

MINUTES OF THE REACTOR PHYSICS DIVISION EXECUTIVE COMMITTEE MEETING
AMERICAN NUCLEAR SOCIETY

Hilton Hotel

Reno, NV

June 4, 2006, 4:00-6:00 PM

The RPD executive committee meeting was held on June 4, 2006 at the Hilton Hotel in Reno, NV.

1. The meeting was called to order by the Chair Jess Gehin at 4:00PM.
 - a. Meeting Agenda provided as Attachment 1
 - b. Meeting Attendance provided as Attachment 2
2. RPD Executive Committee **voted and approved** the minutes of the November 2006 meeting held in Washington, D.C..
 - a. Noted that name of website administrator at Georgia Tech is Jason Breen (not Jason Green)
3. Newsletter
 - a. Newsletter issues
 - b. Proposal made that newsletters should be finalized by April 15th and September 15th in each year in order to align with national meetings. For years that include a PHYSOR or Topical Meeting, the finalization date should be moved forward.
 - c. Incoming Secretary (Bob St. Clair) will need to prepare newsletter. Call for input will be issued
4. RPD Website
 - a. Add list of Wigner Award winners (chairs responsible)
 - b. Add list of scholarship winners
 - c. Discussion held noting the importance of ensuring content was up to date (not currently the case) rather than focusing on appearance of website.
 - d. Vice-Chair to review status of website and provide updates to content.
 - e. Vice-Chair will report at each future meeting the status of the website.
 - f. add to agenda as standing item
5. The treasurer Farzad Rahnema reported that the actual budget through December 2005 is \$9,483. The Treasurer's Report is provided as Attachment 3.
 - a. Need to confirm member allocation and ensure it is consistent with ANS report.
 - b. Line item will be added (\$2000) for PHYSOR 2006.
 - c. Need to disburse \$500 for student travel and \$2000 for PHYSOR 2006– action Farzad
 - d. RPD Executive Committee **voted and approved** the expenditure of \$2000 in the 2006 Budget.
 - e. Jess Gehin discussed \$2000 appropriation to scholarship fund.
 - f. Motion made to **table decision** on 2005 \$2000 scholarship expenditure until next meeting. Jess Gehin has action to obtain status of scholarship funding and report at June 2006 meeting
6. 2007 Student Conference (Oregon State University, March 29 – 31, 2007)
 - a. Looking for financial support
 - b. Looking for companies to send professionals to interact with students
 - c. Last year 350 students/professionals
 - d. See <http://groups.engr.oregonstate.edu/ans/> for more information

- e. Students also made report on 2006 Student Conference. Stated that \$1500 that had been approved by RPD previously had not yet been disbursed. Action Farzad.
7. The nominating committee reported the following results for the 2006-2007 officers and executive members:

Chair: Benjamin Rouben
Vice-Chair/Chair Elect: Farzad Rahnema
Treasurer: Jeffrey Bradfute
Secretary: Bob St. Clair

Executive Committee: United States
Michael Todosow
Pavel Hejzlar
Bojan Petrovic

International
Ken Kozier

Following people are rotating off the committee
Atul Karve, Brian Aviles and Jeff Borkoski

Need to replace vacant position left when Jeff Bradfute was elected Secretary. Steve Baker nominated to fill vacant position. RPD Executive Committee **voted and approved**

8. Scholarship Committee
- a. Jess Gehin to assume Chair of Scholarship Committee from Phillip Finck
 - b. Applications received in early 2006 – 19 candidates, top 7 made for difficult decision
 - c. Brian Toth – University of Michigan selected as winner
 - d. Current scholarship balance (3/31/06): \$94K
 - e. Will receive \$10K from Al Henry's estate – will bring total to \$104K (this figure does not include Board Endowment reported at \$16,595 as of 3/31/06)
 - f. Scholarship is fully endowed
 - g. Discussion on how to proceed now that scholarship
 - i. Will not contribute \$2000 to scholarship
 - ii. Jess will investigate increase in scholarship amount to \$4000
9. RPD Program Committee. Ivan Maldonado, reported the following:
- a. PHYSOR 2008
 - i. Brief report provided on status.
 - b. Summer 2006
 - i. Roughly 31 papers in four sessions and 1 panel session
 - ii. Report info on 4 sessions and panel session
 - iii. Best paper selections Nam Chin Cho and Mike Driscoll (Atul Karve and Ben Rouben will judge)
 - c. Winter 2006
 - i. One special sessions organized by Mike Zerkle and Ken Kozier on ENDB-VII
 - ii. Paper review end of June/early July
 - iii. Paper auction in July
 - iv. Looking for reviewers and Chairs

