

ANS NEWSLETTER

JANUARY 2001

**RADIATION PROTECTION AND
SHIELDING DIVISION**

<http://www-rsicc.ornl.gov/rpsd/RPSD.html>

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Chairman's Message (Laurie Waters)

Congratulations to everyone who made our Spokane Topical a success! And a special thanks to Jess Greenberg and the local organizing committee for all their hard work. It is obvious that future topicals will benefit from the close co-sponsorship we had with the Health Physics Society, and we hope to continue these efforts in the future. Notices are now in preparation for the 2002 Topical to be held in Santa Fe, and please feel free to contact General Chair Tom Hiron if you would like to help out (hironst_homas_j@lanl.gov).

Our November executive committee meeting in Washington DC was very stimulating, particularly with a long discussion on the proposed changes to the ANS policy statement on the Health Effects of Low-Level Radiation. Previously, the executive committee took advantage of our newly established email listserver to conduct an extensive conversation on the subject, resulting in a Statement from RPSD, which was finalized at the Washington meeting. This statement was presented to the ANS Board of Directors, and President Jim Lake will call for a working group to discuss resolution of the issues brought up. RPSD will send a representative to this group. Further details on this topic can be found later in this

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newsletter.

Communication among our RPSD membership, knowledge and support of your interests, and the opportunity to become involved in ANS activities is key to our success. We are looking into establishing a division-wide email listserver, and let me remind you of our division home page at <http://www-rsicc.ornl.gov/rpsd/RPSD.html>. And please, let me know of your concerns and how we can help.

Message from the Chair-Elect (Larry Miller)

I am honored to serve as the chair-elect of the Radiation Protection and Shielding Division, and I look forward to working with all RPSD members to improve what we already do very well. In this capacity, I will promote better attendance of topical and national meetings, encourage active participation in RPSD committees, and promote effective utilization of electronic media for more effective communication with all of the RPSD membership.

Program development for national and technical meetings is essential for organized presentation of relevant information, and it is probably our most important activity to assure that current and new capabilities are offered to the RPSD membership. The most recent technical meetings at Nashville and Spokane included many excellent papers, they were well organized, and they offered significant opportunities for individuals to meet face-to-face for professional discussions.

Our ongoing effort for developing and updating standards facilitates the practice of radiation protection and shielding, and it encourages improvement in the state-of-the-art. If you have an interest in being involved in standards development, you may contact Bill Hopkins,

chair of the standards committee.

Benchmark efforts provide the basis for testing new methods and for evaluating established computational methods and procedures. You may submit ideas and get involved on a special website at <http://www-rsicc.ornl.gov/BENCHMARKS.html>, which is maintained by Hamilton Hunter, chair of the benchmark committee.

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Treasurer's Report (John Bennion)

I am pleased to report that our division remains financially solvent. Income for 2000 included \$1,160 for the division allocation from ANS membership dues and \$500 revenue from the MCNPX Workshop. Expenditures for 2000 totaled \$2,585, which was disbursed as follows: \$299 for awards and plaques, \$250 for student support, \$2,000 for the Blizzard scholarship, and \$36 for miscellaneous expenses. This past year, 87% of the division's expenditures provided financial support for ANS student members.

The approved budget for 2001 provides an excess of about \$2,600, exclusive of any revenue generated by the RPSD topical meeting in Spokane last September. Although the meeting did turn a profit, final figures will not be available until the books are closed out later this spring. The 2001 budget allocates \$1,000 for the Blizzard scholarship and \$600 to support student participation at the 2001 ANS Student Conference at Texas A&M University scheduled for the end of March.

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Program Committee (David Anderson)

Spokane Meeting

Jess Greenborg provided me with a report of the topical meeting. There were about 130 attendees, which is down from 170 in Nashville in 1998. Session attendance ran from 12-30 in the audience. The best attended were sessions on decommissioning, standards and low dose health effects. Three Russian presenters had their attendance paid for. Jess also expressed his concern for future topical meetings due to the effort required in obtaining enough papers in time for the conference. The Columbia Chapter of the Health Physics Society was the co-sponsor and HPS members contributed about 40% of the papers.

Santa Fe, New Mexico Meeting, RPSD-2002

Plans are moving forward for the next topical meeting. The 2002 topical received calendar placement at the winter meeting paper review in Washington in July. General Chair Tom Hiron made the presentation to the screening committee. The meeting will be held April 14-17, 2002, at the La Fonda Hotel in Santa Fe, NM. A contract has been signed with the hotel and they will guarantee per diem rates for 2002. The preliminary publications plan has been approved, and the meeting will be presented for preliminary approval at the February paper review meeting in Chicago.

