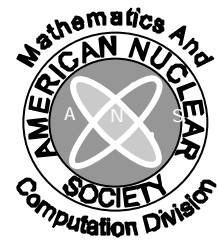


# AMERICAN NUCLEAR SOCIETY MATHEMATICS AND COMPUTATION DIVISION



February, 2000

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

## *Message from the Chair*

Let me briefly introduce myself at the outset of this newsletter. I am Farzad Rahnema, and I am in the midst of my one-year leadership of the Mathematics and Computations Division of ANS. The change in leadership occurred in June of 1999, when Jim Rathkopf completed his term as Chair. Thank you, Jim, for your important contributions to the Division. Without further ado, let me update you on the events of the last 8 months.

### *News from ANS Headquarters*

As you know, over the past year, at the request of the ANS president, a number of Task Force and Infrastructure III meetings were held to evaluate ANS meetings. The purpose of the discussions was to create better meetings with improved sessions and greater attendance. The Board of Directors approved the Infrastructure recommendations by a vote of 20-3. Most of the items of interest in the approved recommendations affect the Program Committee, but some also affect the MCD budget. The recommendations will be implemented (phased-in) on a gradual basis. The recommendations of interest are summarized below:

➤ The “two national meetings per year” format will continue. (Most of the divisions including MCD had been advocating a single national meeting concept.) The Meetings Department of ANS headquarters will take financial responsibility for Topical as well as National meetings. Divisions will take technical responsibility for their sponsored sessions in National and Topical meetings. Embedded Topical meetings are now highly encouraged to improve attendance in the National meetings. A National Screening Committee (SC) is “empowered” to make all decisions regarding the siting and timing of the topical meetings. The SC decisions are final subject to an appeal to the ANS President. ANS headquarters will also review and recommend locations & hotel contracts for National as well as Topical meetings. There will be a dedicated time to visit the Nuclear Technology Exhibit at the National meetings. ANS headquarters will conduct electronic paper reviews in the near future for all divisions. Despite the vast experience of the Math and Comp. and the Reactor Physics divisions with electronic review, neither division has been asked for input into the process.

➤ A new financial incentives program will be put in place to encourage ANS Divisions to support the National meetings.

An automated electronic management system for paper submissions will be implemented beginning with the 2001 Milwaukee meeting.

- Some of the new “features” of ANS meetings that would affect the registration fee in order of priority are:
- Refreshments Breaks in morning & afternoon;
  - upgraded audio/visual equipment;
  - increase attendance at Honors & Awards functions by including their costs in the registration fee.

These features will add up to about \$120 to the meeting registration fee and be phased-in in the above order.

### *Program Committee Changes*

After many years of outstanding service to the Division, at the latest M&C Executive Committee (EC) meeting in Long Beach, Forrest Brown announced that he is stepping down as the Program Committee Chair. Thanks to Forrest, MCD was the first to successfully implement an “electronic” paper review process. His Co-chair Ali Haghighat has agreed to become the new Program Committee Chair effective immediately. Robert Singletery has been appointed as the new co-chair. Congratulations to both Ali and Robert. I look forward to their contributions and am confident they will continue to improve the program committee activities.

### *“Pomraning” Award*

At the Long Beach meeting, the executive committee voted to change the name of the M&C “Distinguished Service” Award to the “Pomraning” Award in memory of Gerald C. Pomraning. This award will be designated for the “Outstanding Technical Achievement” in the area of Mathematics and Computation. The MCD Honors and Awards Committee will be looking into the possibility of making this a national award rather than a M&C division award.

### *Benchmark Committees Combine*

Recently, Shielding, Reactor Physics and the M&C divisions agreed to merge their benchmark committees into one. It is hoped that by joining forces, the joint benchmark committee will be more productive in collecting and

publishing approved work on benchmarks that would benefit members of all three divisions. The committee structure is currently under development by an ad hoc committee made up of representatives from the three divisions.

*Student Member of MCD Executive Committee*

In order to increase the involvement of students in the Division's activities, the Executive Committee has voted to

create a new "Student" Executive Committee Member position. This will also help prepare students for service roles in the future. Of course, for this to happen, it is required that the majority of the members of the division approve this new position.