- d. Summer 2007
 - i. Working on 2 special sessions
 - e. PHYSOR 2006
 - i. Ben Rouben summarized status of PHYSOR 2006 planning in TPC meeting
 - ii. Papers due this week, website up and running.
 - iii. See <http://www.cns-snc.ca/physor2006> for more information.
 - f. Las Vegas expressed interest in 2010 topical.
10. Harold McFarlane, incoming ANS President, stopped by and spoke briefly.
11. Standards Committee Report – Dmitri Cokinos
- a. Status update provided regarding standards currently under review.
 - b. Contact Dmitri for detailed update.
12. Honors and Awards
- a. Wigner Award
 - i. No award this year
 - ii. Members to consider nominating qualified members
 - b. ANS Fellows
 - i. Large pool of qualified candidates in RPD
 - ii. Decision made to publish current RPD fellows in newsletter and encourage the nomination of those who are not yet fellows.
 - iii. Dmitri will supply article for next newsletter.
13. Joint Benchmark Committee Report. Russ Mosteller reported the following:
- a. Committee met earlier today
 - b. Two benchmarks submitted for approval, not discussed
 - c. Doppler benchmark; set of analytic 1D benchmarks designed for code calculations
 - d. Both are setup for verifications
 - e. Candidate benchmarks will be voted on
 - f. Once approved they will be posted at RSIC
14. Goals and Planning Committee
- a. Jess Gehin reported that the 1 year and 5 year tactical plans were updated during the earlier meeting.
 - b. Copy provided is updated version from November
 - c. 5 year plan changes
 - i. \$2000/year objective on scholarship will be modified to state will contribute as necessary
 - d. 1 year tactical plan
 - i. standards items (complete 19.3, complete 19.6.1, but new 19.6.1 being worked on, will keep 19.10)
 - ii. nominate 1 international member to executive committee, still need to add TPC member
 - iii. seek out young members – will keep
 - iv. panel session for reactor engineers will be continued
 - v. keep 2 special session/year: 1 for Albuquerque, need to get 2 for Boston

- vi. co-sponsor 2007 MCD
 - vii. delete \$2000 scholarship
 - viii. keep \$1500 and \$500/year student support
 - ix. keep \$2000 to PHYSOR 2006
 - x. keep Fellow and Wigner nominations
 - xi. keep migrate to new standard bylaws
 - xii. remove young member liaison
 - xiii. add investigate increase in scholarship
 - xiv. add Chair to appoint new TPC chair
 - e. PD metrics look good – all green except Class 3 and Professional Development. Jess to argue that ORIGEN workshop held last meeting should be counted towards PD
15. Professional Divisions Committee. Jess Gehin reported the following:
- a. Meeting held with PD representatives and at-large members.
 - i. Public Policy statement
 - 1. PPS #48 was generated by RPD
 - 2. PPS #57 has been developed but not approved
 - 3. looking for interested participants
 - ii. Discussion on meeting footprint reduction
 - 1. RPD has 6 hours of prime time
 - 2. Mike Zerkle
16. Discussed upcoming RPD presentation to ANS Board of Directors on June 7
- a. Presentation provided (see Attachment 4)
17. Standards and Bylaws
- a. RPD will form committee to address new bylaws. The committee will consist of Jess Gehin, Ben Rouben Russ Mosteller, and Baard Johansen.
 - b. Currently every division has their own by-laws. Effort underway to develop standard set.
 - c. PD's to review draft version
 - d. RPD will need to vote on revised by-laws
18. Meeting was adjourned at 6:00 pm.

