

**DRAFT**  
**M&C EXECUTIVE COMMITTEE MEETING**  
**MINUTES**

**New Orleans, LA, November 16, 2003**

**Meeting location and time**

The Mathematics and Computation (M&C) Division Executive Committee met at the American Nuclear Society (ANS) International Winter Meeting held in New Orleans, LA, at the Hyatt Regency Hotel, St Charles C Room, on Sunday, November 16, between 2:05 to 4:00 pm.

**Attendees**

The following people attended the meeting:

<b>Attendee</b>	<b>E-mail</b>	<b>Phone</b>
Anistratov, Dmitriy	<a href="mailto:anistratov@ncsu.edu">anistratov@ncsu.edu</a>	(919) 513-5343
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Emmett, Margaret (Peggy)	<a href="mailto:emmettmb@ornl.gov">emmettmb@ornl.gov</a>	(865) 574-5276
Favorite, Jeffrey A.	<a href="mailto:fave@lanl.gov">fave@lanl.gov</a>	(505) 667-7941
Feltus, Madeline A.	<a href="mailto:madeline.feltus@hq.doe.gov">madeline.feltus@hq.doe.gov</a>	(301) 903-2308
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Hunter, Melissa	<a href="mailto:melish@westol.com">melish@westol.com</a>	(412) 384-6735
Kirk, Bernadette (Bernie)	<a href="mailto:kirkbl@ornl.gov">kirkbl@ornl.gov</a>	(865) 574-6176
Martin, Bill	<a href="mailto:wrm@umich.edu">wrm@umich.edu</a>	(734) 764-5534
McKinley, Michael Scott	<a href="mailto:mckinley9@llnl.gov">mckinley9@llnl.gov</a>	(925) 424-2738
Palmer, Todd	<a href="mailto:palmerts@ne.orst.edu">palmerts@ne.orst.edu</a>	(541) 737-7064
Prinja, Anil K.	<a href="mailto:prinja@unm.edu">prinja@unm.edu</a>	(505) 277-4600
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Sood, Avneet	<a href="mailto:soda@lanl.gov">soda@lanl.gov</a>	(505) 667-2199
Turinsky, Paul	<a href="mailto:turinsky@ncsu.edu">turinsky@ncsu.edu</a>	(919) 515-5098

**Agenda**

The agenda for the meeting was submitted by the Chair Roger Blomquist through the e-mail prior to the meeting. Copies were also available at the meeting. The agenda was as follows:

AGENDA  
Executive Committee Meeting  
Mathematics and Computation Division  
American Nuclear Society  
Sunday, November 16, 2003  
Hyatt Regency New Orleans (St. Charles C)

1. Call to order and announcements (Roger Blomquist)
2. Secretary's report (Piero Ravetto)
  - Approval of minutes from the San Diego meeting
3. Treasurer's Report (Bill Martin)
4. Review of PDC Workshop (Bernadette Kirk)
5. 2004 ANS Student Conference (Ross Radel, as convenient)
6. Nominating Committee (Richard Sanchez)
  - Approval of MCD slate for 2004
7. Honors and Awards (Paul Turinsky)
  - M&C candidates to Fellow of ANS
  - Pomraning Award (M&C2003)
8. Publicity (Avneet Sood)
  - Newsletter
  - MCD Web Site (Todd Palmer)
9. Program Committee Report (Anil Prinja)
10. M&C 2005 Topical Meeting. Progress Report (Richard Sanchez)
11. Standards (Andy Smetana)
12. Membership (Madeline Feltus)
13. Joint Benchmark Committee Report (Barry Ganapol)
14. Old Business
  - Amendments of MCD Bylaws Roger Blomquist)
  - Presenting student author tickets to ANS President's Reception
15. New Business
  - MCD Strategic/Tactical Plan (R. Blomquist)
  - SNA-2007/MC2007
  - 6<sup>th</sup> International Conference on Simulation Methods in Nuclear Engineering

## **Minutes**

### **1. Call to order and announcements**

Chair Roger Blomquist opened the meeting at 2:05 pm. The agenda for this meeting (above), strategic plan (Attachment A) and minutes from the last meeting were passed around. The agenda was approved unanimously.

### **2. Secretary's report**

The minutes from the M&C Executive Committee Meeting held in San Diego, CA in June 2003 compiled by the Secretary Piero Ravetto were approved unanimously. The approved minutes will be transmitted to the Headquarters and made available through the division web site.

### **3. Treasurer's report**

Treasurer Bill Martin asked to be skipped while he prepared information from his laptop for display.

