

#### **MEETING MINUTES**

Meeting minutes were taken by Pavel Tsvetkov, division secretary Attendance count – 20 attendees (see APPENDIX 2 for the current executive committee membership structure and APPENDIX 3 for the attendee list of the Executive Committee Meeting in San Diego)

Meeting called to order at 4:00 pm by Ali Haghighat.

Meeting agenda distributed (see APPENDIX 1)

#### 1. Secretary's Report – Pavel Tsvetkov

#### a. Approval of minutes, June 2012 meeting (Chicago, IL)

The ANS 2012 Annual Meeting minutes summary has been distributed. Several committee members offered corrections to the document. Corrections were taken and implemented. The corrected document is provided in APPENDIX 4.

The motion was made by Mark DeHart to approve the ANS 2012 Annual Meeting Minutes as amended The motion was seconded by Pavel Tsvetkov. The motion was carried by unanimous vote of the committee members.

Outcome: ANS 2012 Annual Meeting minutes approved, see APPENDIX 4.

#### b. RPD Newsletter Status/Schedule

The ANS RPD Winter/Spring 2012 Newsletter has been distributed to the RPD membership prior to the ANS 2012 Winter Meeting in San Diego.

The next newsletter is expected to be released after the ANS 2012 Winter Meeting, by the end of 2012. It will be released as Summer/Winter 2012 Newsletter.

The Spring 2013 Newsletter will be released prior to the ANS 2013 Annual Meeting.

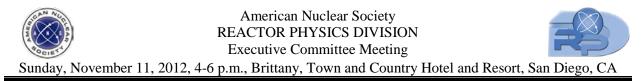
**Outcome:** the upcoming ANS RPD Summer/Winter 2012 Newsletter is expected by the end of 2012.

#### 2. Treasurer's Report – Ron Ellis

The financial report has been distributed to the committee. The Treasurer's financial report and related documents are given in Appendices as follows - APPENDIX 5 "RPD Financial Report", APPENDIX 6 "Historical Income/Expenses & 2012 Budget", APPENDIX 7 "ANS Financial Status Report as of 8/31/2012", APPENDIX 8 "Reactor Physics Division Membership", APPENDIX 9 "Reactor Physics Division Membership History".

#### a. Student Support (National Meetings and Student Conference)

Student conference allocation has been discussed and made. The committee expressed support and agreement to continue support student conferences at the levels needed. Excess funds were



mentioned and discussed in this context and also in connection to broader student support and potential ways to do so. A student design competition was noted as a possibility.

**Outcome:** the student conference allocation is budgeted

#### b. 2012 Budget Status (payments, income, pending items, etc.)

It has been reported that the current RPD membership is approximately 2200 members. The budget has been reviewed by the committee. The question was asked to confirm that the intent is to keep the budget at the level of about \$70,000. It has been acknowledged that there is some excess available. The support for the potential joint benchmark conference is cancelled for this year due to schedule challenges.

Outcome: the committee concluded that the budget is healthy

#### c. 2013 Budget Proposal

2013 budget details have been presented. The need to finalize scholarship/fellowship expenses has been discussed.

**Outcome:** the committee will continue working on establishing fellowships/scholarships and providing the needed budget allocation.

#### 3. 2012 Nominating/Elections Committee Report – Ben Forget

Ben Forget was absent at the meeting. Mark DeHart discussed elections and discussed the status. Candidates for the secretary position will be Attul Karve and Fausto Franceschini. There are 4 candidates for the executive committee. There is also one international position.

Outcome: the committee discussed the election bids.

#### 4. 2012 RPD Survey – Blair Bromley

Blair Bromley discussed the status of the RPD survey. Mark DeHart mentioned that the ANS national should be capable to provide technical support with the survey administration. The plan is to proceed with the survey in 2013.

**Outcome:** survey is in progress. Blair Bromley will check with Joe koblich on the potential for ANS help with the survey administration.

#### 5. RPD Website Update – Mark DeHart

Mark DeHart provided update on the status of the RPD website. Hanna Shipara availability to make timely changes to the website content was discussed. The need to update the website content was brought up and discussed. It was mentioned that the current site still shows Ivan Maldonado as the division chair.

Access to the website content and access credentials needed for it were discussed. Mark DeHart mentioned that he is waiting for Hanna to send him the necessary information for accessing the site.

Mark also brought up his efforts to establish the RPD Facebook presence. It is up and available. He is also planning to create LinkedIn site. Some committee members indicated that they are not interested in using Facebook because of privacy issues.

**Outcome:** Mark DeHart plans to proceed with his ANS RPD website update efforts to bring it up to speed and make sure this can be sustained on a timely basis.

#### 6. Scholarship Committee - Jess Gehin

Jess Gehin was absent. A comment was made that he has been absent for some time and a new liaison is needed. The need for a plan and a commitment to establish an undergraduate scholarship was discussed. There was a discussion about Andy Worrall to take the lead on the Scholarship committee but nothing firm was decided.

Outcome: no immediate action items emerged from the discussion. New liaison will be considered.

#### 7. Program Committee Updates – Alex Stanculescu

Mark DeHart gave the update for Alex Stanculescu who was absent at the meeting.