Respectfully submitted by Jeffrey L. Bradfute, Secretary

Attachment 1 – Agenda

REACTOR PHYSICS DIVISION EXECUTIVE COMMITTEE

Sunday, June 4, 2006

4:00 – 6:00 PM

Location: Teton 2

Reno Hilton, Reno NV

AGENDA

1. Secretary's Report
 - a. Approval of Minutes, November 2005 Meeting Jeff Bradfute
 - b. RPD Newsletter
2. Treasurer's Report Farzad Rahnema
 - a. 2006 Budget Status
3. Nominating Committee Report Baard Johansen
 - a. 2006 Election Results
4. Scholarship Committee Jess Gehin
5. Program Committee Report Ivan Maldonado
 - a. 2006 Annual Meeting (Reno, NV)
 - b. 2006 Winter Meeting (Albuquerque, NM)
 - c. 2007 Annual Meeting (Boston, MA)
6. Reports on Topical Meetings Ben Roubin/Ken Kozier
 - a. PHYSOR 2006
7. Standards Committee Report Dmitri Cokinos
8. Honors and Awards Committee Report Dmitri Cokinos
9. Joint Benchmark Committee Report Russ Mosteller
10. Goals and Planning Committee Jess Gehin/
 - a. 2005-2008 Operational Plan updates Baard Johansen
11. Professional Divisions Committee – Summary Jess Gehin
12. Other Topics
 - a. Request for student support
 - d. Presentation to Board
13. New Business
14. Adjourn

Attachment 2 – Attendance List

1) Ivan Maldonado	Univ. of Cincinnati	ivan.maldonado@uc.edu
2) Farzad Rahnema	Georgia Tech	farazd@gatech.edu
3) Jess Gehin	ORNL	gehinje@ornl.gov
4) Jeff Bradfute	Westinghouse	bradfujl@westinghouse.com
5) Bojan Petrovic	Westinghouse	petrovb@westinghouse.com
6) Russ Mosteller	LANL	mosteller@lanl.gov
7) Taek Kim	ANL	tkkim@anl.gov
8) Dimitri Cokinos	BNL	cokinos@bnl.gov
9) Bob St. Clair	Duke	brstclai@duke-energy.com
10) Ben Rouben	AECL	roubenb@alum.mit.edu
11) Michael Todosow	BNL	todosowm@bnl.gov
12) Atul Karve	GE	Atul.Karve@gnf.com
13) Pavel Hejzlar	MIT	hejzlar@mit.edu
14) Mike Zerkle	Bettis	zerkleml@bettis.gov
15) I. Attieh	AECL	attiehi@aecl.ca

Attachment 3 – Treasurer’s Report

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AMERICAN NUCLEAR SOCIETY
DIVISION FINANCIAL REPORT
12/31/05

REACTOR PHYSICS DIV.

	BUDGET 12 MONTHS 2005	ACTUAL 12 MONTHS 2005	PAGE 2 REF.	Proposed Budget 12 Months 2006 6/4/2006
BUDGET FUNDS				
CARRY FORWARD FROM previous yr	9,505	9,505		9483
2005 MEMBER ALLOCATION	1,492	1,492		1598
DIVISION INCOME 2005	0	1,430	1	1400
TOTAL BUDGET FUNDS	10,997	12,427		12,481
BUDGET EXPENSES				
NEWSLETTERS	0	0	2	0
AWARDS, PLAQUES	200	73	3	100
NATIONAL MEETING COSTS	0	246	4	
DIVISION OFFICER EXPENSE	0	0	5	
STUDENT SUPPORT	2,000	2,000	6	2000
SCHOLARSHIP/NEED FUNDING	2,000	0	7	0
PHYSOR STUDENT SUPPORT			9	2000
OTHER EXPENSES	0	625	8	625
TOTAL EXPENSES	4,200	2,944		4,725
EXCESS (DEFICIENCY) OF BUDGET FUNDS OVER EXPENSES	6,797	9,483		7,756

Attachment 4

RPD Presentation to the ANS Board

American Nuclear Society Reactor Physics Division

Presentation to the
ANS Board of Directors
Jess Gehin
June 7, 2006, Reno NV



RPD Mission

The Reactor Physics Division has been organized to:

1. Promote the advancement of theoretical, applied, and experimental research in reactor physics,
2. Seek a better understanding of reactor physics,
3. Seek a better understanding of reactor operations and in-core fuel management through the development and application of fundamental tools,
4. Improve basic physical data,
5. Test both tools and data in reactor experiments.

