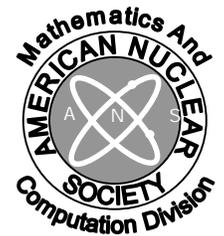


AMERICAN NUCLEAR SOCIETY MATHEMATICS AND COMPUTATION DIVISION



February, 1999

<http://www.mcd.ans.org/newsletters>

Message from the Chair

Perhaps you've noticed that it has been some time since our last M&C Newsletter, October 1998 to be exact. After many years of excellent service to the Division, our Newsletter Editor Ali Haghighat has stepped down as Publicity and Public Information Chair and Editor. Todd Palmer has graciously volunteered to succeed Ali. The first fruits of his labor sit before you. Todd's home institution, Oregon State, is the new home for the M&C web-site: <http://www.mcd.ans.org>. Todd invites you to surf on over and check it out. Send along any comments or suggestions to Todd, but be aware, the web-site is still in its infancy. With the increased use of electronic communications in almost everything we do, the M&C Executive Committee voted to disband the special Electronic Communications Committee and merge its responsibilities into the Publicity Committee. Thanks go to Jasmina Vujic for heading up this special committee.

Student Support

Congratulations to Carla Barrett of the University of Michigan for the selection of her paper, "A Variationally Enhanced Monte Carlo Algorithm for Neutron Shielding Problems," as the top student M&C paper at the Washington ANS meeting. M&C presented her an award for \$100. We hope to continue this award at subsequent meetings as an encouragement to students to pursue topics related to M&C.

Along these lines, we are supporting this year's Regional Student Conferences with donations toward their general operating expenses as well as graduate and undergraduate best paper awards.

Volunteers Needed

The Division is in need of volunteers for its various committees. Christa Boman is stepping down as chair of the special Student Committee (Thank you, Christa). Ahmed Badruzzaman, chair of the Benchmark Committee, has not been able to make any Executive Committee meetings for some time. Andy Smetana has had the thankless job of Standards Committee Chair for quite some time and, I'm sure, would appreciate some assistance. If you are inspired to help out with these or any other committees please contact me or the committee chairs.

E-Review

Through Program Committee Chair Forrest Brown's leadership, M&C Division has lead the ANS in conducting electronic paper

reviews. For several years now, M&C paper reviewers have saved travel time and money by reviewing papers for the ANS National Meetings in the comfort of their own offices through the Internet. For the recent Washington meeting, not a single M&C representative attended the on-site paper review. Other Divisions are now adopting our practices. Electronic *submission* of papers is also possible (<http://ans-mcd.tamu.edu>).

Upcoming Meetings

The next M&C Topical, *International Conference on Mathematics and Computation, Reactor Physics and Environmental Analysis in Nuclear Applications (M&C '99 MADRID)*, to be held in Madrid, Spain (September 27-30, 1999) will pull us even further into the electronic age. All submission and review of papers will be done via the Internet. Full papers are due March 15. See <http://www.din.upm.es/mc99/> for more details.

M&C is co-sponsoring the *2000 ANS International Topical Meeting on Advances in Reactor Physics and Mathematics and Computation into the Next Millennium* with the Reactor Physics Division. This meeting will be held in Pittsburgh, Pennsylvania (May 7-11, 2000). See <http://ans-pgh.commerce.wec.com>.

The 2001 M&C Topical will be sponsored by the Idaho Section and will be held at the Coeur d'Alene Resort, Idaho.

National Meeting Blues

A debate is raging at ANS National Program Committee regarding the future of twice-yearly national meetings. This issue has come to the fore because hotels are refusing to host the meetings. They are not profitable enough for the hotels because the amount of meeting room space is disproportionate to the number of "sleeping rooms" booked by meeting attendees. I have noticed, on occasion, that I cannot always tell the difference between meeting and sleeping rooms, but I digress. For our part, M&C has reduced its need of rooms to hold our committee meetings to only three hours. Three scenarios are under consideration:

1. business as usual: two meetings each year
2. collocated topicals: one meeting remains as it is today; the other becomes a collection of collocated topicals

3. one national meeting

The M&C Executive Committee is in support of the single national meeting concept. Until one yearly meeting has been eliminated, however, M&C will continue to have a presence at all meetings through our continued sponsorship of relevant technical sessions. We feel that MCD should not dictate to our membership which meetings they should or should not attend.

We are vehemently opposed to the concept of collected topicals. M&C favors separate topicals for a number of reasons: variety of locations, lack of conflict with the National Meeting agenda, financial benefits to M&C and the sponsoring local section. Please let me know what you think.

Jim Rathkopf

Report

EXECUTIVE COMMITTEE MEETING WASHINGTON, DC, NOVEMBER 15-19, 1998

Benchmark Committee

I.K. Abu-Shamays suggested that RPD and MCD combine their Benchmark Committees. Ali Haghghat and Farzad Rahnema will talk with RPD to determine a need, and talk with Ahmed Badruzzaman, the Chair of the Benchmark Committee, about his participation.

