

M&C EXECUTIVE COMMITTEE MEETING MINUTES

San Diego, CA, June 1, 2003

Meeting location and time

The Mathematics and Computation (M&C) Division Executive Committee met at the American Nuclear Society (ANS) Annual Meeting held in San Diego, CA, at the Town and Country Resort and Convention Center, Royal Palm VI Room, on Sunday June 1, between 2:10 to 4:00 pm. The late start was due to the overrun by the M&C Program Committee meeting held previously in the same room.

Attendees

The following people signed the attendance roster at the Meeting:

Attendee	E-mail	Phone
Richard Sanchez, Chair	Richard.sanchez@cea.fr	+33169085404
Aldemir, Tunc	Aldemir.1@osu.edu	616 292 4627
Azmy, Yousry Y.	Yya3@psu.edu	814 865 0039
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Brown, Forrest B.	Fbrown@lanl.gov	505 667 7581
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De Oliveira, Cassiano	c.oliveira@ic.ac.uk	+442075949319
Favorite, Jeffrey A.	Fave@lanl.gov	505 667 7941
Feltus, Madeline	Madeline.feltus@hq.doe.gov	301 903 2308
Ganapol, Barry	Cowboy.ganapol@nee.arizona.ed	520 621 4728
Haghighat, Alireza	Haghighat@ufl.edu	352 392 1415
Hunter, Melissa	Hunterm@bettis.gov	412 476 5811
Kirk, Bernadette L.	Blk@ornl.gov	865 574 6176
McKinley, Michael S.	Mckinley9@llnl.gov	925 424 2738
Palmtag, Scott P.	Palmtag@soa.com	208 522 8304
Prinja, Anil	Prinja@unm.edu	505 277 4600
Rahnema, Farzad	Farzad.rahnama@me.gatech.edu	404 894 3731
Ravetto, Piero	Piero.ravetto@polito.it	+390115644443
Singleterry, Robert C.	Robert.c.singleterry@nasa.gov	434 426 6378
Sjoden, Glenn	Joedean@sprintmail.com	321 254 1117
Smetana, Andy	Andrew.smetana@srs.gov	803 725 4192
Turinsky, Paul	Turinsky@eos.ncsu.edu	919 515 5098

Agenda

The Agenda for the meeting had been submitted by the Chair Richard Sanchez 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, June 1, 2003
2-4 pm, Town and Country Resort and Convention Center, Royal Palm VI Room

1. Call to order and announcements (Richard Sanchez)
2. Secretary's report (Piero Ravetto)
 - Approval of minutes from the Washington meeting
3. Treasurer's Report (Glenn Sjoden)
 - 2003 budget discussion and approval
4. Nominating Committee (Forrest B. Brown)
 - Results of elections
5. Honors and Awards (Paul Turinsky)
 - M&C candidates to Fellow of ANS
 - Pomraning Award (M&C2003)
6. Publicity (Todd Palmer)
 - Newsletter
 - MCD Web Site
7. Program Committee Report (Anil Prinja)
8. M&C 2003 Topical Meeting. Final Report (Yousry Azmy)
9. Standards (Andy Smetana)
10. Membership (Madeline Feltus)
11. Joint Benchmark Committee Report (Barry Ganapol)
12. Old Business
 - Dannel Scholarship (Farzad Rahnema)
 - Amendments of MCD Bylaws:
 - a) Special Committee Report
 - b) Election and term duration of Chairs for Standing Committee: Bill Martin + all.
13. New Business
 - New PDC matrix (B. Kirk or R. Sanchez for R. Blomquist)
 - Short and Long Range Operations Plan. General Discussion.
 - Publication Guidelines and criteria (A. Prinja + all)

Minutes

1. Call to order and announcements

The meeting was opened by the Chair Richard Sanchez at 2:10 pm. The Chair made the following announcements:

- The Vice Chair Roger Blomquist is unable to participate to the meeting due to fund cuts by the Laboratory;
- The M&C Sushi Sub-Committee will keep the tradition also at this Annual ANS Meeting, convening at the reception hall at 7:30 pm;
- Five sessions have been organized by the Division at this meeting: Particle Transport Methods in Medical Applications (Monday pm), Mathematical Modeling: General (Tuesday pm), Transport Methods and Applications:

General (Wednesday am); ANS Joint Benchmark Committee Benchmarks and Related Efforts (Monday pm) Current Issues in Computational Methods – Roundtable (Tuesday pm).