Key Priorities:

- Technical Program
- Honors & Awards
- International Participation
- Henry/Greebler Scholarship
- Standards
- Student Support



RPD Executive Committee

- Chair: Jess Gehin, ORNL
- Vice-Chair: Benjamin Rouben, AECL
- Treasurer: Farzad Rahnema, Georgia Tech
- Secretary: Jeffery Bradfute, Westinghouse Electric Company
- EC (2006):
 - Atul Karve, Global Nuclear Fuels
 - Brian Aviles, KAPL
 - Jeffery Borkowski, Studsvik/Scandpower
- EC (2007):
 - William Charlton, Texas A&M
 - Juan-Luis Francois, Universidad Nacional Autonoma de Mexico
- EC (2008):
 - Abderrafi Ougouag, INL
 - Taek Kyum Kim, ANL
 - Michael Zerkle, BAPL
- Board Liason: Bertrand Barre
- Demographics: Industry – 33%; Nat'l Lab – 42%; University – 25%; Non-US - 17%

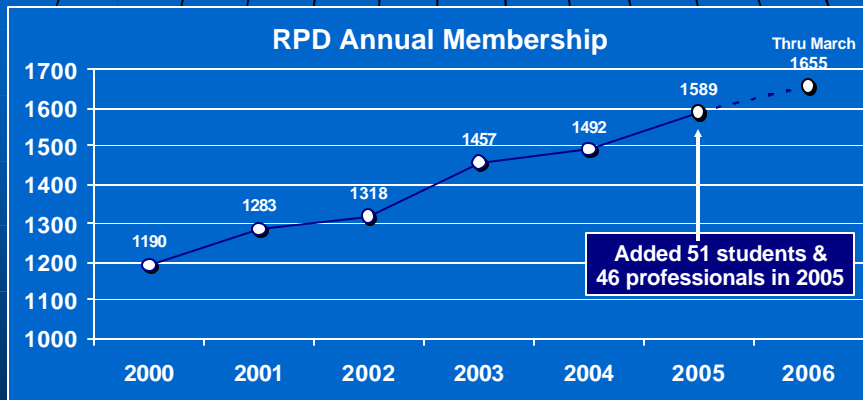


RPD Standing Committees

- Program: Ivan Maldonado, U. Cincinnati
- Honors & Awards: Dimitrios Cokinos, BNL
- Standards: Dimitrios Cokinos, BNL
- Scholarships: Jess Gehin, ORNL
(transitioned from Phillip Fink in '05)
- Goals & Planning, Membership, Nominating: Baard Johansen, Westinghouse Elec.
(past chair)
- Website: Farzad Rahnema, Georgia Tech



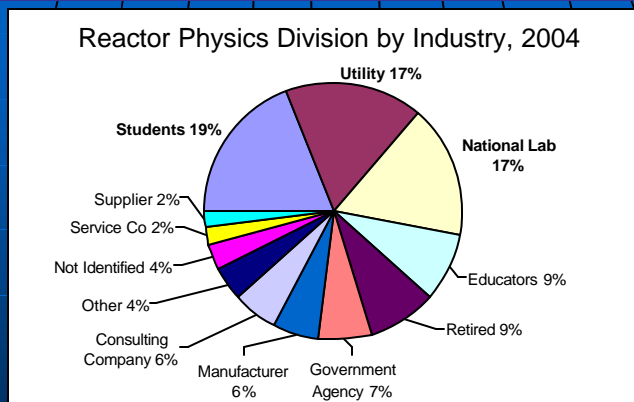
RPD Membership Trend



Overall, RPD membership has increased 33% over the past 5 years!



RPD Membership Demographics



- 53% represented by Students, Utility and National Lab
- Since '02, added 92 students, 28 Nat'l Lab, 15 educators; lost 15 Utility members



