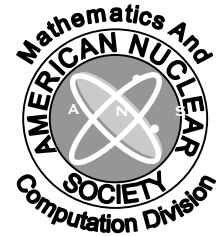


AMERICAN NUCLEAR SOCIETY MATHEMATICS AND COMPUTATION DIVISION



May, 2001

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

MESSAGE FROM THE CHAIR

As I finish my term as the Chair of the Mathematics and Computations Division, I would like to recognize some of the individuals who work on behalf of the Division:

- Dr. Todd Palmer who has the unenviable job of Newsletter Editor along with Publicity Committee duties,
- Dr. Laural Briggs who Chairs the Honors and Awards Committee,
- Dr. Madeline Feltus who Chairs the Membership Committee and who helps keep ANS straight on M&C membership levels, and
- Drs. Ali Haghghat and Robert Singleterry who Co-Chair the Program Committee.

These individuals, along with others, carry on the business of the Division and help make M&C the strong Division that it is.

I would now like to briefly touch on several topics:

The strength of the Mathematics and Computations Division and the ANS is its members. According to the Fall 2000 Membership report, M&C Division increased by a little over 1%. During the same time period, ANS overall membership decreased by 2%. I urge you to talk with your colleagues about joining M & C Division and the ANS. Membership benefits can be reviewed in the Member Services section of the ANS Web site (www.ans.org).

The M&C Division continues to have very successful Topical Meetings. Dr. I. K. Abu-Shumays presented

the final report on PHYSOR 2000 International Topical Meeting "Advances in Reactor Physics and Mathematics and Computation in the Next Millennium" which

M&C co-sponsored with the Reactor Physics Division. The M&C share of the proceeds was over \$4,200. Topical Meetings are the primary source of income for the Division which funds the Honors and Awards program, Scholarships and helps provide Student Support.

The next M&C Topical Meeting is the 2001 ANS International Meeting on Mathematical Methods for Nuclear Applications (www.srv.net/~ians/MC2001). This meeting will be held in Salt Lake City September 9 – 13, 2001.

The M&C Division actively supports the ANS Standard efforts. The Standard "Portability of Scientific and Engineering Software", ANSI/ANS-10.2-2000, was recently published. M&C sponsors the ANS-10 Standards Subcommittee which developed this Standard. New members are always welcome on this Committee.

As the energy crisis worsens, safe, economic, and environmentally sound energy production is receiving renewed interest. Nuclear power is a proven supplier of economic, environmentally sound energy. The computational methods and tools developed and used by members of the Division have positioned nuclear power as a viable energy source to meet future energy needs. The continuing advances made by the Division members will help enhance Nuclear Power's role in the future.

EXECUTIVE COMMITTEE REPORT

WASHINGTON, DC, NOVEMBER, 2000

Treasurer's Report: (Tunc Aldemir)

The Division has \$11,004 in the treasury.

Report on Physor 2000: (I.K. Abu-Shumays, Bettis, Technical Program Chair)

The Physor 2000 Meeting, which took place in Pittsburgh, PA on May 7-12, 2000, hosted by the ANS Pittsburgh Session was a success. The meeting was co-sponsored by the M&C Division. The net result of the sponsorship was a payment to M&C Division of \$ 4235.05.

Honors and Awards: (Laurel Briggs)

Two awards of note were discussed: 1) Pomraning Award - This is a new award and is in the process of being established. M&C is being asked to fund part of the award. The breakdown is as follows: \$15,000 from SAIC, \$5000 from M&C [\$20,000 total award]; 2) Distinguished Service Awards: The Distinguished Service Award to be presented at the M&C 2001 Topical Meeting in Salt Lake City has only one nomination thus far. Nominations for deserving members are requested. Finally, there was a request for more people to serve on the Honors and Awards Committee. The committee needs 3-5 members. See Laurel Briggs for more information.

New Working Group on Space Science: (Robert Singleterry)

Robert Singleterry gave a presentation on a new working group, Aerospace Nuclear Science and Technology Technical Group. The goal of this group is to promote the advancement of knowledge within ANS to the aerospace community. The applications in this group that are of interest to members in M&C are primarily the creation of models and solution methods utilized in various aspects of spacecraft operation and design. Thus far ESD and FUSION divisions have given their support. A copy of their petition has been put into the meeting record. A motion to support the formation of the Aerospace Nuclear Science and Technology Technical Group was passed.

Report on 2001 ANS Student Conference: (Don Todd, Texas A&M)

Don Todd, representing the 2001 ANS Student Conference scheduled for March 2001, asked for M&C support. Because this is the only student conference of the year, up to \$30,000 is required for student travel. This sum amounts to \$200 per student. They also need sponsors for student awards. A motion was put forth to give \$1,000 to the ANS 2001 Student Conference. In the end, the Executive Committee decided to pass the motion granting \$ 1,000 to the Student Conference.