#### a. 2012 Winter Meeting (San Diego, CA)

Mark DeHart reported that there are 11 sessions sponsored and co-sponsored by RPD at the ANS winter meeting in San Diego:

- 1. Reactor Physics: General I, Mon., p.m.
- 2. Reactor Physics: General II, Tue, a.m.
- 3. Reactor Physics Design, Validation, and Operating Experience I, Tue, a.m.
- 4. Reactor Physics Design, Validation, and Operating Experience II, Tue, p.m.
- 5. Reactor Analysis Methods I, Wed, a.m.
- 6. Reactor Analysis Methods II, Thurs, a.m.
- 7. Hybrid Monte Carlo Deterministic Methods for Reactor Analysis, Wed, a.m.
- 8. "I Wonder if..." Special Session in Honor of John Rowlands, Wed, p.m.
- 9. IAEA Reactor Physics and Technology Development Activities I, Thurs, a.m.
- 10. IAEA Reactor Physics and Technology Development Activities II, Thurs, p.m.
- 11. Physics Issues for Small Compact Reactors, Thurs, p.m.

All special sessions made and have good representations of papers. Mark DeHart confirmed availability of chairs and co-chairs for the sessions.

The paper review process resulted in 5 potential best papers.

Outcome: no immediate action items resulted from the discussion

#### b. 2013 Annual Meeting (Atlanta, GA)

Meeting organization is in progress. There is a number of proposed special sessions being organized and papers are solicited.

**Outcome:** the need to participate in the review process was acknowledged.

# c. 2013 Winter Meeting (Washington, DC) (75<sup>th</sup> Anniversary of the ANS at 2013 Washington DC meeting)

The need for a session focused on fission (potentially a panel discussion) has been brought up and discussed in a view of 75<sup>th</sup> anniversary of fission. Potential ideas were discussed. An idea of a joint RPD-MCD session has been brought up.

**Outcome:** solicit more ideas after the meeting is an action item including approaching MCD for a joint session or panel.

#### 8. Topical Meetings (Updates, Requests for Sponsorship)

#### a. PHYSOR 2012 (Knoxville, TN) – Jess Gehin, Ivan Maldonado, Ron Ellis

Ron Ellis reported that PHYSOR 2012 has been closed by the ANS national. The income to the division is about \$12,306, 4,000 people were associated with the conference in various roles, 375 papers were presented in 65 sessions. The conference was a clear success.

**Outcome:** the committee acknowledged the success of PHYSOR 2012 and thank organizers for their efforts and superb job done.

#### b. PHYSOR 2014 Planning – Akio Yamamoto

Akio Yamamoto presented the status of the conference organization. The conference will be held in Kyoto, Japan, will be similar to previous PHYSOR meetings. Deadlines and committees have been established. Everything is on schedule. The conference organization status report was delivered via presentation. The presentation is included as APPENDIX 10.

The question was asked about potential discounts available at the conference. The answer was given that there are no discounts defined yet. Everything will depend on budgets.

A concern was brought up with respect to potential travel restrictions and limited conference attendance due to budget constraints.

**Outcome:** no action items developed from the discussion.

#### 9. Standards Committee Update - Dimitrios Cokinos

The report on standards related efforts was given by Dimitri Cokinos. There are several standards in development including 19.3 on neutronics (static) and standards on physics of startup tests, nuclear data for medical and industrial applications, and 19.5 on requirements for experiments for physics measurements. Standard on MTC has been finalized. Decay heat power standard has been revised by Ian Gauld (ORNL).

Search for the chair is in progress. Standards meeting -8:30 - 10:30 a.m., Monday.

**Outcome:** no action items developed from the discussion.





Sunday, November 11, 2012, 4-6 p.m., Brittany, Town and Country Hotel and Resort, San Diego, CA

#### 10. Honors and Awards Committee Update - Dimitrios Cokinos

Dimitri Cokinos gave the update on honors and awards committee activities

#### a. Wigner Award

Wigner Award nominations due by April

**Outcome:** no direct action items developed from the discussion for the committee. Nominations for the award are solicited.

#### **b. ANS Fellows**

Number of potential candidates for the award has been identified.

**Outcome:** no direct action items developed from the discussion for the committee. Nominations for the award are solicited.

#### c. Update on Categorization of Division Administered Awards

ANS handles the award. Early career awards (under 39 years) have been discussed. There should be a system in place to encourage nominations.

**Outcome:** no direct action items developed from the discussion for the committee. Nominations for the award are solicited.

#### **11. Student Conference Update – (MIT)**

MIT student representatives gave the update on the ANS student conference organization status. The conference will have presentations and poster sessions. Best paper awards will be contested in graduate and undergraduate categories. Opportunity to submit mode detailed abstracts will be offered to conference participants. The conference details are summarized in APPENDIX 11.

Outcome: volunteer is needed to deliver a presentation from RPD.

#### 12. Joint Benchmark Committee Report - Mark DeHart, Glenn Sjoden

Glenn Sjoden reported on the status of the joint Benchmark Committee effort. The benchmark database is completed and available. Blair Briggs at INL is a coordinator. Special session is approved for the next winter meeting. The session needs a co-chair.

Outcome: there is a need to seek a session co-chair.

#### **13.** Goals and Strategic Planning Committee – Mark DeHart

Mark DeHart reported on the Goals and Strategic Planning committee activities. The plan is to develop a primer outlining each RPD officer responsibilities.

