



AMERICAN NUCLEAR SOCIETY MATHEMATICS AND COMPUTATION DIVISION

June, 2006
<http://www.mcd.ans.org/newsletters>

Message from the Chair

As I finish my tenure as the Chair of MCD, I would like to reflect on the past year and mention about the future! I started my year on an excellent note, i.e., 2005 Topical Meeting, Avignon, France; **Richard Sanchez**, one of our very active members, put together a highly successful meeting that attracted more than 300 participants; and, we as a Division besides technical exchanges, received \$7000 toward the Dannels Scholarship. On your behalf, I thanked our French colleagues, and reminded the participants of making sure to use the “opportunity of getting to know each other, and making long- lasting friendships and collaborators.” I believe we can make a better world for all if we attempt to learn about others and realize that we do not have a monopoly on knowledge and talent; rather we should take advantage of our resources to accelerate advancements in our discipline!

We achieved an understanding with the Biological and Medicine Division (BMD) on how to manage the recently formed Computational Medical Physics Working Group (CMPWG) that its formation has to be credited to the tireless efforts of **Bernie Kirk**. Within a rather short time, she has organized several sessions/meetings among interested colleagues from ANS and AAPM. For this year, I have asked Bernie to represent MCD as the Co-Chair of CMPWG; the other Co-Chair is **Christina Piles** from BMD. Please join me and thank Bernie for her major contribution, which promises significant benefits to MCD, BMD, and ANS as a whole!

Based on some discussions we had at the Winter Meeting in Washington DC, we decided to conduct a survey of the membership to learn more about our membership and identify issues and seek new ideas that can lead to betterment of our Division. I encourage you to help us by completing the survey form available at <http://www.ans.org/const/survey/mcd>.

Prof. Paul Turnisky from North Carolina State University, Chair of Awards and Honors Committee, has informed me that he would like to step down from his position in order to be able to serve on the Society’s Honors and Awards. I truly have to thank Paul for all his service and for his tireless efforts in making sure that deserving individuals are identified and honored for their contributions. In order to make sure that this important activity is continued effectively, I have asked **Dr. Farzad Rahnama** from Georgia Institute of Technology (farzad.rahema@nre.gatech.edu) to assume the position. He has agreed!

I would like to take this opportunity and offer possible changes that may help us in running the Division more effectively. I propose that we increase the number of years of service for the Chair, Vice-Chair, and Treasurer; this essential because in a rather short time of one year, the Chair cannot start and follow through major initiatives, and the Treasurer term is too short; maintenance of our budget becomes complicated because of the need for continuous dialogue with ANS! Also, I would like to offer a maximum term limit of 5 years for the Chair of the Program Committee, who is in charge of the most important activity of any technical division. These items and others (possibly from the survey) should be considered for our upcoming activity of revising our Bi-Laws!

Finally, I would like to thank my fellow officers, **Bill Martin** (Vice Chair), **Douglas Peplow** (Treasurer), **Paul Wilson** (Secretary), **Todd Palmer** and **Dimitri Anistratov** (Program Co-Chairs), **Avneet Sood** (Newsletter and Publicity), **Madeline Feltus** (Membership), and **Barry Ganapol** (Benchmark), for their support and contributions. Also, I want to especially thank **Bernie Kirk**, the former Chair, for informing me of all the issues and offering solutions!

And, thanks for the opportunity of serving you! I am looking forward to an exciting year under leadership of my good friend, and prominent member of our Division, **Prof. Bill Martin** from University of Michigan!

Alireza Haghighat
University of Florida

2006 ANS Winter meeting: Mathematics and Computation Sessions

SUNDAY, 4 June 2006 1:00 p.m. - 2:00 p.m..
Program Committee Meeting: Sierra 1

SUNDAY 4 June 2006 2:00 p.m. - 4:00 p.m.
Executive Committee Meeting: Sierra 1

MONDAY, 5 June 2006 P.M.
Current Issues in Computational Methods-Roundtable

TUESDAY, 6 June 2006 A.M.
Computational Medical Physics Benchmarks

WEDNESDAY, 7 June 2006 A.M.
Transport Methods: General

WEDNESDAY, 7 June 2006 P.M.
Computational Methods: General

PROGRAM COMMITTEE

The next **Mathematics and Computation Topical Meeting** will be held **April 15-19, 2007, in Monterey, California**. The meeting will be held jointly with the **International Conference on Supercomputing in Nuclear Applications**, an arrangement that worked well for the Saratoga Springs meeting in 1997. The conference banquet is currently planned to be held at the world-renowned Monterey Bay Aquarium. Join us in beautiful, dramatic, romantic, and historic Monterey! Information on Monterey as well as information about the meeting will be posted to the conference web site: <<http://mc-sna07.nuc.berkeley.edu>>.