RPD Budget

	ACTUAL 2004	ACTUAL 2005	FORECAST 2006
BUDGET FUNDS			
Current Year Member Alloc	1457	1492	1492
Carry Forward, Prior Year	8995	9505	9483
Other Budget Funds			
National Meeting Participation		1430	500
AFM-III Meeting	3167		
PHYSOR 2004 Meeting (75% profit share)	7,964		
PHYSOR 2006 Meeting (75% profit share)			
TOTAL BUDGET FUNDS	21583	12427	11975
BUDGET EXPENSES			
NEWSLETTERS	0	0	0
AWARDS, PLAQUES (Wigner Award & Luncheon)	78	73	200
NATIONAL MEETING COSTS (A/V Equipment)	0	246	0
DIVISION OFFICER EXPENSE	0	0	0
STUDENT SUPPORT			
Student Travel, National Meetings	500	500	500
Annual Student Conference	1500	1500	1500
Topical Meeting Travel Support			2000
SCHOLARSHIP (Henry/Greebler)	10000	0	0
OTHER EXPENSES	0	625	0
TOTAL EXPENSES	12078	2944	4200
TOTAL BUDGET FUNDS OVER EXPENSE	9505	9483	7775



RPD Planning

- 5 Year Operational Plan
 - Aligned with ANS 5-year goals
 - Updated annually each June
- 1 Year Tactical Plan – Updated twice per year
- Latest update includes as appendices
 - RPD Vitality Measures
 - Success plan for officers & committees
 - Goals for meeting participation, topicals, standards, awards, student support
- Succession Planning
 - Secretary – contested election of 2 candidates, preferably from EC or TPC
 - Secretary then progresses through Treasurer -> Vice-Chair -> Chair positions
 - Technical program chair – 3 year assignment, with transition



RPD Communication

- Increased emphasis on website and newsletter
- Website:
 - Redesigned in 2005
 - Updated frequently to contain:
 - EC Meeting Minutes
 - 5 yr operational plan and 1 yr tactical plans
 - Officer and committee contact list
 - Newsletters
- Newsletter
 - Committed to 2 newsletters per year
 - Recent newsletter publicized sessions at ANS National Meeting and PHYSOR 2006 Topical Meeting
- E-mail list
 - Distribute newsletter in electronic form
 - Distribute information on special sessions to bolster interest in national meetings



RPD Contributions to ANS

- ANS Position Statements
 - #48 – Preserving Experimental Benchmark Work (1999)
 - #57 – Preservation of Nuclear Data Research (not issued, under assessment)
 - Representative attends PPC meetings
- Participation with Other Professional Societies
 - Canadian Nuclear Society - PHYSOR2006 Sponsored by Canadian Nuclear Society (September 2006)
 - European Nuclear Society - Co-sponsorship of M&C 2005 topical meeting (September 2005)
 - Moroccan Association for Nuclear Engineering and Reactor Technology – Class 3 sponsor of PHYTRA-1 conference (March 2007)
 - Swiss Nuclear Society – PHYSOR2008
 - PHYSOR2004 meeting cosponsored by 15 international nuclear societies.
- Society Leadership
 - Attended 100% of PDC Workshops & Meetings
 - Attended 100% of NPC Meeting
 - ~50% attendance by Officers/Executive Committee
 - Working on division By-laws and Rules
- Non-Meeting Publications
 - Standards (next slide)
 - Working with authors and book publishing committee on a new reactor physics text book



RPD Standards

RPD Is Very Active in the Development of Standards

Active Standards

- ANS 5.1 – Decay Heat (2004) – New working group chair
- ANS 19.1– Nuclear Data Sets (2002) – Revision underway
- ANS 19.3 – Reactivity & Reaction Rates (2005)
- ANS 19.3.4 – Thermal Energy Generation (2002)
- ANS 19.4 – Documentation for RP Measurements (2000) – Needs update
- ANS 19.5 – Requirements for RP Measurements (1984) – Needs update
- ANS 19.6.1 – Reload Physics Startup Testing (2005)
- ANS 19.11 – Moderator Temperature Coefficient (2002) – Revision underway

Under Development

- ANS 19.8 Fission Chain Yields
- ANS 19.9 Delayed Neutrons
- ANS 19.10 Fast Neutron Fluence (under review by ANS-19)



RPD Professional Development

- 2005 National Meeting Professional Development Workshop "Introduction to New Analysis Capabilities of the ORIGEN Code"
- PHYSOR 2004 Workshops:
 - MCNP5 Criticality Workshop
 - Gen-IV Reactor Physics Workshop
- PHYSOR 2006 Planned Workshops:
 - SCALE/TRITON Lattice Physics
 - PARCS Core Simulator
 - DRAGON Lattice Physics
- Special panel sessions at ANS National Meetings on "Current Topics for Reactor Engineers" (1 time per year)



RPD Scholarships

- Henry/Greebler scholarship awarded in amount of \$3500
 - May be granted to any full-time student attending North American College or University
 - Henry family matching contribution of \$10,000 to be added this year
 - Current balance at \$92,900
 - With Henry matching funds, scholarship is at RPD goal of \$100K.
- RPD has contributed \$42,000 since 2001
- RPD considering increasing award amount or creating second scholarship
- 2006 Scholarship had 24 well-qualified applicants.