**Outcome:** the committee will review the document once available.

#### 14. Professional Divisions

#### a. PDC Update (workshop update by Ali Haghighat and Mark DeHart)

Mark DeHart reported on the professional development committee activities. Student assistance and DOE travel restrictions were discussed.

**Outcome:** no action items developed from the discussion.

#### b. Liaison report (Regis Matzie – PDC Liaison)

Regis Matzie was not present at the meeting. No report was given on this agenda topic.

**Outcome:** deferred till next meeting.

#### 15. New Business

Ali Haghighat carried the discussion. Session chairs/co-chairs were confirmed for the RPD sessions. Mark DeHart informed the committee that this has been resolved at the Program Committee meeting.

The committee discussed the possibility to provide assistance to Yehuda Wagchal in his annual visa applications. ANS President has been informed and expressed sympathy to the situation. The committee acknowledged that this issue is beyond ANS and is up to the State Department to handle following the established process.

ANS President is holding a meeting on strategic planning efforts which are currently in progress.

The conference registration fee has been discussed. Committee members expressed their surprise by the current level of the fee vs. fees in peer professional societies. It has been agreed that the current fee level is too high and may potentially impact conference attendance.

Blair Bromley brought up the subject of donations for student conferences and the possibility to organize RPD student design competition. The discussion did not lead to any action items.

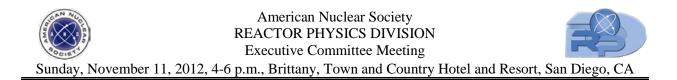
# RPD co-sponsoring of the International Conference on Nuclear Data for Science and Technology, March 4-8, 2013, NY, NY (<u>http://www.bnl.gov/nd2013</u>)

Because of the scheduling challenges due to timing constraints, RPD is not going to provide any support to the meeting.

Outcome: no support will be provided.

#### A list of topics for the Special Awards was prepared at the request of H&A Chair, Paul Turinski

- 1. Beyond-Design-Basis-Accident (BDBA) scenarios, analysis and management
- 2. Advances in Multiphysics Methods, Modeling and Visualization
- 3. Advances towards Nuclear Energy Sustainability
- 4. Public Education and Acceptance



The committee reviewed the proposed list of topics for the special award. Dimitri Cokinos confirmed that only one topic will be picked among topics submitted by the divisions. The committee expressed hope that one of the proposed four topics will be picked up by the ANS national for consideration as an award area.

**Outcome:** no action items developed from the discussion.

# Is there a need for formation of a committee on Public information and Website Maintenance? E.g., Fukushima lessons, preparation of a RPD poster.

Ali Haghigat discussed the need for public outreach, public information and website maintenance as well as RPD poster. An option of forming a committee of volunteers was suggested.

**Outcome:** the committee seeks volunteers who are interested in serving on the committee on public information and website maintenance.

#### 15. Adjournment

Ali Haghighat moved to adjourn the meeting. Mark DeHart seconded. The motion carried by the unanimous vote of the executive committee membership present.

Blair Bromley asked the committee to self-organize for the photo opportunity.

Several photos were taken to document the meeting.

Outcome: photos from the RPD Executive Committee Meeting are included as APPENDIX 12.

The meeting was adjourn.



American Nuclear Society REACTOR PHYSICS DIVISION Executive Committee Meeting



Sunday, November 11, 2012, 4-6 p.m., Britany, Town and Country Hotel and Resort, San Diego, CA

### APPENDIX 1. Executive Committee Meeting Agenda

1 Secretary's Deport Devel Toyothey	5 min
<ol> <li>Secretary's Report – Pavel Tsvetkov         <ol> <li>Approval of minutes, June 2012 meeting (Chicago, IL)</li> </ol> </li> </ol>	5 min
b. RPD Newsletter Status/Schedule	
2. Treasurer's Report – Ron Ellis	10 min
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a. Student Support (National Meetings and Student Conference)	
b. 2012 Budget Status (payments, income, pending items, etc.)	
c. 2012 Budget Proposal	5 min
3. 2012 Nominating/Elections Committee Report – Ben Forget	5 min 15 min
4. 2012 RPD Survey – Blair Bromley 5. RPD Website Us data – Mark Dallart	
5. RPD Website Update – Mark DeHart	10 min
6. Scholarship Committee - Jess Gehin	5 min
7. Program Committee Updates – Alex stanculescu	15 min
a. 2012 Winter Meeting (San Diego, CA)	
b. 2013 Annual Meeting (Atlanta, GA)	
c. 2013 Winter Meeting (Washington, DC) (75 <sup>th</sup> Anniversary of the ANS at	
2013 Washington DC meeting)	10
8. Topical Meetings (Updates, Requests for Sponsorship)	10 min
a. PHYSOR 2012 (Knoxville, TN) – Jess Gehin, Ivan Maldonado, Ron Ellis	
b. PHYSOR 2014 Planning – Akio Yamamoto	<u> </u>
9. Standards Committee Update - Dimitrios Cokinos	5 min
10. Honors and Awards Committee Update - Dimitrios Cokinos	10 min
a. Wigner Award	
b. ANS Fellows	
c. Update on Categorization of Division Administered Awards	<u> </u>
11. Student Conference Update – (MIT)	5 min
12. Joint Benchmark Committee Report - Mark DeHart	5 min
13. Goals and Strategic Planning Committee – Mark DeHart	5 min
14. Professional Divisions	10 min
a. PDC Update (workshop update by Ali Haghighat and Mark DeHart)	
b. Liaison report (Regis Matzie – PDC Liaison)	
15. New Business	10 min
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Science and Technology, March 4-8, 2013, NY, NY (http://www.bnl.gov/nd2	2013)
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3) Advances towards Nuclear Energy Sustainability	
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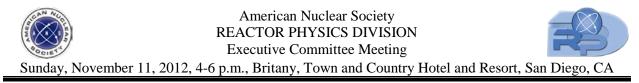