[Submitted by Jeff Favorite, Publications Chair]

ANS-10 Standards Committee

ANS-10 Standards Subcommittee Report

The M&C Division sponsors the ANS-10 Standards Subcommittee. ANS-10 currently maintains three Standards in areas of interests to the M&C membership.

ANSI/ANS-10.5-2006 Accommodating User Needs in Scientific and Engineering Computer Software Development was recently approved by the American National Standards Institute (ANSI) and is the newest of the ANS-10 Standards. It replaced ANSI/ANS-10.5-1994 Accommodating User Needs in Computer Program Development and provides information for addressing the needs of the end user when developing software.

ANSI/ANS-10.4-1987; R1998 Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs in the Nuclear Industry is under revision. The current working title for the revised Standard is "Criteria for Quality Assurance of Scientific and Engineering Computer Programs for the Nuclear Industry". Dr. Charles Martin (charlesm@dnfsb.gov) is the Chair for the ANS-10.4 Working Group. Please contact Dr. Martin for additional information.

The last of the ANS-10 standards is **ANSI/ANS-10.2-2000 Portability of Scientific and Engineering Software**. This standard provides recommendations and requirements that will simplify the implementation, conversion, and modification of computer programs on various hardware/software configurations. ANSI/ANS-10.2 is due for maintenance. If you are interested in working on this Standard, please contact Andy Smetana.

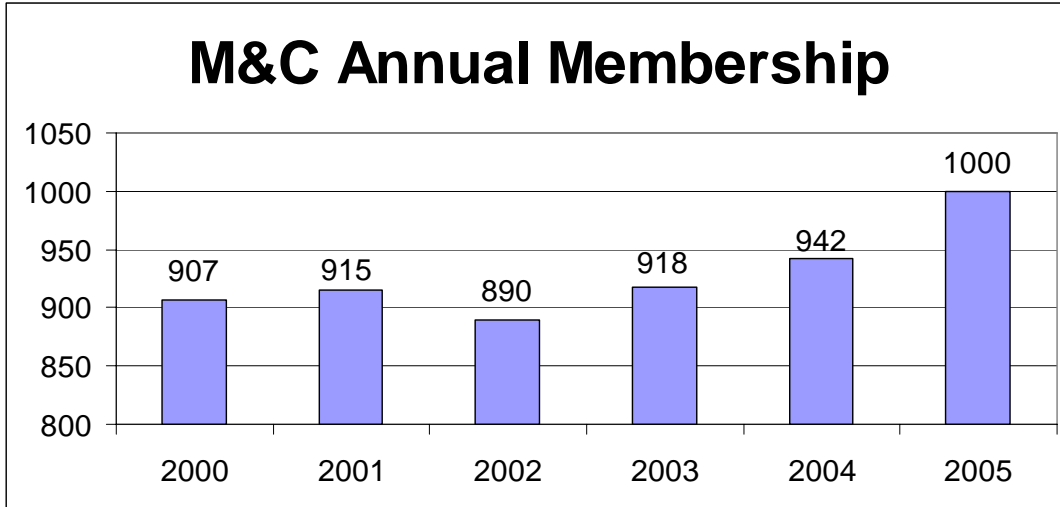
Finally, if you have an idea for a new Standard or an interest in serving on the ANS-10 Standards Subcommittee, please contact Andy Smetana (andy.smetana@srnl.doe.gov).

