutorial
- Monte Carlo SCALE Tutorial
- Monte Carlo Introductory Tutorial

### **RPSD2008/ICRS-11, Georgia, April 15-20, 2008**

Please mark your calendars for RPSD2008/ICRS-11, April 13–18, Callaway Gardens, Georgia. This conference is a collaboration of the 15<sup>th</sup> Topical Meeting of the Radiation Protection and Shielding Division (RPSD2008) and the 11<sup>th</sup> 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. It is one of the premier international radiation shielding events, regularly drawing hundreds of the world's top scientists and engineers. The technical program will be comprised of plenary sessions, parallel oral technical sessions, and poster sessions. The call for papers is now open. Please consult the conference website for additional details: <http://icrs11.me.gatech.edu/>.

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.

### **MCD2009, Saratoga Springs, May, 2009**

Saratoga Springs, New York has been chosen as the site of the 2009 M&C Topical Meeting. The meeting is being organized by the Northeast New York local section, and will be held at the Saratoga Hotel and Conference Center May 3–7, 2009. This is the same venue as was used for the very

successful 1997 MCD topical meeting. Ray Gamino (KAPL) is the general chairman. As always, help will be needed to review papers. If you would like to volunteer for the Technical Program Committee, contact Bob Grove at grovero@kapl.gov. A preliminary version of the conference website is available at <http://local.ans.org/ne-ny/>.

### **RPSD2010, Site and Date TBD**

The Las Vegas local section plans to make a bid for the RPSD2010 meeting. If your local section would like to make a bid, now is the time! The Carlsbad RPSD2006 conference was a great success and highly profitable to the local section.

### **RPSD Governance Meetings**

All members of the Radiation Protection and Shielding Division (and those interested in joining) are invited to the RPSD Technical Program Committee Meeting and the RPSD Executive Committee Meeting. Both meetings are on Monday afternoon/evening, June 25, at the ANS Annual Meeting in Boston. At the Technical Program Committee Meeting, plans will be made for the ANS Winter Meeting in Washington D.C., November 11–15, 2007, the next Annual Meeting in Anaheim, CA, June 8–12, 2008, RPSD2008, and RPSD2010. At the Executive Committee Meeting, all matters related to RPSD activities, initiatives, and performance are discussed, including scholarships, awards, budget, metrics, nominations, standards, and more.

## **Notes from the Nov. 2006 Executive Committee Meeting**

Twenty-six members attended the RPSD Executive Committee meeting held November 13, 2006 at the ANS Winter Meeting in Albuquerque. Oregon State thanked RPSD for supporting the student conference. There followed discussions of the newsletter (email or postal), website (Sweezy to take over), how to increase participation—especially given the “nuclear renaissance,” scholarships, a summary of the Program Committee’s activities, benchmarks, nominations, standards [especially Dick Faw’s completed work on ANS-6.4 (Concrete Shield Design) and 6.4-2 (Shielding Materials)], membership, by-laws (now edited, waiting approval), co-sponsorship of Math and Computation meeting for Saratoga Springs in 2009.

## **ANS 6 Standards Report** (Bill Hopkins, Standards Chair)

There has been quite a bit of activity and progress in recent months with the ANS 6 Standards. A brief summary follows.

- Dick Faw and his working group completed revisions of the following standards, which were approved by ANSI in September:
  - ANS-6.4-R2006, "Nuclear Analysis & Design of Concrete Radiation Shielding for Nuclear Power Plants" (revision of ANSI/ANS-6.4-1997; R2004)
  - ANS-6.4.2-R2006, "Specification for Radiation Shielding Materials" (revision of ANSI/ANS-6.4.2-1985; R1997; R2004).
- John Wagner and his working group received ANSI approval in March of the reaffirmation of ANSI/ANS-6.6.1-1998, "Calculation and Measurement of Direct and Scattered Gamma Radiation from LWR Nuclear Power Plants."
- Jennifer Tanner and her working group received ANSI approval in April of the reaffirmation of ANSI/ANS-6.3.1-1998, "Program for Testing Radiation Shields in Light Water Reactors."
- 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.