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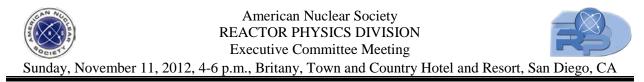
APPENDIX 2. 2012-13 RPD O	officers and Exec					
Chair Dr. Alireza Haghighat Virginia Tech Research Center 900 N Glebe Road Arlington, VA 22203-0238 Phone: (571) 858-3333 Email: haghighat@vt.edu		Vice Chair/Chair Elect Dr. Mark DeHart Idaho National Laboratory Nuclear Systems Design and Analysis Division PO Box 1625 Idaho Falls, ID 83404 Phone: (208) 526-1279; Fax: (208) 526-2930				
Tressurer		Email: Mark.DeHar	t@inl.gov			
Treasurer Dr. Ronald J. Ellis Oak Ridge National Laboratoy Reactor and Nuclear Systems Division 1 Bethel Valley Road, PO Box 2008 Oak Ridge, TN 37831 Phone: (865) 574-6107; Fax (865) 574-9619 Email: ellisrj@ornl.gov			ear Engineering sity 33, College Station, TX, 77843-3133 )78; Fax: (979) 845-6443			
Executive Committee						
2013 Dr Tunc Aldemir Ohio State University E427 Scott Laboratory 201 W 19th Ave Columbus, OH 43210 Phone: (614) 292-4627 Email: aldemir.1@osu.edu	2014 Dr. David W. Nigg Idaho National Labo Corporate Fellow, N Design & Analysis I PO Box 1625 Idaho Falls, ID 8340 Phone: (208) 526-76 Email: David.Nigg@	uclear Systems Division 4 27	2015 Dr. Sandra Dulla Politecnico di Torino, Dipartimento Energia Corso Duca degli Abruzzi, 24 10129 Torino, Italy Phone: (+39) 011 090 4416 Email: sandra.dulla@polito.it			
Mr. Robb Borland Manager, Nuclear Fuel & Analysis FirstEnergy Nuclear Operating Company Phone: (330) 384-2483 Email: rjborland@firstenergycorp.com	Dr. Mohamed Ouisle Westinghouse Electr 4350 Northern Pike Monroeville, PA 151 Phone: (412) 374-21 Email: ouislom@we	oumen ic Company 146, USA 48	David S. Orr, PE Duke Energy P.O. Box 1006 Charlotte, NC 28201-1006 Phone: (704) 382-8673 Email: david.orr@duke-energy.com			
Dr. Blair P. Bromley AECL - Chalk River Laboratories Building 889 - Keys School - Room 130 I Plant Road, Chalk River, ON, K0J 1J0 Phone: (613) 584-8811 x43676 Email: bromleyb@aecl.ca	Dr. Ugur Mertyurek Oak Ridge National Reactor and Nuclear I Bethel Valley Roau Oak Ridge, TN 3783 Phone: (865) 574-52 Email: mertyureku@	Systems Division d, PO Box 2008 1 91	Dr. Mark Pierson Virginia Tech, Mechanical Engineering Department, Nuclear Engineering Program 306 Collegiate Square (MC 0710) Blacksburg, VA 24061 Phone: (540) 231-9112 Email: mark.pierson@vt.edu			
Dr. Akio Yamamoto Associate Professor Dept of Material, Physics and Energy Engineering Graduate School of Engineering, Nagoya University Furo-cho, Chikusa-ku, Nagoya-shi, 464- 8603, Japan. Phone: +81-52-789-5121 Email: a-yamamoto@nucl.nagoya-u.ac.jp	Massimo Salvatores CEA-Cadarache St-Paul-Lez-Durance France Phone : +33 6891040 Email : Massimo.sal	e 13115 006 vatores@cea.fr				
Program Dr. Alexander Stanculescu Idaho National Laboratory Director, Nuclear Systems Design and Analysis (NSD&A) Division 2525 North Fremont Avenue, P.O.Box 1625, Idaho Falls, ID 83415-3860 Phone: (208) 526-5985 Email : Alexander.Stanculescu@inl.gov	Standard/Honors & Dr. Dimitrios Cokine Brookhaven Nationa Building 130 Upton, NY 11973-5 Phone: (516) 344-21 Fax: (516) 344-39 Email: cokinos@bnl	os 1 Laboratory 00 146 957	Scholarship/Goals & Membership Dr. Jess Gehin Oak Ridge National Laboratory 2218 Brighton Farms Blvd. Knoxville, TN 37932-1400 Phone: (865) 576-5093 Fax: (865) 574-9619 Email: gehinjc@ornl.go			
Immediate Past Chair Dr. Benoit Forget Massachusetts Institute of Technology 77 Massachusetts Ave. Room 24-214 Cambridge, MA 02139 Phone: (617) 253-1655 Email: bforget@mit.edu		Past-Past ChairDr. G. Ivan MaldonadoUniversity of Tennessee311 Pasqua EngineeringKnoxville, TN 37996-2300Phone: (865) 974-7562; FAX: (865) 974-0668Email: ivan.maldonado@utk.edu				