- Students from the ANS/Berkeley Section have asked to present a report on the recent Student Conference at Berkeley;
- Students from the organizing Committee of the forthcoming Student Conference to be held in Madison, WI, have asked to report to the committee on the organization process and ask for financial support;
- The Chair Richard Sanchez asks the new officers to introduce themselves and thanks those who are to go out of office at this meeting;
- The chair briefly reports on the Professional Division Workshop that took place on Saturday 31 May 2003; most significant items concern the introduction of the matrix to help judging the performance of the Division and the concern about the ANS loss of about 100 members each year;

Bernie Kirk reports on the status of the Pacific Basin Conference (2004): members of the division are stimulated to submit papers and organize technical sessions.

Out-of-Agenda: Report on the past Student Conference and on the organization of the forthcoming Student Conference

As from the announcements by Richard Sanchez, students from the organizing committee of the Student Conference held in Berkeley in April distribute and illustrate a nice report on the conference. They thank the committee for the financial support. Larry Foulke, who is present for this matter, confirms that the conference was an excellent one.

Students from the organizing Committee of the forthcoming Student Conference to be held in Madison, WI, report to the committee on the organization process and ask for financial support; it is suggested that the ANS Divisions are given a chance to present themselves at that conference; a draft of the conference program is distributed.

2. Secretary's report

The minutes from the M&C Executive Committee Meeting held in Washington in June 2002 compiled by the Secretary Piero Ravetto have been circulated among the members of the Committee and are available in copy at the present meeting. The minutes are approved unanimously. The approved minutes will be transmitted to the Headquarters and made available through the division web site.

3. Treasurer's report

The report on the situation of the Division budget is presented by the Treasurer Glenn Sjoden. He gives a thorough and detailed update of the financial situation of the Division from November 2002 and distributes three documents:

- a table with the current financial situation of the division, as in Table I below;
- A collection of e-mail messages exchanged between the Treasurer and the ANS Headquarters;

- The copy of the final budget verified by ANS; it must be observed that the ANS HQ have charged the Division twice an amount of \$ 1,600 for the past M&C Topical: the mistake has been recognized and it has been assured that the numbers will be fixed as soon as possible after the Annual Meeting; on the basis of this event, Glenn invites the in-coming Treasurer to pay special attention and care in checking the numbers when interacting with the ANS HQ.

To avoid any misunderstanding on this important issue, the Committee asks the Secretary to include in the minutes the text of the message by Glenn to ANS HQ on 05.29.03 and the answer by Christian Krapp on the same date.

From Glenn:

“Dear Folks

I am in the process of preparing my final statements for our upcoming M&C Executive Committee Meeting.

Attached are budgets sent to me by your office regarding billing to the M&C Division Accounts.

Please note in the left margins, comparing the files for the 2002 and 2003 years, M&C was CHARGED TWICE for \$ 1600 for support to the M&C Gatlinburg Meeting!

Therefore, please correct the problem and reimburse M&C for this money as soon as possible. Also, please send me an updated statement, and please include all proceeds from the Gatlinburg meeting that should be credited to our account.”

From Christian Krapp:

“Dear Mr, Sjoden:

I have researched the duplicate charge.

The charge from December was an accrual and the charge from January was a check. The January check was to reverse the December accrual but instead hit your statement a second time. A journal entry has been made to correct this and an adjusted copy of the M&C statement is attached to this email. Sorry for the confusion this may have caused you.

