AMERICAN NUCLEAR SOCIETY MATHEMATICS AND COMPUTATION DIVISION

May, 2005 http://www.mcd.ans.org/newsletters

MESSAGE FROM THE CHAIR

My term, which started in June 2004 and ending in June 2005, has been exciting. The email exchanges among the board members on several issues have been educational and oftentimes amusing. Deep appreciation goes to all the board members and special committees who have made the year a lot of fun.

The division continues to be strong financially. Membership is on a slight increase. M&C 2005 is well on its way to success, drawing hundreds of papers. MCD also co-sponsored a successful Monte Carlo 2005 (MC2005) in April together with the Radiation Protection and Shielding Division.

MCD's student support indicates that the division members care about the future. In November 2004, MCD made it possible for several student presenters to attend the President's Reception. In San Diego, the same will happen. MCD supported the April 2005 student conference and will support the student attendance at M&C 2005.

On the national front, ANS is busy with the proposed formation of technical groups. Current active applications include Hydrogen and Young Members. We have had several discussions on these. We have to keep an open mind.

I turn over the chair to Professor Alireza Haghighat with alacrity.

Bernadette Kirk, Chair

2005 ANS SUMMER MEETING: MATHEMATICS AND COMPUTATION

SUNDAY, JUNE 5, 2005 1:00 p.m. - 2:00 P.M.. Program Committee Meeting: Royal Palm Salon 6

SUNDAY JUNE 5, 2005 2:00 p.m. - 4:00 P.M. Executive Committee Meeting: Royal Palm Salon 6

MONDAY, JUNE 6, 2005 P.M.
Current Issues in Computational Methods-Roundtable

TUESDAY, JUNE 7, 2005 A.M. Mathematical Modeling

TUESDAY, JUNE 7, 2005 A.M.

Advanced Optimization Methods for LWR Analysis Transport Methods

WEDNESDAY, JUNE 8, 2005 A.M.

Next Generation of Advanced Methods for LWR Analysis

Computational Methods: General

WEDNESDAY, JUNE 8, 2005 P.M.

Transport Methods: General

HONORS AND AWARDS

Two nominations, stimulated by the committee, for MCD members to be elected to Fellow grade in the ANS should be acted upon during the Summer National Meeting. If you know a colleague who is a member of the ANS, not currently holding Fellow grade, and you believe deserving of consideration, please consider nominating that individual. The process is explained and all required forms are available at www.ans.org. I would be pleased to provide any assistance that you may require.

Regarding MCD sponsored awards, three awards are scheduled to be presented at the upcoming MCD topical meeting in France. These awards and a brief description are as follows:

- Gerald C. Pomraning Memorial Award to provide recognition to persons who have made outstanding contributions toward the advancement of the fields of mathematics and/or computations in support of advancing understanding of topics of interest to the ANS.
- MCD Distinguished Service Award to provide recognition to persons who have made outstanding contributions towards developing MCD via leadership, governance, standards, benchmarking, program and/or other developmental activities.
- MCD Young Member's Research Achievement Award to identify and reward meritorious contributions in the areas of mathematics and computations by MCD members who are in the earlier stages of their careers, and to stimulate further achievements by younger individuals that will enhance the applications of mathematics and computations in the area of nuclear technology.

The due date for nominations is June 1st, but if you have missed that date please contact me and I will see whether we can accommodate a slightly later submission date. Details and nomination forms for all three awards can be found at mcd.ans.org.

[Provided by Paul Turinsky, Honors and Awards Committee Chair]

ANS-10 STANDARDS COMMITTEE

ANS-10 Standards Subcommittee Report

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

- *ANSI/ANS-10.2-2000 Portability of Scientific and Engineering Software
- *ANSI/ANS-10.3-1995 Documentation of Computer Software
- *ANSI/ANS-10.4-1987; R1998 Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs in the Nuclear Industry
- *ANSI/ANS-10.5-1994 Accommodating User Needs in Computer Program Development

Currently, ANS-10 has two Standards under revision: ANS-10.4 and ANS-10.5. Dr. Charles Martin is the Chair for the ANS-10.4 Working Group. He can be reached at charlesm@dnfsb.gov. Andy Smetana is the Chair for the ANS-10.5 effort. The revision of ANS-10.5 is currently being balloted by N-17 which is the ANS-10 Consensus Committee.

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.

[Provided by Andy Smetana, Standards Committee Chair]

MEMBERSHIP COMMITTEE

ANS Mathematics and Computational Division membership has been showing a steady increase in membership. MCD membership has increased from 885 members in 2002, to 918 in 2003, and 942 in 2004. In 2002, MCD gained 56 new members (5% of new ANS members chose MCD) and lost 23 members due to non-renewal of ANS membership. In the year 2003, MCD gained 84 new members (7% of new ANS members chose MCD) and lost 60 members due to non-renewal of ANS membership. With 942 members at the end of year 2004, MCD has 8.7% of the total ANS membership of 10,777.

[Information 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.

2004-2005 OUTGOING ANS MATHEMATICS AND COMPUTATIONS DIVISION OFFICERS

Chair: Bernadette L. Kirk (ORNL, 865/574-6176, blk@ornl.gov)

Vice-Chair/Chair Elect: Alireza Haghighat (Univ. of Florida, 352/392-1401, haghighat@ufl.edu)
Secretary: Ronald E. Pevey (Univ. of Tennessee, 423/974-7573, pevey@utk.edu)
Treasurer: Abderrafi Ougouag (Bechtel BWXI, INEEL, 208/526-7659, oom@inel.gov)

Outgoing Chair Roger Blomquist (ANL, 630/252-8423, rnblomquist@anl.gov)

2005-2006 INCOMING 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

2005 Tom Sutton (KAPL, 518/395-7407, sutton@kapl.gov)

2005 Cassiano De Oliveira (Georgia Tech, 404/385-4928, <u>cassiano.deoliveira@nre.gatech.edu</u>)

2005 Madeline Feltus (USDOE, 202/506-0541, madeline.feltus@hq.doe.gov)

2006 Jeffrey Favorite (LANL, 505/667-7941, fave@lanl.gov)

2006 Farzhad Rahnema (Georgia Tech, 404/894-3731, farzad.rahnema@nre.gatech.edu)

2006 Scott Palmtag (Studsvik Scandpower, 208/522-8304, palmtag@soa.com)

2007 Horia-Nicolae M. Gheorghiu (Studsvik-Scandpower)

2007 Robert C. Singleterry, Jr. (NASA, r.c.singleterry@larc.nasa.gov)

2007 Avneet Sood (LANL, 505/667-2119, <u>sooda@lanl.gov</u>)

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)

BOARD LIAISON

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

CHAIRS OF STANDING DIVISION COMMITTEES

FINANCE: Abderrafi Ougouag (Bechtel BWXI, INEEL, 208/526-7659, oom@inel.gov), HONORS AND AWARDS: Paul Turinsky (N.C. St. Univ., 919/515-5098, turinsky@eos.ncsu.edu) Madeline A. Feltus (USDOE, 202/506-0541, madeline.feltus@hq.doe.gov)

NOMINATING: Roger Blomquist (ANL, 630/252-8423, rnblomquist@anl.gov)

PROGRAM: Todd Palmer (Oregon State U., 541/737-7064, palmerts@engr.orst.edu) (Chair)

Anil Prinja (U. New Mexico, 505/277-4600, prinja@unm.edu) (Asst. Chair)

PUBLICITY: Avneet Sood (LANL, 505/667-2119, sooda@lanl.gov)

STANDARDS: Andy Smetana (Westinghouse SRC, 803/725-4192, andrew.smetana@srs.gov)