### **4. Review of PDC Workshop**

Vice Chair Bernadette Kirk reviewed the three hour long Professional Division Committee meeting. She reported a new remake of the division bylaws. She is taking responsibility for examining these bylaws to see how they apply to the M&D Division. The ANS Standards Committee is looking for volunteers.

There was a discussion on sending division reports to the ANS president. However, it appears that it is a duplication of effort since the president already gets our metrics and the M&C Division already submits a report to Don Hoffman.

### **Out of Agenda**

Roger reported on the Division Chairs' meeting with the ANS President. He reported that there are several major issues for ANS facing society in order of priority: solvency, membership, public information, nuclear workforce, and ANS governance. Members should help with grassroots efforts in public information, teaching teachers and stopping the spread of lies. The ANS website <http://www.ans.org/> may be used to register any such efforts or for information helping with these efforts.

### **5. 2004 ANS Student Conference**

Ross Radel presented information for the 2004 student conference, which is from April 1<sup>st</sup> to 3<sup>rd</sup> at Madison, WI. He requested a member or two to give a commercial and a couple of judges for the meeting. In addition, he asked that the M&C Division consider this conference in our budget. The meetings occur about once a year. Last year had 220 attendees and 90 presentations. This year is expected to have 350 students and 100 presentations.

### **Out of Order: 3. Treasurer's Report**

Treasurer Bill Martin presented a general outline of the budget at the meeting. The full treasurer's report is in Appendix B. He stated that \$27,282 would be carried over into FY 04. He mentioned that every category is underspent, and we have accumulated this money over time.

The general consensus was to increase student support for ANS members through travel expenses, registration fees or student paper awards. The question arose if the M&C Division should support students for the International Youth Nuclear Congress 2004 in Toronto. The following motion was proposed and unanimously accepted: "We offer \$1,000 in assistance to ANS students to IYNC. They should apply to the division in care of Bill Martin, who will assign disbursements of funds up to \$250 per student. It is discretionary as to whether a young professional should receive aid. They must apply by February 1<sup>st</sup>, 2004."

Since Toronto meeting was given \$1,000, it was suggested that \$2,000 go to the student conference 2004 Student Conference in Wisconsin. The following motion was passed with no dissent: "\$1,000 will go to the conference. \$500 will go to the Best Graduate papers and \$500 to the Best Undergraduate papers."

### **6. Nominating Committee**

Richard Sanchez presented the Nominating Committee candidates for the 2004 slate. The Nominating Committee (Chair: Richard Sanchez, Members: Yousry Azmy, Forrest Brown, Nam Zin Cho, and Glenn E. Sjoden) has nominated the following candidates:

2 candidates, Alirezha Haghigat and Robert Roy, for the position of Vice Chair – Chair Elect,  
1 candidate, Ronald E. Pevey, for the position of Treasurer,  
1 candidate, Abder Ougouag, for the position of Secretary,  
5 candidates, Nicholas Gheorghiu, Mohammed Ouisloumen, Robert Singleterry, Avneet Sood, and James Warsa, for 3 positions at the Executive Committee.

The slate was approved unanimously.

### **7. Honors and Awards**

Paul Turinsky brought up the question, "Should stage of a career matter for the Pomraning award?" There may have been concern from someone that giving the award to a retired person may not be the correct use for this award. A vote was taken where one person voted that career stage mattered while the rest voted that it did not matter.

Paul reported that the 2003 Pomraning Award was given to Gerry Pomraning's widow. He also noted that no one was nominated for this award. Roger

suggested that Paul solicit nominations for the award and not be part of the award decision.

Paul suggested a new award for consideration: The Mathematics & Computations Division Young Members Research Achievement Award. The date and monetary amount are left as variables in the text which should appear in the M&C website. This award was passed with no objections.

## **8. Publicity**

Avneet Sood put out a newsletter a week and a half before this conference. Todd Palmer has been working on the website, <http://www.mcd.ans.org/>. Any suggestions for the website should be sent to Todd and copied to Bernadette and Roger.

## **9. Program Committee Report**

Anil Prinja reported that Barry Ganapol has a special marathon session at the ANS 2004 Annual Meeting in Pittsburgh, Pennsylvania. This session is called "Nontraditional Applications of Transport Methods."

## **Out of Order: 15. New Business**

International Conference on Supercomputing in Nuclear Applications wishes to combine with the M&C topical in 2007. A motion passed with no opposition to combine the meetings.