**Farzad Rahnema**

## *Report*

### **EXECUTIVE COMMITTEE MEETING LONG BEACH, CA, NOVEMBER 14, 1999**

#### *Benchmark Committee*

The Joint Benchmark Committee (JBC) was approved unanimously by the Committee, and the Chair proposed that Ali Haghghat, Richard Sanchez and Robert Singleterry represent M&C in the JBC. The sitting Chairman will be ex-officio and I.K. Abu-Shumays and Barry Ganapol will serve in advisory roles.

#### *Finance Committee - Dmitry Anistratov*

The Division is in good financial health. A question arose about the cost of the electronic review which amounted to \$750 this year. Dima is looking into this.

#### *Honors and Awards Committee - Laural Briggs*

Ed Larsen, Professor at the University of Michigan, received the 1999 Distinguished Service Award at the Madrid M&C Topical Meeting. The Chair proposed renaming this award the Pomraning Award, to honor the late Gerry Pomraning's memory. This honor can continue to be awarded by M&C, or it can be presented on the national level. The latter, while more prestigious, allows the division less control, requires some paperwork to be filed with ANS Headquarters, and must be fully endowed up-front (about \$15,000) in order to include a \$1000 monetary award. Anil Prinja proposed that he approach SAIC to see if they would contribute \$15,000 for this purpose.

#### *Membership Committee - Madeline Feltus*

Madeline voiced a continued concern over an apparent drop in membership, but also noted that ANS National has indicated that the Division has 40 new members. As usual, there is no complete understanding of this data. Madeline will continue to attempt to clarify this issue.

#### *Publicity - Todd Palmer*

The Division's web page is up and running, and members are encouraged to check it out. It will serve to post items of interest to M&C members in a timely and convenient fashion. Also, future M&C national meeting summaries can be submitted to this site as well. The MCD web site can be found at <http://www.mcd.ans.org>.

#### *Standards Committee - Andy Smetana*

Andy painted a bleak picture of the future of the Validation and Verification Standards that are tailored to the purposes of the nuclear industry due to lack of interest within M&C membership. He fears the effort will die in one or two years unless more members engage in related activities. Similarly, the software standards activity, mainly code portability issues, is also dying because no new members volunteer to serve on the Standards Committee. The activity focused on the Documentation of Codes will be dropped since it is accurately met by the IEEE corresponding standard. The question was raised as to joining M&C Standards with those of other divisions, and Andy replied that this had been considered earlier and was voted down by the Division. He proposed that the lack of interest in the activity by the M&C membership be discussed in the next meeting to determine whether our members think Standards are important or not. Andy and Robert Singleterry will poll the members in the meanwhile to find out if they care.

#### *Program Committee - Forrest Brown*

The committee is concerned about the drop in the number of papers submitted by M&C members to ANS National meetings, and will poll the membership about the reasons. Forrest raised the question of whether M&C should merge with another division, such as RPD, whose interests overlap considerably with ours. The sentiment among the attendees ran mostly against this proposal. Forrest Brown also announced that he is stepping down as chair of the Technical Program Committee.

#### *Student Committee - No Chairman at Present*

The Chair asked if this committee was indeed needed. If it is, then someone must be named to chair its activities; otherwise, it should be abandoned. This led to a discussion of the need for M&C members to participate in mentor programs organized on the national level. Also, Todd Palmer will

check to see whether student members receive the Division's newsletter. Another point is to invite student members to participate in the Executive Committee meetings in the future. The above three items are designed to increase students' involvement in the Division's activities and prepare them for service roles in the future.

*Nominating Committee* - Farzad Rahnema for Jim Rathkopf

Jim Rathkopf proposed a list of officer candidates (Andrew Smetana - Chair, Forrest Brown - Vice Chair, Thomas Evans – Secretary, Tunc Aldemir – Treasurer, Bernadette Kirk, William Martin, Piero Ravetto, Michael Zika - Executive Committee) and the committee voted to unanimously accept the list.

## *Upcoming Meetings*

*ICONE-8  
Eighth International Conference on Nuclear Engineering  
April 2-6, 2000, Baltimore, Maryland*

See <http://www.icone-conf.org/icone8/> for more details

*PHYSOR-2000  
ANS International Topical Meeting on Advances in Reactor Physics and Mathematics and Computation into the Next Millennium  
Pittsburgh, Pennsylvania, May 7-11, 2000*

Cosponsored with the Reactor Physics Division. See <http://ans-pgh.commerce.wec.com> for more details.