#### **APPENDIX 3**

#### Reactor Physics Division Executive Committee Meeting Sunday, November 11, 2011, 4:00 - 6:00 PM San Diego, CA ATTENDEE LIST

Name	Organization	E-mail
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MARK DEHART	182	mark deharteinlagov
Fausto Francesc	Wiginia Tech INL thin. Washingtouse	franceforwestighouse . con
PIERO RAVETTO PO	DLITECNICO DI TORINO PIERO	RAVETTO @ POLITORIE
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A	Virginia Tech me	
MAK FRATON!	PENN STATE	mfratonic psv. edu
BLACK BROTLEY	CNS/AECL-CRL brom	nleybpacch. ca; yelmorb?
Akio Vamamoto	Nageya Univ. a-yam	aucto e nucl. asy elmosto? aucto e nucl. antco.net alla@ ornl.gov
Any worrall	ORNZ WOR	alla@ ornl.gov
Nam Zin Cho	KAUT Mach	@kaist.ac.kr
David Urs	Duke Energy davi	d. orr O duke-energy, com
SANDRA UULIA		he. dulba polito.it
Glenn Sjoden		Sjøden@gatech.edu
Mark Deinert	UT Austin Mde	cinert Qutexas, edu
Hany flodel-Khalik	ntsce abdelkt	ialik@ncsu.edu
Pavel Tsue Hear	TAMU tsvetu	ov @ tama.edg
Travis Trahan		-ahan Qumich. edu
Dimitri Cokinos		inos @ bhl.gov
Tom Sutton	KAPL Thomas, Sutton, C	iontractor @ unn pp. gov
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#### **APPENDIX 4. ANS 2012 Annual Meeting minutes**

#### Reactor Physics Division Executive Committee Meeting Sunday, June 24, 2012, 4:00 PM to 6:00 PM., Chicago, IL, USA

Ali and Mark move that the meeting should start. Minutes and newsletter updates are circulated, discussed, and approved. Mark circulated his budget/finance update. The budget is healthy. Mark will find out about disbursements on the Henry/Greebler Scholarships, from the endowed

There were 19 requests for president reception tickets for students. 11 have been paid for so far. RPD will discuss if there are restrictions and if further tickets should be allowed in the future. David G volunteers for MC and RP committee on these tickets. Currently, it is \$1000 per ANS meetings allocated for these tickets. Travel for students is supported to \$1000. RPD should discuss if the money could be used for international meetings too; a cost limit should be set.

Whoever students have paper should get tickets to reception...

Ben motions to make permanent and \$1000 for tickets; requirements: have a paper, member of RP, over 21, registered, and don't already have the ticket.

Mark moves this, set cap for RPD for two payments of up to \$1000. Dave is responsible to find his replacement. Actually, EC should decide this if we have a one meeting warning.

Mark said it is easy; make it a regular budget item now!

Election 2012 results discussed: Pavel is new secretary. The three incoming and outgoing EC members were discussed.

Ali talked with Hanna on website. Jess was not here to discuss scholarship issues. Ben proposes undergrad fellowship for about \$3500 per year (make as an endowment). Name for the fellowship could be for Stamm'ler? Etc?

Restricted to student who have completed 2 yrs appropriate, and a composition. Ali: approach industry. Name after 'Diminache'?(spelling?) - Mark.

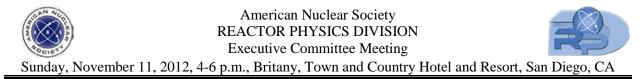
Maybe additional awards. Suggestions for names should be sent in to RPD officers. Pool of people who have won Wigner Awards? Ben will follow up with Jess.

Dimitrios C gave report on Standards activities and progress. Some are under revision. ANSI: nuclear data for reactor design under review. Ali and Dimitri propose and discussed – delayed neutrons. Glenn might like to help too. Dimitri proposed six standards for international acceptance. At a meeting in Paris, there was agreement on this.

An update was given on the PC meeting. 71 papers for this meeting

Blair discussed the paper judging and forms. Send Blair results by email.

The plans for the Winter meeting in SD was discussed.



The SMR session had five papers already. Next year's ANS Annual Meeting will be in Atlanta. A proposed session on CASL and NEAMS technology (not just CASL).

Ivan summarized on PHYSOR 2012.

The vote on the PHYSOR 2014 proposals was discussed. All three were excellent. All three were judged to be within a point. The Japan (Kyoto) (Sept 28 – Oct 3 2014) proposal was the winner.

PHYSOR meetings are officially class 2

The next Advances in ANFM-5 proposal was discussed. It will be at Omni Hilton Head starting on March 20 2015. Feedback; want active participation of division involved, with Tech content Attendance on the average is about 250. Mark: better industry perspective from ANFM. All holidays are ok n the schedule this time. Mark DeHart and David Nigg move to support this meeting.