Any funds due to the M&C division from the Gatlinburg meeting will be credited to your account when the funds are received at ANS headquarters. Unfortunately, funds due after a meeting is completed usually take a long time to be sent because the meeting organizers want to make sure that they have sufficient funds to pay any remaining of unforeseen bills related to the meeting. I hope this clears up any questions you have regarding your statement and have a safe trip to San Diego.

Thanks

Christian Krapp”

The Treasurer illustrates two more points:

- The situation with the PSU Student Conference is finally clarified: PSU needs no money and, hence, the matter is closed;
- The interactions with the HQ are always strongly characterized by heavy bureaucracy and slowness, as demonstrated by the collection of messages produced by the Treasurer; the problem should be raised with the HQ, in order to look for suitable solutions to improve the situation

Table I – Division financial report 03/31/03

Budget funds	Budget 12 months 2003	Actual 3 months 2003
Carry forward from 2002	18,956	18,956
2003 member allocation	900	885
Division income 2003	4,000	0
Total budget funds	23,856	19,841
Budget expenses		
Newsletters	66	0
Awards, plaques	850	101*
National meeting costs	500	0
Division officer expense	50	0
Student support	2,000	0
Scholarship/NEED funding	1,000	1,000**
Other expenses	1,000	0
Total expenses	5,466	1,101
Excess of budget funds over expenses	18,390	18,740

*Pomraning Award plaque;

** Dannel Scholarship Fund, annual support.

The Committee joins the Chair in thanking the Treasurer for his professionalism and for the excellent job he has carried out in the past year.

The Chair introduces for discussion the proposal for a final agreement with the Reactor Physics Division on the share of the profits coming from the Topical meetings sponsored by each Division and co-sponsored by the other Division. The text of the proposal, which is today submitted also to the RP Division, is the following:

“ANS Reactor Physics Division and Mathematics & Computation Division agree to split the share of Division profits from bi-annual topical meetings, with 75% share going to the host Division and 25% to the co-sponsoring Division. This is to formally recognize the strong collaboration and co-sponsorship of topical meetings between the two Divisions that has made our past topical meetings a success, and to continue to foster strong participation and support for our future bi-annual topical meetings.

This agreement would not extend to other Division meetings, such as the Advances in Fuel Management meetings organized by Reactor Physics Division. Any profit sharing for these meetings would continue to be at the discretion of the local organizing committee.”

The Committee approves the proposal, which will henceforth be enforced until a different decision is taken.

4. Nominating Committee

The Chair communicates the results of the elections:

- Vive Chair/Chair elect: Bernadette L. Kirk
- Secretary: Michael Scott McKinley
- Treasurer: William R. Martin
- Member of the Executive Committee: Jeffrey A. Favorite, Scott P. Palmtag, Farzad Rahnema.

Roger N. Blomquist is taking over in the position of Chair of the Division, while Richard Sanchez is becoming Chair of the Nominating Committee.

5. Honors and awards

Paul Turinsky reports. He communicates that the Pomraning Award was granted posthumously to Jerry Pomraning and was given to his widow at the Gatlinburg meeting. The Outstanding Service Award was not granted at the Gatlinburg meeting, since no nominations were received. As the number of awards is used as a parameter for the evaluation of the performance of the Division, it is suggested to discuss the problem at the next meeting. Also it is suggested that Paul writes a note for the newsletter giving details on the nomination procedure and deadlines.

6. Publicity

Todd Palmer is not present at the meeting. Richard communicates that the newsletter should have been forwarded electronically to the members of the Committee. He observes that the name of the actual Chair of the nominating committee should be corrected.

7. Program Committee Report

Anil Prinja reports on the outcome of the meeting that took place earlier in the afternoon. He illustrates the situation of the forthcoming Winter meeting. He states the opportunity to have an updated list of reviewers for the national and topical meetings. Interested people in the Committee sign in.