RPD Recognition/Awards

- Eugene P. Wigner Reactor Physicist Award initiated in 1990, with Dr. Wigner as the first recipient
- Recent Wigner Award winners:
 - 2005 - Massimo Salvatores, ANL/CEA
 - 2004 – Richard Hwang, ANL
 - 2003 – Paul Turinsky, NCSU
W. Stacey, GA Tech
- Wigner Award Lecture Series
 - Massimo Salvatores, “The Interplay of Theory and Experiments in Reactor Physics” at 2005 Winter Meeting
- RPD Best Paper Award given at each meeting
 - November 2005 Winner: K. Macku et al., “U-238 Capture Distributions: CASMO-4 and MCNP vs Activation Foil Measurements”
 - Best paper certificate awarded to winner



RPD Student Support

- Since 2001, RPD has annually dispersed:
 - \$1500 to Annual ANS Student Conference
 - \$500 to Student Travel to National Meetings
- Support for participation in PHYSOR2006 in budget (\$2000).
- 5 Yr Operational Plan includes commitment to maintain at least this level of funding.
- Scholarship and Student Support are dominate expenses in RPD budget and indicate our commitment to supporting students.



RPD National Meeting Participation

- RPD fully supports both National Meetings with a strong technical program:
 - 2006 Annual Meeting – 4 sessions+panel, 31 papers
 - 2005 Winter Meeting – 7 sessions, 45 papers
 - 2005 Annual Meeting – 7 sessions+panel, 46 papers
 - 2004 Winter Meeting – 6 sessions, 44 papers
- ~80-90 papers contributed per year to RPD sessions
- Sessions are co-sponsored and organized with other divisions
- RPD Goal is to have at least 3 standing sessions plus at least 2 special sessions per meeting
- Panel session has added value to our meetings for utility participation



RPD Topical Meetings

- Reactor Physics Division Topical Meetings
 - 2004 – PHYSOR 2004, Chicago, IL
 - 282 registered participants (52% non-US)
 - 240 full papers
 - Meeting Profit: \$35K (\$10K to RPD/MCD, \$17K to ANS)
 - 2006 – PHYSOR 2006, CNS, Vancouver, BC
 - 430 reduced-length papers submitted
 - Full length papers being submitted now
 - Meeting is well organized and will be very successful
 - 2008 – PHYSOR 2008, Interlaken, Switzerland
- RPD co-sponsors M&C topical meetings (odd years) and MCD co-sponsors the PHYSOR conferences (75/25 profit split)
- RPD seeks to award every 3rd PHYSOR meeting to a non-North American Host
- RPD Goal to have >40% non-US participation at PHYSOR
- RPD also sponsors Advances in Nuclear Fuel Topical on a six-year schedule (last meeting in 2003, next in 2009)



RPD Metrics (CY2004)

Division Meetings	Division Governance	Division Contributions to Society	Division Services to Membership
National Meeting Participation	Succession Planning	ANS Position Statements	Professional Development
Class I / Class II Topicals	Membership Trends	Participation with Outside Prof. Societies	Scholarships
Class III Topicals	Communications	Society Leadership	Peer Recognition/ Awards
	Division Planning	Non-Meeting Publications	Student Support



Summary

- Areas of Success
 - Strong technical program (National, PHYSOR)
 - Strong standards support
 - High level of international participation
 - Well funded and contested scholarship
 - Excellent level of student support
- Focus for Future Action
 - Maintain our strong technical program (this takes a lot of effort by our TPC)
 - Provide value to members (workshops, special sessions, panels)
 - Engage the young members group (build our future)
 - Support ANS National's Plans & Goals
 - Maintain newsletters and communication with members