Roger mentioned that our name should be added to the 6<sup>th</sup> International Conference on Simulation Methods in Nuclear Engineering.

## **10. M&C 2005 Topical Meeting Progress Report**

Richard Sanchez handed out the following review:

*In the past there have been a lot of discussion on what kind of reviewing should be done for our Topicals. The final decision was to review full paper because they could then be counted as a publication with peer reviewing. However, as pointed out recently by members of MCD's Executive Committee, most topicals nowadays don't publish conference proceedings anymore and the 'papers' go into a CD ROM so they can be hardly counted as a publication. Another drawback with reviewing full papers is that most individuals that think of attending a topical delay until the last moment the writing of the paper and then may give up at the last moment for lack of time (one could argue that these people should organize their lives in a different way, but this is the way for most of us, with lots of things to do on the side, behave.) The result is a dwindling of the number of papers that are presented to MC Topicals. On the other hand, the PHYSOR meeting, for which only summaries are reviewed and final papers are published in a CD ROM, seems to be doing better in getting more people to submit. A reason for this could be that it is much easier to write a summary than a paper, especially when the task is delayed until the last*

*moments, and, once the summary has been submitted, then it is (psychologically) easier to write the complete paper.*

*As Technical Chair of MCD 2005 Avignon, I am requesting approval of the Executive Committee to proceed in the following way:*

- a) Summaries will be submitted and reviewed for acceptance, change or rejection.*
- b) Full Papers will be printed in a CD ROM.*

*It remains also the possibility to review also the final papers but the scheduling and organization of reviewing both summaries and final papers is too complicated.*

The committee agreed to try a one time trial of a 2 to 4 page summary review with computational results.

## **11. Standards**

Andy Smethana has a report in the newsletter. He mentions that the Standards Committee is looking for people.

## **12. Membership**

Madeline Feltus stated that membership is decreasing for regular members from 890 to 878 in the Math and Computations Division. However, student membership in the ANS went up by 83.8% from 538 to 989 members. This information will appear on the MCD website.

## **13. Joint Benchmark Committee Report**

Barry Ganapol is part of the Joint Benchmark Committee that is made up of Mathematics & Computations, Radiation Protection & Shielding, and Reactor Physics. Barry mentioned that the MCD is playing a small part in this so far and there is a lack of computational benchmarks. An article from this joint committee will appear in the ANS Newsletter. A more in depth article will appear later in Nuclear News. Barry is working on analytical benchmarks in 2 or 3D.

## **14. Old Business**

Roger Blomquist is working on the amendments to the MCD bylaws and will present this at the next meeting.

Roger stated that five student authors were presented with tickets to the ANS President's Reception: Sandra Dulla ([sandra.dulla@polito.it](mailto:sandra.dulla@polito.it)), David P. Griesheimer ([dgrieshe@umich.edu](mailto:dgrieshe@umich.edu)), Heath L. Hanshaw ([heathhanshaw@usa.net](mailto:heathhanshaw@usa.net)), Scott W. Mosher ([swmosher@pathlink.com](mailto:swmosher@pathlink.com)), Matteo M. Rostagno ([matteo.rostagno@polito.it](mailto:matteo.rostagno@polito.it)) and Jesse J. Klingensmith ([jxk390@psu.edu](mailto:jxk390@psu.edu)).

## **15. New Business**

Roger based the draft of the Strategic Plan (see Appendix A) on the model ANS plan. The plan was adopted with no dissent.

The Chair Richard Sanchez adjourned the meeting at 3:58 pm.

Draft, November 18, 2004

Michael Scott McKinley, Secretary

## Appendix A

### ANS MATHEMATICS & COMPUTATION DIVISION 2004-2008 STRATEGIC PLAN November, 2003

#### 2004 Tactical Plan

##### 2004 Top Priorities

Continue technical program excellence in support of ANS Goals A & B. (Program Chair)  
Succession planning and bylaws revision in support of ANS Goal E. (Chair)  
Improve financial management and institutionalize thorough budgeting in support of ANS Goal B. (Finance Committee)