A discussion is then held on the criteria that should be used for acceptance of papers submitted to meetings and on the whole reviewing process and its opportunity and validity, also in consideration of the fact that only a rather small number of papers are actually rejected. Another long-debated problem concerns the opportunity to review full papers rather than summaries for topical meetings. Since these problems come very often in discussion, it is believed that the question of the paper reviewing process should be brought up in the agenda of the next meeting.

8. M&C 2003 Topical Meeting. Final Report

Yousry Azmy reports on the topical meeting held in Gatlinburg and he hands in a detailed report, where also the *lessons learned* are illustrated. A synthetic report is attached as appendix A to these minutes.

Ali observes that the best student paper award was presented at the banquet on Wednesday while student papers were also included in the program for

Thursday. This fact might have suggested the idea that the choice had already been made before the paper presentation, which, by the way, is one of the elements to be taken into consideration for the judgement. It is believed that the Committee should discuss the matter and establish clear criteria for the best student paper award.

9. Standards

Andy Smetana reports briefly on the topic and on the forthcoming meetings. A report by Andy is attached as Appendix B to these minutes.

10. Membership

Madeline Feltus illustrates the situation of the membership of the Division. She suggests the opportunity to stimulate new potential members and, when possible, to contact members who have not renewed their membership. A list of unpaid members is distributed.

11. Benchmarks

Barry Ganapol reports very briefly on the meeting of the Benchmark Committee held earlier in the day. Some report will be included in NN in the future.

12. Old Business

There is no time to open a discussion on many important matters brought up in the previous meeting. However, Richard lists some important issues, which are still open and should be brought up in the forthcoming meeting:

- The amendments to the by-laws: Richard asks the in-coming Chair to keep the Committee set up in the previous Washington meeting;
- The duration of Committee Chairs;
- The Long Range Operations Plan;
- The guidelines for publications.

13. New Business

Richard discusses the question of the matrix introduced by ANS to evaluate the performance of the divisions. The Professional Divisions Committee proposes to give the matrix evaluation, identifying each division's results, to the Board of Directors. During that meeting a question was raised on the suitability of including division's names in the report to the Board of Directors, because it was feared by some divisions' representatives that the Board could monitor closely the divisions with bad evaluations. Consequently divisions were required to approve or disapprove the PDC motion. The Division Executive Committee unanimously has no objections that the matrix evaluation, including the division name and results, is given to the ANS Board of Directors.

Having concluded the discussion on all points in the Agenda, the Chair Richard Sanchez adjourns the meeting at 4:05 pm.

All the members of the Committee join in thanking Richard for his hard work as Chair and for his dedication to M&C Division.

Draft, 23 June 2003

P. Ravetto, Secretary

Appendix A

Final Report on the ANS M&C 2003 Topical *Nuclear Mathematical & Computational Sciences: A Century in Review, A Century Anew*

Yousry Y. Azmy

- ❖ **Sponsors:**
 - ANS Math & Comp, Reactor Phys, and Rad Protection & Shielding Divisions
 - Oak Ridge/Knoxville Local Section of the ANS
 - Radiation Safety Information Computational Center (RSICC)
 - Nuclear Energy Agency (NEA)
 - Canadian Nuclear Society
 - Korean Nuclear Society
- ❖ **Gelbard Review Lecture Series:**
 - Each half-day of session (except Thursday afternoon) started with a lecture.
 - Dedicated to the memory of Ely Gelbard in recognition of his contributions to our community and his active role as co-organizer of the lecture series.
 - Each invited lecturer was introduced by a colleague who briefly reminisced on the life and career of Ely Gelbard.
 - Lectures were videotaped; video/audio stream will be published on CD embedded in the corresponding PowerPoint presentation.
 - While we are proud of the slate of invited lecturers we regret the lack of international participation; of the several potential international lecturers we contacted, only one was able to accept, but then apologized due to unforeseen circumstances.
- ❖ **Sessions:**
 - 19 regular sessions
 - 6 special sessions, two of which broken into session and a half each
 - Panel session on software quality assurance and reliability
 - Poster session including oral briefing session in addition to the standard exhibit
- ❖ **Papers:**
 - 157 submitted
 - 2 withdrawn
 - 5 rejected
 - 150 accepted
- ❖ **Reviews:**
 - 127 registered reviewers
 - 85 active reviewers participated in the review process
 - 396 reviews were completed as counted by votes
- ❖ **Participation:**
 - 225 total registrants from 22 countries
 - Included 35 students (registered free) from 6 countries