Item 9 – Dimitrios discussed honors and awards. He talked about Nils Sjostrand and the Wigner Award. Sjostrand was moved with the presentation. April 1 is deadline for next award (Wigner Award). Requirements: Outstanding contributions, three letters of nomination. There is a list of past winners on RPD website. ANS Fellows: nominees - largest pool for ANS fellows. Five letters of nomination, and other newly revised criteria were discussed.

Developed proposal for early career award. Form is ready to be submitted to ANS HQ. Robb noted that ANS is 'stingy' in awarding fellowships

Item 10: student conference was discussed. 516 students. The student representatives thanked RPD. There were 23 awards. 41% of students there presented. Proposal on MIT student conference for 2013. Podium presentations and posters.

Glenn gave discussion on the JBC. He said it was difficult to get people to help. Wants to propose chair special session on benchmark sessions: INL rp, SINBAD, independent benchmarks on NEA site proposed by Jim Gulliford.

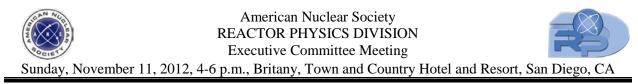
Blair has ideas: Among divisions: want to have a special session on solutions to benchmark problems. Winter of 2013 will be first time to hold such a session. Glenn and Skip will co-chair this special benchmark session. Underwritten by divisions in JBC. Chalotta - UF6 benchmark.

Regarding the Website and postings, JBC website not updated since 2007. Put on RP benchmark? How to do it?

Agenda bullet 12 - Ali discussed goals and planning. Blair's survey. We're interested in results. Website? Ugur close by to Hanna so offers to help update website. We have income as a division, so we have a potential of organizing a design competition, independent of ANS's.

Get industry to give design problems... RP at universities is not really done as much. Could be grad students. Schools run their design project quite differently. Not many from industry here Ali Is not sure how much we'd benefit from tying in with existing design project.

Ugur had ideas about addressing actual industry problems in this. Will attract better students to RPD. Maybe launch this idea at next ANFM

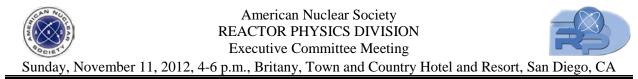


"Design and analysis". Third item - public info: What is RP?

Why not one of us go to workshop and introduce RP. Prof div meeting; Banner Bonnifer outreach at ans dot org. Regis is not here. Blair talked again about the RPD survey form.

Plaque for Fausto!

Mark and Robb move to adjourn. All approve.



#### **APPENDIX 5. RPD Financial Report**

*By Ron Ellis, RPD Treasurer November 11, 2013* 

The Reactor Physics Division is in exceptional financial health and continues to prosper due to growing membership and a series of successful recent Topical Meetings. We predict ending calendar year 2012 with a balance of \$73846. Our 2011 membership allocation from ANS Headquarters was \$3,886. Based on growth trends we forecast a 2012 membership of allocation of \$3920. PHYSOR 2012 was held in April 2012. It was a technical and financial success; the fraction of income from the meeting returned to RPD was \$12306. Our significant balance will allow RPD to continue to make generous contributions in support of students. We have allocated \$5200 for 2013: \$2,500 for student conference support (up from \$2,000 for the previous student conference); \$500/national meeting to support student travel; and \$1,700 for the purchase of up to 10 student tickets for the ANS Meeting Opening Reception (doing this in tandem with the Mathematics & Computations Division). The RPD is meeting its objectives for student support. In fact, because of the significant sustained or growing balance, the Division is looking to develop a second Endowed Scholarship, in addition to the current Henry/Greebler Scholarship. The 2012 recipient of the Henry/Greebler Scholarship is Jonathan Wormald of NCSU. More information on this plan and the scholarships can be obtained from the RPD Scholarship Subcommittee.

REACTOR PHYSICS DIVISION	2013
BUDGET FUNDS	
CURRENT YEAR MEMBER ALLOC.	3926
CARRY FORWARD, PRIOR YEAR	73846
DIVISION INCOME / OTHER	1580
TOTAL BUDGET FUNDS	79352
BUDGET EXPENSES	
STUDENT SUPPORT	5200
WEB MAINTENANCE	1000
JBC SUPPORT	400
TOTAL EXPENSES	6600
ANTICIPATED END OF YEAR BALANCE	72752