Finance Committee - Allison Stolle (for Tom Sutton)

Allison reported that the dispute over the Division's share of the topical meeting profits was resolved. This year's expenses include funds for the E-review web site. It was also noted that MCD would get a 5% cut from PHYSOR 2000 meeting.

Honors and Awards Committee - Lural Briggs

Information on MCD participation in the evaluation of Dannels scholarship applicants is still being gathered. The Scholarship Policy and Coordination Committee is considering adjusting scholarship awards to amounts which can be supported by the individual scholarship endowments, which would reduce the Dannels Scholarship from 3500\$ to 2500\$. Mike Westfall is continuing to work on identifying MCD candidates for Fellow and processing the nomination packages through the national Honors and Awards. Contact either Mike or Lural for details. The committee has received two nominations for the next Distinguished Service Award and will continue to accept nominations until May 1st, 1999. Anyone wishing to nominate MCD members various ANS-wide awards should contact Lural.

Membership Committee - Madeline Feltus

Madeline reported that as of 11/1/98, there were a significant number of unpaid members. It was also reported that 98 members were dropped. Numerous attendees voiced a question about the timing of this information with the dues cycle of the Society.

Publicity - Todd Palmer

Todd has volunteered to replace Ali Haghghat as newsletter editor (thanks, Ali!) and has arranged for a MCD web site: <http://www.mcd.ans.org>.

Standards Committee - Andy Smetana

The draft of ANS 10.2, "Portability of Scientific and Engineering Software," is available and a meeting will be held later that day to review and vote on the draft. Revision is needed for ANS 10.4, "Verification and Validation." A committee is forming. Andy asked the Committee about the value of the standards effort. Numerous attendees were very supportive of the effort; however, it was noted that ANS's method of distributing standards discourages their use in industry. The cost of these standards can also be prohibitive to universities.

Program Committee - Forrest Brown

I.K. Abu-Shamays passed out the call for papers for the PHYSOR 2000 topical meeting and notified MCD that a technical program committee meeting was to be held later in the week. A list of the current Program Committee members was prepared; their duties are to participate in the MCD E-reviews. If not active for a year, members will be dropped. Members may nominate themselves to participate at anytime by emailing Forrest at fbrown@lanl.gov. There are four regular sessions and one special session at the 1998 ANS Winter Meeting. Nine of the 34 papers were submitted electronically as PDF files (via the Texas A&M website). All MCD members are encouraged to submit papers electronically in the future. The timetable for special sessions at future national meetings was discussed. There are no special sessions at the Boston meeting. To submit a topic for the San Diego meeting, the week of the Boston meeting is the deadline. The winter 2000 meeting will be in Washington DC again. The 2001 meetings will be in Milwaukee and Reno. A change was approved to the E-review procedures: all reviewers' comments will be visible to other reviewers, but only by reviewer ID not by name. The motivation for this is to improve the quality of the reviews. The 2001 MCD Topical meeting will be hosted by the Idaho section in the proposed Coeur d'Alene Resort Hotel during October.

Student Committee - Jim Rathkopf for Christa Boman

The student lunch to be held this week was canceled because 2 or 3 students out of 80 agreed to attend. Judges were needed for the best student written paper award for this meeting. Volunteers were arranged to judge the three papers in the MCD sessions. The Chair asked for volunteers

relieve Christa Boman as chair of this committee. The RPI Student ANS Branch has requested monetary contributions and paper awards funds for their March 99 Student Paper Conference. The committee approved a MCD paper award (graduate and undergraduate) for 100\$ at both conferences (400\$ awards total) and donate 100\$ to the general funds of both conferences for 600\$ total.

Electronic Communication Committee – Paul Wilson

Paul reports that ANS has hired an Information Systems person and will hire a web master soon. They would be available to integrate the MCD website into the ANS website. A motion to merge this committee with the Publicity Committee was put forward and was unanimously approved.

Nominating Committee - Marv Adams

Marv proposed a list of officer candidates (Andrew Smetana - Vice Chair, Yousry Y. Azmy – Secretary, Dmitriy Anistratov – Treasurer) and the committee voted to unanimously accept the list.

Upcoming Meetings

*1999 ANS Annual Summer Meeting
Boston Marriott Copley Place, Boston, Massachusetts, June 6-10, 1999.*

*International Conference on Mathematics and Computation, Reactor Physics and Environmental Analysis in Nuclear Applications
(M&C '99 MADRID)*

This meeting held in Madrid, Spain (September 27-30, 1999) will pull us even further into the electronic age. All submission and review of papers will be done via the Internet. Full papers are due March 15. See <http://www.din.upm.es/mc99/> for more details.

*Global '99
International Conference on Future Nuclear Systems: Nuclear Technology - Bridging the Millennia*

Sponsored by the Fuel Cycle and Waste Management Division of ANS, this conference will be held at the Snow King Resort in Jackson Hole, Wyoming, August 29 - September 3, 1999. See <http://www.anlw.anl.gov/global99> for more details.