❖ **Other notable events:**

- A luncheon was held in honor of Dr. I. K. Abushumays, recently retired from BAPL.
- A dinner was held in celebration of RSICC's 40th Birthday; speakers included Betty Maskewitz, former RSICC Director, and Dr. Alvin Weinberg, Nobel Laureate and former director of Oak Ridge National Laboratory.
- The conference banquet speaker was Joseph Salomon, Louver Museum, on the use of an ion beam accelerator to perform analysis on works of art
- The first *Gerald C. Pomraning Memorial Award* was presented posthumously to Prof. Gerry Pomraning; it was received by his widow, Mrs. Lucia Levermore.
- Results of the Best Student Paper competition:
 - ✓ First Prize, \$500: Jae H. Chang, Texas A&M University.
 - ✓ Second Prize, \$200: Allen Toreja, Lawrence Livermore National Laboratory.
 - ✓ Third Prize, \$100: Dobby Kastanya, North Carolina State University.
- An RSICC Best Poster Award was organized and the winner Thomas A. Brunner, Sandia National Laboratories.
- Three members of the Technical Program Committee were recognized for completing the most reviews:
 - ✓ Charles Rombough, CTR Technical Services, Inc.
 - ✓ John Hendricks, Los Alamos National Laboratory
 - ✓ Kostadin Ivanov, The Pennsylvania State University

❖ **Lessons learned:**

- Set and enforce strict limit on page count ⇒ *Suggested* limit, and limit on PDF file size insufficient.
- Adding reference information on first page of each paper ⇒ Complete citation information self-contained.
- Collected abstracts in ASCII format to compile the book of abstracts ⇒ Set word count higher than announced limit to account for hyphenation!
- Collected biographical sketches of speakers online, and distributed to session chairs prior to each session ⇒ Legible and better organized.
- Authors required to have a pre-registrant commit to present their paper, otherwise paper placed at the end of session ⇒ no gaps occurred in presentation sequences.
- Additional *food for thought*, some are detailed in the full report:
 - ✓ Concept of deadline: Initially announce absolute deadline as stick to it?
 - ✓ Paper count: Should a new balance between paper count vs quality be sought?
 - ✓ Should M&C Div. *own* a website program to run future conferences?

Appendix B

ANS-10 Standards Subcommittee Report

June 2003 ANS Meeting

Andy Smetana

ANS-10 currently supports 4 Standards in the area of Mathematics and Computations.

The following Standard is currently under maintenance:

ANS-10.4-1987; R1998, Guidelines for the Verification and Validation of Scientific and Engineering Computer Programs for the Nuclear Industry. This standard provides criteria for the verification and validation (V&V) of scientific and engineering computer programs developed for use by the nuclear industry. Dr. Chip Martin (charlesm@dnfsb.gov) chairs the Working Group for this Standard. Please contact him for additional information.

ANS-10 has two Standards that require maintenance:

ANS-10.5-1994, Accommodating User Needs in Computer program Development.

This standard presents criteria for addressing user needs in the preparation and use of computer software for scientific and engineering applications.

ANS-10.3-1995, Documentation of Computer Software. This Standard address the documentation of computer software prepared for scientific and engineering applications.

The last Standard ANS-10 supports is **ANS-10.2-2000, Portability of Scientific and Engineering Software** (revision of ANS-10.2-1988). This Standard provides recommended programming practices and requirements to facilitate the portability of computer programs prepared for scientific and engineering computations.

Please contact the ANS-10 Chair, Andy Smetana (andy.smetana@srs.gov) to work on these Standards or if you have ideas for other Standards. Work on the individual Standards is generally done by email or phone.