##### 2004 Operational Plans and Activities

1. Improve ANS meeting paper reviewer assignment procedures to reduce duplication of effort and improve the quality of reviews. (Program)
2. Publicize paper review standards on the MCD web site and newsletters. (Publicity)
3. Improve succession planning for committee chairs. (Chair)
4. Review MCD Bylaws to align them with good governance and operations. (Vice Chair)
5. Produce and maintain a baseline budget for student support, awards, student conference support, and scholarship fund contributions. (Finance)
6. Enhance MCD web site, and publish two newsletters. (Publicity)
7. Support attendance at and paper reviews for PHYSOR-2004, Chicago, IL, April, 2004 (Publicity, Program)
8. Support planning for International Topical Meeting, Avignon, France, 2005. (Program)
9. Support planning for Monte Carlo 2005 (jointly sponsored by ANS Oak Ridge/Knoxville Section, RPSD, and MCD).
10. Solicit proposals for International Topical Meeting, 2007 (Program)
11. Continue active development/qualification of computational benchmarks to include comparison with experiments. (Joint Benchmark)
12. Support ANS-10 standards activities, particularly update of ANS10.4.
13. Track and analyze membership trends (Membership)
14. Nominate at least one MCD member for ANS Fellow, and solicit nominations for the MCD Distinguished Service and the Pomraning Awards.

##### Succession Plan

Committee Chair appointments are for a fixed term of two years, but are renewable:

Position	Incumbent	Term End	Successor	Successor Term End
Program Chair	Anil Prinja	2004	Todd Palmer	2006
Asst. Program Chair	Todd Palmer	2004	Anil Prinja	2005
Nominating Chair	latest ex-chair	2004	current chair	2005
Finance Chair (1 year)	current treasurer	2004	next treasurer	2005
Finance Member	latest ex-treasurer	2004	current treasurer	2005
Joint Benchmark Rep	Barry Ganapol	2004		
Joint Benchmark Rep	Mike Smith	2005		
Publicity Chair	Avneet Sood	2005		
Membership Chair	Madeline Feltus			
Honors and Awards Chair	Paul Turinsky			
Standards Chair	Andy Smetana			

## **2004-2008 MCD Five-Year Plan**

### **Mission**

The Mathematics and Computation Division (MCD) promotes the advancement of mathematical and computational methods for solving problems which are of interest to the membership of the American Nuclear Society (ANS) and of benefit to the application of nuclear science and engineering. The Division keeps its members informed through its regular newsletters, participation in ANS meetings, and sponsorship of regular topical meetings.

### **Long-Term Goals**

- To hold an average of 4 regular and special sessions at the semi-annual national ANS meetings. (Program Committee)
- To hold biennial topical meetings focused on a range of mathematical and computational topics of interest to the MCD membership, and to encourage international participation. To sponsor at least every third biennial topical meeting outside of the U.S., as well as other relevant meetings such as Supercomputing in Nuclear Applications. (Program Committee)
- To continue the biennial PHYSOR topical meeting partnership with RPD by mutual support through membership attendance and profit-sharing. (Program and Finance Committees)
- To support ANS non-meeting publications by encouraging topical meeting organizers to propose submission of high-quality technical papers to ANS journals. (Program Committee)
- To foster recognition of deserving MCD members through the biennial MCD Distinguished Service Award, the Gerald C. Pomraning Award, and through nomination of MCD members for national ANS awards. (Honors and Awards Committee)
- To foster professional development of MCD members through workshops on codes, computational methods, and other topics, to be held in conjunction with MCD topical and ANS meetings. (Program Committee)
- To foster student development by improving the funding level of the Dannel Scholarship and by encouraging student participation and attendance at ANS activities through cash awards for best student papers at topical meetings and by MCD contributions to the ANS national meeting student travel fund. (MCD Honors and Awards Committee, Finance Committee)
- To support efforts in the formulation, solution, and evaluation of computational benchmark problems under the auspices of the Joint (MCD, PRD, RPSD) Benchmark Committee, which disseminates benchmark work through distribution of the original Benchmark Problem Book and supplements to this book. Efforts toward this goal should be coordinated with relevant OECD expert benchmark groups.
- To continue active involvement in the formulation of computational standards. (Standards Committee)
- To publish the biennial MCD newsletter, and ensure that it remains an effective communication medium among the MCD membership. (Publicity Committee)
- To maintain and improve the MCD web site to enhance its value to members, officers, and committee chairs. (Publicity Committee)
- To increase MCD membership by analyzing membership data provided by ANS and responding to trends. To increase the participation of MCD members in its activities. (Membership Committee)
- To improve MCD governance by specifying fixed and renewable committee chair tenure lengths, by early identification of successor chairs who will act as assistant chairs, and by re-evaluating the tenure lengths of MCD officers. (Chair)

**Recommended Changes to ANS Strategic Plan:** None

### **Analysis of Trends**

The scope of the MCD has expanded considerably in recent years. Initially, the division was primarily focused on methods in neutronics calculations. MCD membership interests eventually broadened to include thermal-hydraulic calculations as well, with the emphasis still primarily on methods development. These two areas are still very important in the division, but they have been joined by a widespread interest in supercomputer applications to nuclear technology, as well as a growing involvement in non-reactor transport problems and in statistical analysis.