*1999 ANS Annual Winter Meeting
Long Beach Convention Center and Hyatt, Long Beach, California, November 14-18, 1999.*

*2000 ANS International Topical Meeting
Advances in Reactor Physics and Mathematics and Computation into the Next Millennium*

Cosponsored with the Reactor Physics Division, this meeting will be held in Pittsburgh, Pennsylvania (May 7-11, 2000). See <http://ans-pgh.commerce.wec.com> for more details.

In Memoriam: Gerald C. (Jerry) Pomraning

Gerald C. (Jerry) Pomraning was born in Oshkosh, Wisconsin on February 23, 1936. In 1962 he received his Ph.D. in Nuclear Engineering from MIT. In 1969, following seven years of industrial research at the General Electric and General Atomic companies, he and two colleagues founded Science Applications International Corporation (SAIC) in San Diego. In 1976, Jerry joined UCLA as a professor in the School of Engineering and Applied Science.

Jerry's research interests encompassed transport and kinetic theory, radiative transfer, radiation hydrodynamics, nuclear reactor physics, and applied mathematics. He published two books and about 250 papers on these subjects. During his career he held visiting appointments at Brookhaven National Laboratory, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, the Nuclear Research Center in Karlsruhe, Germany, and the Universities of Bologna and Rome (La Sapienza) in Italy.

Jerry was awarded the Mark Mills Awards of the American Nuclear Society for his Ph.D. dissertation work. He was an elected Fellow of the American Nuclear Society (1975), the American Physical Society (1980), and the American Association for the Advancement of Science (1986). In 1994 he was awarded a distinguished service citation from the University of Wisconsin for his contributions to nuclear reactor physics, transport theory, and radiative transfer. In 1997 he was awarded the Arthur Holly Compton Award of the American Nuclear Society for his contributions to nuclear engineering education and research. Just prior to his death on February 6, 1999, Jerry was awarded the ANS Eugene Wigner Award for his contributions to reactor physics. [*Thanks to Ed Larsen*]

1999-2000 ANS MATHEMATICS AND COMPUTATIONS DIVISION OFFICERS

Chair: James Rathkopf(LNLL, 925/422-4602, rathkopf@lnll.gov)
Vice-Chair/Chair Elect: Farzad Rahnema (Georgia Tech, 404-894-3731, farzad.rahnema@me.gatech.edu)
Secretary: Robert Singleterry (NASA, 757/864-8094, singleterry@larc.nasa.gov)
Treasurer: Thomas M. Sutton (KAPL, 518-395-7047, tmsutton@aol.com)

EXECUTIVE COMMITTEE

1998 Raymond E. Alcouffe (LANL, 505/667-5956, rea@lanl.gov)
1998 Forrest Brown (KAPL, 518/395-7370, brownf@rpi.edu)
1998 Madeline A. Feltus (Penn State, 814/865-2866, maf@psuvm.psu.edu)
1999 Edward W. Larsen (University of Michigan, 313/936-0124, ed.larsen@um.cc.umich.edu)
1999 Ronald E. Pevey (U. of Tennessee, 423/974-7573, rpevey@utk.edu)
1999 David P. Weber (ANL, 630/252-8175, dpweber@anl.gov)
2000 Douglass L. Henderson (U. of Wisconsin, 608/263-4970, henderson@enr.wisc.edu)
2000 James P. Halloway (U. of Michigan, 313/939-3126, hagar@umich.edu)
2000 Allison Stolle (KAPL, 518/395-4551)
2001 Jeffrey A. Borkowski (Studs vik, 208/522-4440, jeff@soa.com)
2002 Todd S. Palmer (Oregon St. U., 541/737-7064, palmerts@enr.orst.edu)
2003 Anil K. Prinja (U. New Mexico, 505/277-4600, prinja@unm.edu)

EX OFFICIO

Walter Weaver (INEL, 208/526-9299, wlw@inel.gov)
Craig Grochmal (Prof. Div. Comm. Chair)

BOARD LIAISON

Laural Briggs (ANL, 630/252-4677, llbriggs@anl.gov)

STAFF LIAISON

Kristi Williams (ANS, 708/579-8257)

CHAIRS OF STANDING DIVISION COMMITTEES

BENCHMARK: Ahmed Badruzzaman [**Seeking Replacement**]
FINANCE: Christa Bowman
HONORS AND AWARDS: Laural Briggs
MEMBERSHIP: Madeline A. Feltus
NOMINATING: Walt Weaver
PROGRAM: Forrest Brown and Ali Haghghat (Co-Chairs)
PUBLICITY: Todd Palmer
STANDARDS: Andy Smetana [**Seeking Assistance**](SRS, 803/725-4192,
andrew.smetana@srs.gov)
STUDENT: Vacant [**Please Volunteer**]

Editor's Message: This newsletter is issued twice a year and can be accessed at <http://www.mcd.ans.org/newsletters>. Please send your news and *constructive* comments to me at Oregon State University, Department of Nuclear Engineering, 116 Radiation Center, Corvallis, OR 97331-5902; FAX (541) 737-0480; E-Mail, palmerts@enr.orst.edu; or call (541) 737-7064.

Todd Palmer