Future Topical Meetings

Early next summer it will be time for me to send out letters to the local sections asking for interest in submitting a bid to host the 2004 Topical Meeting. Due to some effort involved in pulling together the Spokane meeting, the Program Committee decided to offer the local sections options for holding the 2004 topical in order to limit some of the risk involved in organizing these meetings. These may include an embedded topical (at a national meeting), or a co-located topical (either with a national meeting or with another division), in addition to the option of continuing with a stand alone topical. More details will be coming in the solicitation letters to the local sections, but this may get some of you thinking ahead.

Upcoming Meeting Schedule

2001 ANS Annual Meeting, June 17-21,
Milwaukee, WI
2001 ANS Winter Meeting, Nov 11-15,
Reno, NV
2002 RPSD Topical Meeting, April 14-17,
Santa Fe, NM
2002 ANS Annual Meeting, Jun 9-13,
Hollywood, FL
2002 ANS Winter Meeting, Nov 17-21,
Washington, DC

Electronic Review

Beginning with the 2001 Annual Meeting, the new ANS-wide electronic submittal and review system is in place. It is intended that all papers be submitted electronically and reviewed on-line. At

the paper review last July, training was held by the vendor, Community of Science, on the use and administration of the system. My impression is an improvement over our existing system, and it should streamline the process of organizing meetings.

Standards (Bill Hopkins)

Right now Andy Hodgdon needs help with the buildup factor standard so anything you can do would be of great help in at least keeping that one alive. My long term goal for benchmark efforts with M&C and Reactor Physics divisions is to create a new set of ANS standards based on benchmarks for ANS 6/ANS 19.

Benchmarks (Hamilton Hunter)

The Joint Benchmark Committee (JBC) has suggested that new benchmarks follow the format for the NEA Reactor Physics Benchmark meeting, similar to that used for criticality benchmarks. Those that have been previously documented would have to be voted into the collection, as currently written, by the JBC members. This would not preclude adjustments to analyses to fit better with the JBC format by a working group.

Six benchmarks defined by the MCD, RPD and RPSD need to be analyzed, so please contact the JBC to participate in this very important work! You may do this on the web site at <http://www-rsicc.ornl.gov/BENCHMARKS.html>. This site has a sign up area, news area, and pending benchmark area for all types of benchmarks.

L. Waters, J. Sweezy, and N. Hertel have submitted five new accelerator-based experimental benchmark analyses to SINBAD. Several others have been placed on our web site.

Honors and Awards (Bernie Kirk)

RPSD Salutes the Pride of the Twentieth Century

The Honors and Awards Committee's task is to ensure that RPSD members get the recognition they deserve. Since the year 2001 is the start of the new millennium, it is time to recap the membership achievements of the past century.

Rockwell Award

The award for a Lifetime Achievement, or the Rockwell Award, is based on long-term contribution in research, development of technology, or education in radiation measurement, protection, shielding, and dosimetry. Recipients of the Rockwell Award are:

- 1986: Theodore Rockwell II
- 1987: Arthur B. Chilton
- 1989: Herbert Goldstein
- 1991: David K. Trubey
- 1995: Norrnan Schaeffer (presented in 1996)
- 1997: Wilbur L. Bunch

ANS Fellows

The American Nuclear Society established in 1954 the honor of Fellow of the Society. The objective was to recognize members for distinguished contributions to the advancement of nuclear science and engineering or of applied arts and science. The RPSD Fellows include:

- R. G. Alsmiller, Jr.
- Ramon L. Ashley
- John R. Beyster
- Everitt P. Blizard
- Charles J. Bridgman
- Gordon L Brownell
- Anthony R. Buhl
- Dan G. Cacuci
- Bengt G. Carlson
- Arthur B. Chilton
- Eric T. Clarke
- C. E. Clifford
- Gail de Planque
- Gerard DeSaussure

Donald J. Dudziak
Charles M. Eisenhower
Ward W. Engle Jr.
Frank Feiner
Anthony H. Foderaro
Ely M. Gelbard
Herbert J. Goldstein
Glen A Graves
Gordon E. Hansen
Luisa F. Hansen
Robert J. Howerton
John H. Hubbell
Henry Hurwitz
Tomonori Hyodo
Dan T. Ingersoll
W. Reed Johnson
Clyde P. Jupiter
William Kerr
William E. Kreger
Kaye D. Lathrop
Fred Maienschein
Betty F. Maskewitz
Charles W. Maynard
J. E. McLaughlin, Jr.
Lawrence Meem, Jr.
Walter Meyer
Dade W. Moeller
Ira L. Morgan
Karl Z. Morgan
Fred R. Mynatt
Lothar W. Nordheim
Keran O'Brien
Sol Pearlstein
Robert W. Peelle
John W. Poston
Norman C. Rasmussen
A David Rossin
Massimo Salvatores
Robert T. Santoro
Norman M. Schaeffer
Robert L. Seale
Kalman Shure
Lewis V. Spencer
Bernard L. Spinrad
Edward A. Straker