Notes				26 (1)	46	80 (2)	52						00 (3)		1000 (4)	400 (5)		2		52		
PROPOSED	BUDGET	2013		3926	7384(	1580	79352						5200		10	4		0000		72752	ach meeting	
Notes				-	-	(9)	-														n at e	
EIGHT MONTHS	ACTUAL	2012		3886	57986	13886	75758			62			1850	0			1040	181		73846	r ANS receptio	007 011
	BUDGET	2012		3920	50832	25,000	79752						5000		1000	400	0400	0400		73352	udent tickets fo	
	ACTUAL	2011		3846	65800	3230	72876			80	443		4000	10,000	367		11000	14,090		57986	lase up to 10 st	
2	ACTUAL	2010		3586	34628	30624	68838						3000			38	0000	3030		65800	s \$1700 to purch	
	ACTUAL	2009		3500	29553	10219	43272		27	76	50	0	2000			1491	0044	00444		34628	nal meeting, plus shop me national mee	
	ACTUAL	2008		3434	29059	1060	33553		0	0	0	0	4000				0001	4000		29553	apolation from previous 3 years ected RPD income national meeting 00 for student conference, plus \$500/national meeting, plus \$17 5 for 2012 plus \$500 for 2013 port for Joint Benchmark Committee workshop 306 from PHYSOR 2012, \$1580 RPD income national meeting.	
	ACTUAL	2007		1651	31345	-3937	29059										c			29059	from previous 3. D income nations lent conference, plus \$500 for 20 int Benchmark C PHYSOR 2012; 9	
	ACTUAL	2006		1589	9483	24388	35460		115				4000				1445	6114		31345	<ol> <li>Extrapolation from previous 3 years</li> <li>Projected RPD income national meeting</li> <li>\$2500 for student conference, plus \$500/national meeting, plus \$1700 to purchase up to 10 student tickets for ANS reception at each meeting.</li> <li>\$500 for 2012 plus \$500 for 2013</li> <li>Support for Joint Benchmark Committee workshop</li> <li>\$12306 from PHYSOR 2012; \$1580 RPD income national meeting.</li> </ol>	ER)
REACTOR PHYSICS			BUDGET FUNDS	CURRENT YEAR MEMBER ALLOC.	CARRY FORWARD, PRIOR YEAR	DIVISION INCOME /OTHER	TOTAL BUDGET FUNDS	BUDGET EXPENSES	NEWSLETTERS	AWARDS, PLAQUES	NATIONAL MEETING COSTS	DIVISION OFFICER EXPENSE	STUDENT SUPPORT	SCHOLARSHIP/NEED FUNDING	WEB MAINTENACE	OTHER EXPENSES		I UIAL EAFENSES	EXCESS (DEFICIENCY) OF	BUDGET FUNDS OVER EXPENSE		ENDOWED SCHOLARSHIP (HENRY/GREEBLER) Balance 01/01/12

#### **APPENDIX 6. Historical Income/Expenses & 2012 Budget**

**REACTOR PHYSICS DIVISION** Executive Committee Meeting Sunday, November 11, 2012, 4-6 p.m., Britany, Town and Country Hotel and Resort, San Diego, CA

American Nuclear Society



#### APPENDIX 7. ANS Financial Status Report as of 8/31/2012

PAGE 1

AMERICAN NUCLEAR SOCIETY DIVISION FINANCIAL REPORT 8/31/2012

REACTOR PHYSICS DIV.

	BUDGET 12 MONTHS 2012	ACTUAL 8 MONTHS 2012	PAGE REF
REVENUES			
2011 MEMBER ALLOCATION DIVISION INCOME 2011	3,886 25,000	3,886 1,580	1
TOTAL REVENUES	28,886	5,466	
EXPENSES			
NEWSLETTERS	1,000	0	2
AWARDS, PLAQUES		62	3
NATIONAL MEETING COSTS	0	850	4
DIVISION OFFICER EXPENSE	0	0	5
STUDENT SUPPORT	5,000	0	6
SCHOLARSHIP/NEED FUNDING		0	7
OTHER EXPENSES	400	0	8
TOTAL EXPENSES	6,400	912	
NET SURPLUS / (DEFICIT)	22,486	4,555	
FUND BALANCE AT 1/1/12	57,986	57,986	
FUND BALANCE AT 8/31/12	80,472	62,541	

#### #2758 Henry / Greebler

Balance 01/01/12	110,438
Plus 08 Months Interest	2,552
Plus Receipts	0
Minus Disbursements	(3,500)
Balance 08/31/12	109,490

American Nuclear Society REACTOR PHYSICS DIVISION Executive Committee Meeting



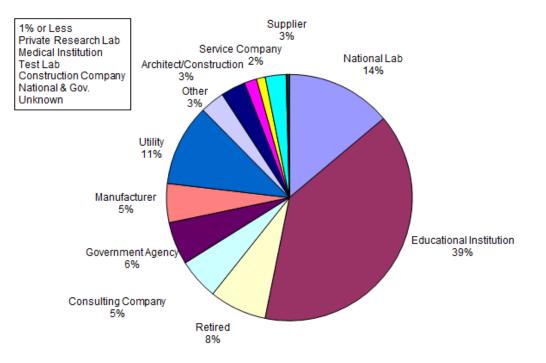
Sunday, November 11, 2012, 4-6 p.m., Britany, Town and Country Hotel and Resort, San Diego, CA

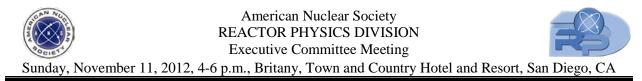
PAGE 2	AMERICAN NUCLEAR SOCIETY DIVISION FINANCIAL REPORT 8/31/2012
REACTOR PHYSICS DIV. 043060	
1. DIVISION INCOME NATIONAL MEETING	1,580
2. NEWSLETTERS	1,580
	0
3. AWARDS, PLAQUES JUNE AWARD PLAQUE	62
	62
4. NATIONAL MEETING CO 10 PR TICKETS	DSTS 850
5. DIVISION OFFICER EXP	850 ENSE
	0
6. STUDENT SUPPORT	
	0
7. SCHOLARSHIP/NEED F	UNDING
	0
8. OTHER EXPENSES	