Report on M&C 2001 Topical Meeting: (Jeff Borkowski)

A report on preparations for the 2001 M&C Division Topical Meeting in Salt Lake City, Utah was given by Jeff Borkowski. For specific details about his report see the minutes of the M&C Program Committee Meeting. Highlights of his report include: 1) a Call For Papers is scheduled for March 1, 2001, 2) reviewers are needed (<http://www.srv.net/ians/mcd2001>), 3) MS Word templates are available and submissions will be accepted in PDF format

Publicity Report: (Todd Palmer)

Todd unveiled the design of the M&C website. Approval to launch the site was given at the meeting. Todd asked for submissions of graphics outputs from calculations in order to make a rotating GIF gallery. A similar request was made for content suggestions. Finally, two M&C newsletters per year will become standard starting in 2001.

Standard's Report: (Andy Smetana) Andy gave a brief report on the ANS-10 Standard Subcommittee activities. His written report has been entered into the M&C Executive Committee record. The principle question Andy posed to the committee was, "Do standards provide benefit to membership?" There was no resolution to this question other than for Andy to continue his efforts with the Standards Subcommittee.

Program Committee Report: (Ali Haghghat)

The report from the Program Committee focused on the 2001 Annual Meeting Technical Program (Wisconsin) and the 2003 M&C Division Topical Meeting site. The site chosen for the 2003 M&C Topical Meeting is Gatlinburg, TN. The tentative dates are April 7-10, 2003. The meeting will be hosted by the ANS/Knoxville-Oak Ridge Sections. The Program Committee agreed to give Paris strong consideration for the 2005 meeting. For details about these discussions see the Program Committee minutes.

Membership Report: (Madeline Feltus) Madeline made a plea to members to send in their 2001 dues as soon as possible, as this makes accounting easier. M&C currently has approximately 875-930 members.

New Business:

ANS headquarters wants a list of experts in various nuclear technology fields. Additionally, headquarters wants a liaison to the national Public Policy Committee to aid in work on ANS public policy statements. The M&C Executive Committee agreed to try to send someone. Finally, proposals for changing the ANS mission statement were discussed.

UPCOMING MEETINGS

*2001 ANS Annual Summer Meeting
Milwaukee, June 17-21, 2000*

For more information, see <http://www.ans.org/meetings/pdfs/2001/am2001.pdf>

*17th International Conference on Transport Theory
Imperial College, London, July 8-14, 2001*

For more information, see <http://junior.th.ic.ac.uk/>

*ANS International Meeting on Mathematical Methods for Nuclear Applications
Little America Hotel Salt Lake City, Utah, September 9-13, 2001*

For more information, see <http://www.srv.net/~ians/MC2001/>

*PHYSOR-2002
ANS International Topical Meeting on Advances in Reactor Physics and Mathematics and Computation into the Next Millennium
Sheraton Walker Hill Hotel, Seoul, Korea, October 7-10, 2002*

Cosponsored with the Reactor Physics Division. For more information see <http://physor2002.kaist.ac.kr>

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

SPECIAL SESSIONS IN HONOR OF ALLAN F. HENRY

Two special sessions are being organized for the Winter 2001 ANS meeting in Reno to honor the memory of Allan F. Henry, the preeminent American reactor physicist of the 20th century. The sessions are being sponsored jointly by the Reactor Physics Division and the Mathematics and Computation Division.

All of Professor Henry's former students, colleagues, and friends are encouraged to attend these sessions. It is anticipated that these sessions will provide a great opportunity for reactor physicists from around the world to gather together. This promises to be an occasion not only for honoring the memory of Dr. Henry, but for rekindling old friendships among reactor physicists of all generations.

The first session, "Advanced Nodal Methods: The Legacy of Allan F. Henry," is devoted to advanced nodal methods, a field in which he and his students have played a major role. This session will be limited to invited papers. A second session, "Reactor Physics, Mathematics and Computations: The Legacy of Allan F. Henry," is devoted to other areas in which AI was a major contributor. This session will include both invited and contributed papers. Both sessions will begin with an opening memorial by a close colleague, and a paper reviewing AI's contributions to that field.

Studsvik Scandpower, Inc. will be hosting a cocktail gathering in hopes of further providing the opportunity and atmosphere to share and enjoy everyone's stories and memories of Dr. Henry.

Both invited and contributed summaries must be submitted electronically by June 26, 2001. Detailed instructions for submission are available at www.ans.org/meetings. Prospective authors who wish to submit invited papers are asked to contact the session organizers, Kord Smith (kord@soa.com), I. K. Abu-Shumays (ika01@email.msn.com), or Russ Mosteller (mosteller@lanl.gov) to receive an invitation.

M&C ROUNDTABLE AT ANS SUMMER MEETING

The MCD Roundtable on Current Issues in Computational Methods will be held in Milwaukee during the second half of the Wednesday morning session. Marvin Adams has agreed to talk about his recent NSE paper on discontinuous finite element transport methods. This work is an outstanding example of how important it is to perform analysis of new methods BEFORE implementing them in computer codes, and should provide the basis for some lively discussions.

2001-2002 ANS MATHEMATICS AND COMPUTATIONS DIVISION OFFICERS

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Treasurer: Steven D. Nolen (LANL, 505/667-7267, frodo@lanl.gov)
Outgoing Chair: Andrew O. Smetana (Savannah River Site, 803/725-4192, andrew.smetana@srs.gov)

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Robert Singletery (NASA, 757/864-1437, r.c.singletery@larc.nasa.gov) (Co-Chairs)
PUBLICITY: Todd Palmer
STANDARDS: Andy Smetana

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