David K. Trubey
Bernard W. Wehring
J. Ernest Wilkins, Jr.
C. E. Winters

Professional Excellence Award and Service Recognition Award

The Professional Excellence Award may be given to one or more individuals in the Division each year on the basis of outstanding past or current professional contribution. The basis for this award would usually be a major contribution to the state of the art, an important publication, a major technical achievement, or a sustained record of significant accomplishment and technical excellence.

The Service Recognition Award may be presented to one or more persons in the Division on an annual basis. The award is in recognition of outstanding past or current service to the Society and/or Division by a member of the Division. This award may be characterized as a distinguished service award or outstanding service award.

Recipients of these awards (T for Professional Excellence; S for Technical Service) include:

1975 Marshall Grotenhuis and Betty F. Maskewitz
1976 Norman M. Schaeffer and Keran O'Brien
1977 Herbert Goldstein and A. Edward Profio
1978 R. L. Ashley and David E. Bartine
1979 F. R. Mynatt and W. W. Engle, Jr.
1980 R. J. LaBauve and F. J. Muckenthaler
1981 M. A. Capo and W. A. Rhoades
1982 J. C. Courtney and B. A. Engholm
1983 G. L. Simmons and D. K. Trubey
1984 W. Bunch and G. Lahti
1985 T. A. Gabriel and R. K. Disney
1986 L. Spencer and R. E. Faw
1987 Radiation Shielding Information Center (RSIC)
1988 C. Eisenhauer (T) and R. Johnson (S)
1989 J. Hubbell (T) and W. Bunch (S)

- 1990 K. Shure (T) and R. Roussin (S)
- 1991 Y. Harima (T) and J. Cardito (S)
- 1992 L. Carter (T) and D. Ingersoll (S)
- 1993 R. Malenfant (T) and W. Hopkins (S)
- 1994 J. Greenborg (T) and E. Normand (S)
- 1995 D. Dudziak (T) and N. Tsoulfanidis (S)
- 1996 R. MacFarlane (T) and M. Emmett (S)
- 1997 William T. Urban (S)

Division Chairmen

The following individuals served in the capacity of Chair of RPSD:

- 1962: Marshall Grotenhuis
- 1963: H. Goldstein
- 1964: R. L. Ashley
- 1965: W. E. Kreger
- 1966: F. Ashwbrenner
- 1967: E.T. Clarke
- 1968: P. S. Mittelman
- 1969: A. B. Chilton
- 1970: A. H. Foderaro
- 1971: H. E. Hungerford
- 1972: J. R. Beyster
- 1973: D.J. Dudziak
- 1974: W.R. Johnson
- 1975: D. K. Trubey
- 1976: E.A. Straker
- 1977: F. R. Mynatt
- 1978: W.L. Bunch
- 1979: S. A. W. Gerstl
- 1980: W. B. Kreger
- 1981: G. P. Lahti
- 1982: M. J. Kolar
- 1983: D. E. Bartine
- 1984: E. T. Boulette
- 1985: S. E. Binney
- 1986: R.K. Disney
- 1987: R. W. Roussin

1988: N. Tsoulfanidis
1989: W.J. Johnson
1990: J. M. Cardito
1991: D. T. Ingersoll
1992: W. C. Hopkins
1993: M.B. Emmett
1994: W.T. Urban
1995: L.L. Carter
1996: N. E. Hertel
1997: J.W. Poston
1998: J. Greenborg
1999: B. L. Kirk
2000: R. Little
2001: L. S. Waters

Best Paper

The Honors and Awards Committee is charged with the development of procedures for the selection of the “Outstanding Technical Papers” and the “Best Technical Paper”. The selection applies to any ANS Annual, or Winter, or Topical meeting in which the RPSD sponsors a full complement of sessions. The list of awardees may be viewed from the website: http://www-rsicc.ornl.gov/rpsd/awards/awards_man.html.