- Nolan Hertel and his working group are reviewing a new revision of ANS-6.1.1, "Dose Conversion Coefficients."

A question to the RPSD community – would you be in favor of resurrecting ANS-6.4.3, "Gamma-Ray Attenuation Coefficients & Buildup Factors for Engineering," as an official ANSI standard. It was allowed to lapse to "Withdrawn" status. Reply to Bill Hopkins at wchopkins@insightbb.com.

## **Update on the RPSD Bylaws** (Erik Shores, Bylaws Chair)

While it seems like only yesterday Ray Klann was looking for help with the bylaws, it was actually September 2005! At that time, we formed a "Special Committee on RPSD Bylaws and Rules," with the following membership: Ray Klann, Dave Anderson, Charlotta Sanders, and Erik Shores (chair). Since then, we have traded a number of notes in our electronic collaboration regarding implementation of the "standard" bylaws for RPSD.

By way of background, the Board of Directors approved a standardized format for each Division/Group in June of 2005. They also provided a template for our division's "rules". While the bylaws will be the same across Divisions (only the names have been changed), the rules allow a bit of flexibility for us to create individualized guidelines for conducting business within RPSD. While our goal was completion by the spring of 2006, comments, questions, and clarification have lengthened the process. For interested readers, templates for the standard documents may be found at <http://www.ans.org/about/committees/brc/>.

We have updated our rules and they are being circulated among the Executive Committee. Once we have settled on the "final" rules, they will be presented to the RPSD membership. The vehicle for such advertisement will most likely be through a division-wide electronic mailing referring to a link on our website. Approval of the rules is required by our Executive Committee and the national committee. The RPSD's current bylaws from 1979 may be found at our website (<http://rpsd.ans.org/executive/executive.html>). Copies of current and updated versions of the bylaws may also be requested from Erik Shores (eshores@lanl.gov).

## **2007 Election Results**

The 2007 election results were reported in early May and the elected Division Officers and Executive Committee members are:

**Officers:**

John C. Wagner, Chair  
John S. Hendricks, Vice Chair/Chair-Elect  
Erik F. Shores, Secretary  
F. Arzu Alpan, Treasurer

**Executive Committee:**

David R. Anderson  
Everett L. Redmond II  
X. George Xu

Congratulations to all, and thank you for your service to the RPSD!

## RPSD Officers and Committees

### Officers:

Andrew Hodgdon, AREVA, Chair (2007), [andrewhodgdon@comcast.net](mailto:andrewhodgdon@comcast.net)  
John Wagner, ORNL, Vice Chair/Newsletter (2007), [wagnerjc@ornl.gov](mailto:wagnerjc@ornl.gov)  
John S. Hendricks, LANL, Secretary (2007), [jxh@lanl.gov](mailto:jxh@lanl.gov)  
Stephanie Frankle, LANL, Treasurer (2007), [frankles@lanl.gov](mailto:frankles@lanl.gov)

### Executive Committee (year term expires):

F. Arzu Alpan, Westinghouse (2007), [alpanfa@westinghouse.com](mailto:alpanfa@westinghouse.com)  
Nolan Hertel, Georgia Tech (2007), [nolan.hertel@me.gatech.edu](mailto:nolan.hertel@me.gatech.edu)  
Erik Shores, LANL (2007), [eshores@lanl.gov](mailto:eshores@lanl.gov)  
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)

### Standing and Special Committee Chairs:

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 – John S. Hendricks, LANL, [jxh@lanl.gov](mailto:jxh@lanl.gov)  
Benchmarks – Dick Amato, BAPL  
Standards – Bill Hopkins, Bechtel, retired  
Bylaws – Erik Shores, LANL, [eshores@lanl.gov](mailto:eshores@lanl.gov)  
Nominating – David Anderson, Electric Boat  
Web-site – Stephanie Frankle, LANL, [frankles@lanl.gov](mailto:frankles@lanl.gov)  
ANS Board Liaison – Herb Fontecilla+