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

*SNA-2000  
4<sup>th</sup> International Conference on Supercomputing in Nuclear Applications  
Toranomon-Pastoral, Tokyo, Japan, September 4-7, 2000*

Sponsored by Japan Atomic Energy Research Institute, cosponsored by OECD/Nuclear Energy Agency, Atomic Energy Society of Japan, Japan Nuclear Cycle Development Institute. See <http://ciscper.tokai.jaeri.go.jp/sna2k/> for more details.

*MC2000  
International Conference on Advanced Monte Carlo for Radiation Physics  
Lisbon, Portugal, October 23-26, 2000*

For more information, see <http://www.itn.pt/Meetings/MC2000/>.

*2000 ANS International Meeting  
Washington, DC, November 14-18, 1999.*

[More up-to-date information about relevant conferences can be found at <http://www-rsicc.ornl.gov/Newsletters/>.]

## *M&C Topical Meeting - Madrid, Spain, September 27-30, 1999*

The bi-annual M&C Topical meeting was held in Madrid, Spain during the last week of September, 1999. The meeting was extremely successful, with 27 oral sessions, 1 poster and 1 interactive session which showcased 214 invited and contributed papers. The review process was conducted entirely by electronic means, and the conference proceedings were published on CD-ROM as well as in hard copy. The organizing committee (Professors Guillermo Velarde, Jose M. Aragoes, Carol Ahnert, Oscar Cabellos, and Pedro Velarde) did a superb job providing an environment that allowed for the free exchange of technical information and that encouraged frequent social interaction.

Three student Best Paper Awards (\$200 each) were given to Chris Gesh (Texas A&M, now LANL), Nuria Herranz (Polytechnic University of Madrid), and Alan Toreja (University of Illinois). Jacques Devooght, Gerry Pomraning, Pierre Benoist, and Rafael Perez were honored at the Conference for their contributions to the Mathematics and Computations community.

## **2000-2001 ANS MATHEMATICS AND COMPUTATIONS DIVISION OFFICERS**

Chair: Farzad Rahnema (Georgia Tech, 404/894-3731, farzad.rahnema@me.gatech.edu)  
Vice-Chair/Chair Elect: Andy Smetana (Savannah River Site, 803/725-4192, andrew.smetana@srs.gov)  
Secretary: Yousry Y. Azmy (ORNL, 423/524-8069, yya@ornl.gov)  
Treasurer: Dmitriy Anistratov (Texas A&M Univ., 979/862-2033, dmitriy@trinity.tamu.edu)  
Outgoing Chair: James Rathkopf (LNL, 925/422-4602, rathkopf@lnll.gov)

### **EXECUTIVE COMMITTEE**

2000 Douglass L. Henderson (U. of Wisconsin, 608/263-4970, henderson@engr.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 (Studsvik, 208/522-4440, jeff@soa.com)  
2001 Todd S. Palmer (Oregon St. U., 541/737-7064, palmerts@engr.orst.edu)  
2001 Anil K. Prinja (U. New Mexico, 505/277-4600, prinja@unm.edu)  
2002 Randal Baker (LANL, 505/667-3041, rsb@lanl.gov)  
2002 Robert Grove (KAPL, 518/395-7042, regrove@earthlink.com)  
2002 Richard Sanchez (CEA, +33 (0) 1 6908 5404, richard.sanchez@cea.fr)

### **EX OFFICIO**

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

### **BOARD LIAISON**

Laural Briggs

### **STAFF LIAISON**

Kristi Williams (ANS, 708/579-8257)

### **CHAIRS OF STANDING DIVISION COMMITTEES**

FINANCE: Dmitriy Anistratov  
HONORS AND AWARDS: Laural Briggs  
MEMBERSHIP: Madeline A. Feltus (USDOE, ??,???)  
NOMINATING: Marv Adams (Texas A&M, mladams@tamu.edu, 409/845-4198)  
PROGRAM: Ali Haghghat and Robert Singleterry (Co-Chairs)  
PUBLICITY: Todd Palmer  
STANDARDS: Andy Smetana [**Seeking Assistance**]  
STUDENT: Vacant [**Please Volunteer**]

**Editor's Message:** This newsletter will (hopefully) be issued twice a year and can be accessed electronically 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@engr.orst.edu; or call (541) 737-7064.

**Todd Palmer**