Blizard Memorial Scholarship

The Blizard Scholarship, endowed by individual and corporate contributions, supports Master's and Ph.D. students pursuing specialization in the field of radiation protection and shielding. Recipients of the scholarship are:

1995 Michael G. Cantaloub, Oregon State Univ.
1996 Michael G. Cantaloub, Oregon State Univ.
1997 Brian C. Franke, Univ. of Michigan
1998 Brian P. Hanson, Univ. of Michigan
1999 Roland R. Benke, Univ. of Michigan

If you have any questions or suggestions for nominees on any of

the above awards, please contact Bernadette L. Kirk (865-574-6176), kirkbl@ornl.gov.

Health Effects of Low-Level Radiation Policy Statement (Laurie Waters)

In September, we were contacted by Herb Fontecilla of the Public Policy Committee for comments on a proposed change to the ANS Policy Statement on the Health Effects of Low Level Radiation. The currently approved statement can be found at <http://www.ans.org/pi/ps/>. The proposed change involves inclusion of the following statement:

"The American Nuclear Society recognizes that there are no detectable harmful effects to humans at radiation levels below 100 mSv (10 rem) and believes that there may even be health benefits at lower doses."

RSPD was asked to examine the supporting Technical Brief issued by ANS, to see if it was still adequate for the proposed change. This request generated an excellent and stimulating discussion in the RSPD executive committee and board, both at the Spokane and Washington meetings, and also through our email listserver. Many of our members expressed concern with the changes, and RSPD generated a statement (reprinted below) in response to Herb Fontecilla, which was presented to the ANS Board of Directors when the proposed policy statement came up for discussion. ANS Board deferred further action pending a review of the situation through a working group to be established by President Jim Lake. This represents an excellent opportunity for RPSD members to become involved in an important health issue, and we will participate to our fullest extent.

Statement from RSPD regarding Policy Statement: Health Effects of Low-Level Radiation approved by Executive Committee November 13, 2000

The RPSD Executive Committee members present in Spokane examined the present ANS Policy Statement on the Health Effects of Low-Level Radiation, and the accompanying Technical Brief, dated April 1999 as distributed on the ANS Web site. We endorse the current Policy Statement as a reasonably cautious statement, particularly calling for further research into the issues. Without a

formal review of the Technical Brief (which we did not produce as a Division), we are unable at this time to say whether it contains sufficient technical basis to support even the present Policy Statement. As a Division, we would like to conduct our own review of the Technical Brief in light of the present Policy before endorsing it as applicable to any proposed Policy changes. We have approached key members of the Division as to how to undertake such a review, and their response indicates that a several month effort would be necessary. There was no time to complete such an activity before the Washington meeting.

We have examined the proposed statement revision (November, 2000), in the several forms you have sent around. Although your initial request to this Division was for technical review of the Brief, we do wish to make a statement on the proposed Policy changes. The Radiation Protection and Shielding Division does not currently endorse the proposed changes, for the following reasons:

1. We find some inappropriate language in the proposed revision, and we are concerned about potential legal impact for the ANS should this Policy ever be used to support Federal or State regulatory requirements. In particular, we believe that the statement "there may even be health benefits at lower doses" lacks specificity, and as such cannot currently be defended with the technical rigor that our members require in their own everyday work.
2. RPSD, reflecting the views of most of our professional community, has serious concerns with the application of the Linear No Threshold Hypothesis to all situations. However, we caution about taking an extremely opposite stance. We have not adequately defined a "threshold" concept, nor discussed threshold values or applications to specific situations. We caution against applying a too broad, simplistic approach to a complex situation, which can be just as bad as the current one.
3. We would very much like to see a collaborative effort with the Health Physics Society on such statements, or at least be assured that those drafting the policy are aware of the current HPS position, so that professionals in closely related fields are coordinated in the position they present to the public.

We appreciate the opportunity you are giving us to become involved in policy-making statement; it is largely unprecedented

that we as a Division are consulted outside of the PPC meetings.
Thanks for your consideration, and I will talk to you further at the meeting.

Nominating (Bob Little)

The following slate of officer candidates for RPSD was approved by the Executive Committee:

Chair: Larry Miller

Vice-Chair / Chair-Elect: Jeff Johnson and Ray Klann

Secretary: Dave Court

Treasurer: John Bennion

Executive Committee Group 1: Nolan Hertel and Larry Townsend

Executive Committee Group 2: Dave Anderson and Michael

Momeni

Executive Committee Group 3: Stephanie Frankle and Hamilton Hunter

Thanks to all who have volunteered to serve and also to all of you who suggested such fine candidates. Please vote when ANS sends out ballots.