Andy Smetana
Chair ANS-10

[Provided by Andy Smetana, Standards Committee Chair]

Membership Committee

The Mathematics and Computation Division is one of the smaller ANS division but our membership numbers have been relatively stable. Please remember to renew your ANS National Membership Dues for 2006, and be sure to check off M&C as one of your divisions. You can have more than the two free divisions, for a small fee. ANS members who do not immediately renew will get three mailings, a monthly email reminder, and may get a telemarketing call. If the 2006 dues are not paid before July 2006, they are dropped from national and M&C membership. It is imperative to have folks pay their national dues by JUNE. We will have our M&C list for the November meeting. The membership list can be sorted by organization, age, zip code etc, students, etc. If we can ask for your help to call a coworker to be reminded, or a friend, let us know.



Note that we have as of December 2005:

*1000 members, which INCLUDES 186 student members.

*As of April, we have 1053 members, however 108 members are UNPAID. (This includes 174 students of which 38 are unpaid!!!)

*Notice that with 1000 members we are 9.3% of the total ANS membership of 10,783, and our numbers have been growing in percentages!

I hope to see you all in RENO in June

[Provided by Madeline Feltus, Membership Committee Chair]

Editor's Message: This newsletter will be issued twice a year and can be accessed electronically at <http://www.mcd.ans.org/newsletters>. Please send your newsletter items and comments to me, Avneet Sood at Los Alamos National Laboratory, P.O. Box 1663 MS F663, Los Alamos, NM 87545; Tel: (505) 667-2119; email: sooda@lanl.gov.

2005-2006 ANS MATHEMATICS AND COMPUTATIONS DIVISION OFFICERS

Chair: Alireza Haghighat (Univ. of Florida, 352/392-1401, haghighat@ufl.edu)
Vice-Chair/Chair Elect: William R. Martin (Univ. of Michigan, 734/764-5534, wrm@umich.edu)
Secretary: Paul P. Wilson (Univ. of Wisconsin-Madison, 608/263-0807, wilsonp@engr.wisc.edu)
Treasurer: Douglas E. Peplow (ORNL, 865/574-0521, peplowde@ornl.gov)

EXECUTIVE COMMITTEE

2006 Jeffrey Favorite (LANL, 505/667-7941, fave@lanl.gov)
2006 Farzhad Rahnema (Georgia Tech, 404/894-3731, farzad.rahnema@nrc.gatech.edu)
2006 Scott Palmtag (Studs vik Scandpower, 208/522-8304, palmtag@soa.com)
2007 Horia-Nicolae M. Gheorghiu (Studs vik Scandpower)
2007 Robert C. Singleterry, Jr. (NASA, r.c.singleterry@larc.nasa.gov)
2007 Avneet Sood (LANL, 505/667-2119, sooda@lanl.gov)
2008 Piero Ravetto (Polit. De Torino, 39011-564-4443, piero.ravetto@polito.it)
2008 Robert Roy (Ecole Polyt. De Montreal (EPM), 514/340-4262, robert.roy@polymtl.ca)
2008 Richard Sanchez (CEA de Saclay, 33-01-5908-5404, richard.sanchez@cea.fr)
2008 Taro Ueki (Univ. of New Mexico, 505/277-7964, tueki@unm.edu)
2009 Thomas A. Brunner (Sandia National Laboratory, 505/844-1253)
2009 Sara A. Pozzi (Oak Ridge National Laboratory, 865/576-8380, pozzisa@ornl.gov)
2009 John C. Ragusa (Texas A&M Univ., 979/862-2033, jean.ragusa@tamu.edu)

BOARD LIAISON

Harold McFarlane (INL, 208/533-7106, harold.mcfarlane@inl.gov)

CHAIRS OF STANDING DIVISION COMMITTEES

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HONORS AND AWARDS: Paul Turinsky (N.C. State Univ., 919/515-5098, turinsky@eos.ncsu.edu)
MEMBERSHIP: Madeline A. Feltus (USDOE, 202/506-0541, madeline.feltus@hq.doe.gov)
NOMINATING: Bernadette L. Kirk (ORNL, 865/574-6176, blk@ornl.gov)
PROGRAM: Todd Palmer (Oregon State U., 541/737-7064, palmerts@engr.orst.edu) (Chair)
Dimitriy Anistratov (N.C. State Univ. 919/515-4353, anistratov@ncsu.edu) (Asst. Chair)
PUBLICITY: Avneet Sood (LANL, 505/667-2119, sooda@lanl.gov)
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