In response to the growing diversity of technical interests among MCD members, the Joint Benchmark Committee has expanded the range of types of benchmark problems included in each new supplement to the Benchmark Problem Book. The committee is active seeking benchmarks for areas such as machine performance and thermal hydraulics. The committee is also seeking to work cooperatively with outside organizations.

The ANS 10 standards committee will review the existing standards and update them according to developments in computing technology.

**Recurring Student and Award Expenditures**

The following expenditures in support of students and awards are anticipated. Items designated “automatic” are always budgeted for, and will be paid, barring MCD fiscal complications or meeting schedule conflicts.

<b>Item</b>	<b>Amount</b>	<b>Schedule</b>
ANS meeting student travel	\$500	Automatic, semiannual
MCD topical meeting student travel	\$1000	Automatic, biennial (2005)
MCD biennial topical meeting student paper awards		Biennial (2005)
MCD Distinguished Service Award		Biennial (2005)
Gerald C. Pomraning Award		Biennial (2005), endowed
Dannel Scholarship Contributions		
ANS NEED		
ANS Student Conference Support	\$1000	annual
ANS President’s Reception Student Tickets	\$200	semiannual

## Appendix B

### Treasurer's report

The report on the M&C Division budget was presented by the Treasurer Bill Martin. Due to the excellent shape of the MCD books due to the diligence of the previous treasurer Glenn Sjoden, this was a straightforward exercise. Table I presents the current balance of the MCD budget, including encumbrances approved at the 11/16/03. As a result, the balance of \$24,282 is \$3000 less than presented to the MCD Executive Committee on 11/16/03:

- \$2000 support for the University of Wisconsin student conference was approved by the MCD Executive Committee. These funds may be used for any expenses related to hosting the conference.
- Up to \$1000 student travel support for the International Youth Nuclear Congress was approved. These funds are restricted to ANS student members. Students should send applications directly to the MCD Treasurer.

Martin noted that the M&C Division balance was estimated to be \$27,000 for the coming year and that typical expenditures would be less than typical revenues, so this balance is expected to grow unless MCD takes on additional expenditures. Several suggestions were made:

- Increase student travel support
- Establish biannual award for service
- Establish award for benchmark activity
- Contribute additional funds to the Dannels endowment to fully fund this award since MCD is contributing \$1000 annually to cover the shortfall

The committee requested Bill Martin and Paul Turinsky to recommend a strategy for decreasing the MCD budget surplus, taking into account these suggestions. A recommended course of action will be circulated to the committee prior to the June 2004 meeting in Pittsburgh, where the plan will be discussed and approved, along with the 2004 budget.

**Table I – M&C Division Financial Report <sup>a</sup>**

	<b>Budget 12 months 2003</b>	<b>Actual 9 months 2003</b>
<b>Budget funds</b>		
Carry forward from 2002	18,956	18,956
2003 member allocation	900	885
Division income 2003	4,000	9812
<b>Total budget funds</b>	<b>23,856</b>	<b>29,653</b>
<b>Budget expenses</b>		
Newsletters	66	0
Awards, plaques	850	101 <sup>b</sup>
National meeting costs	500	0
Division officer expense	50	0
Student support	2,000	500
Scholarship/NEED funding	1,000	1,000 <sup>c</sup>
Other expenses	1,000	0
<b>Total expenses</b>	<b>5,466</b>	<b>1,601</b>
<b>Excess of budget funds over expenses</b>	<b>18,390</b>	<b>28,052<sup>d</sup></b>
<b>Encumbrances</b>		
Tickets to Presidents Reception (6)		270
Student support – ANS National		500
U of Wisconsin student conference (extra \$1000)		2000
International Youth Nuclear Congress		1000
<b>Total encumbrances</b>		<b>3770</b>
<b>Projected Balance for 2004</b>		<b>24,282<sup>e</sup></b>

<sup>a</sup> With additional encumbrances approved at 11/16/03 EC meeting

<sup>b</sup> Pomraning Award plaque

<sup>c</sup> Dannels Scholarship Fund, annual support

<sup>d</sup> Agrees with ANS Treasurer's Report for MCD 9/30/03

<sup>e</sup> Differs from 11/16/03 report due to additional encumbrances (\$3000)