0

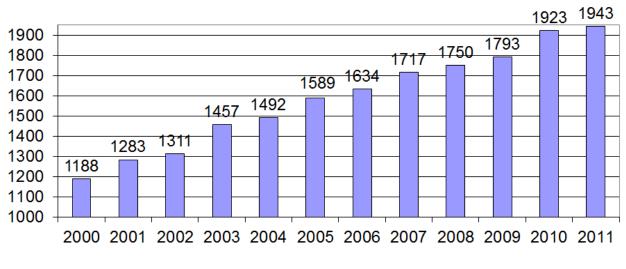
#### **APPENDIX 8. Reactor Physics Division Membership**

Organization	Membership						
	Number of Members	Fraction					
National Lab	299	14%					
Educational Institution	845	39%					
Retired	162	8%					
Consulting Company	116	5%					
Government Agency	121	6%					
Manufacturer	110	5%					
Utility	231	11%					
Other	69	3%					
Architect/Construction	70	3%					
Service Company	35	2%					
Private Research Lab	25	1%					
Supplier	59	3%					
Medical Institution	3	0%					
Test Lab	0	0%					
Construction Company	5	0%					
Unknown	1	0%					
National & Gov.	0	0%					
Total	2,151	100%					





#### **APPENDIX 9**



#### **Reactor Physics Division Membership History**

Membership	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
ANS	10,947	10,849	10,704	10,773	10,777	10,783	10,772	10,851	10,938	11,137	11,557	11,361
RPD	1188	1283	1311	1457	1492	1589	1634	1717	1750	<u>1793</u>	<u>1923</u>	<u>1943</u>
RPD%	10.9%	11.8%	12.2%	13.5%	13.8%	14.7%	15.2%	15.8%	16.0%	16.1%	16.6%	17.1%



Organization Committee of PHYSOR2014

### Overview of PHYSOR2014

### PHYSOR 2014 The Role of Reactor Physics towards a Sustainable Future

- Location
  - The Westin Miyako Kyoto Hotel
  - Kyoto, Japan
- Date
  - September 28 to October 3, 2014

# General conference information

- Host: Japan Atomic Energy Agency and Kyoto University
- Organizers : All Japan
  - Reactor physics division of Atomic Energy Society of Japan
  - Major plant vendors (Mitsubishi, Toshiba, Hitachi)
  - Major nuclear fuel and engineering companies
  - Major universities
  - Organization committee has been launched
  - Organization of technical program committee is under progress

3

- Sponsors
  - Kyoto University
  - Japanese Nuclear Industries



- Expected attendees: 400 .
- Expected papers: .
  - Sessions: 2 plenary sessions 6 half day technical sessions

350

- ¥75,000 (\$940) Registration fees: ¥12,000 (\$150)
- (for student) Workshops fees:
  - ¥7,000 (\$90) ¥15,000 - ¥17,000 (\$190-\$210)/night Hotel:
- Website:
- www.physor2014.org Publication: Nuclear Science and Engineering, Nuclear Technology, Joural of Nuclear Science and Technology, or Progress in Nuclear Science and Technology (supplement of Journal of Nuclear Science and Technology)

1 poster session

Award: best student papers and best poster presentations

November 11, 2012, , 4-6 American Nuclear Society REACTOR PHYSICS DIVISION p.m. Executive Britany Committee Town and Country Hotel and Resort, Meeting

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**APPENDIX 10. PHYSOR 2014 Organization Status Update** 

InS	AMERIO
Sunday,	
-	

# Technical tracks (tentative)

Reactor Analysis Methods	Transient and Safety Analysis
Deterministic Transport Theory	Nuclear Data
Monte Carlo Methods	Research Reactors and Spallation Sources
Verification, Validation and Uncertainty Analysis	Fuel Cycle and Actinide Management
Nuclear Criticality Safety	Radiation Applications and Nuclear Safeguards
Reactor Physics Experiments	Education in Reactor Physics
Reactor Concepts and Designs	Researches related to Fukushima Accident
Reactor Operation and Safety	

5

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# Workshops (tentative)

Title	Organizer	Note	
Sensitivity and Uncertainty Analysis	Dr. H. Abdel-Khalik, NCSU	confirmed	
Accelerator-Driven System	Kyoto Univ., JAEA	confirmed	
Update on Fukushima-Daiichi accident	AESJ	confirmed	
PHITS Monte Carlo code	JAEA	confirmed	
Reactor diagnostics	Dr. Imre Pazsit, Chalmers Univ.	confirmed	
SERPENT Monte Carlo code	Dr. J. Leppänen, VTT	confirmed	
Multiscale, multiphysics approaches in nuclear science and engineering applications	Dr. R. Martineau, INL	confirmed	
ATTILA Transport code	Transpire	confirmed	



### Organizing committee

- Honorary chair
  - Toshikazu Takeda, Fukui University
- General chairs
  - Shigeaki Okajima, JAEA
  - Ken Nakajima, Kyoto University
- Technical program co-chairs
  - Akio Yamamoto, Nagoya University
  - Hany Abdel-Khalik, NCSU
  - Mark DeHart, INL
  - Imre Pazsit, Chalmers University of Technology
  - Igor Zmijarevic, CEA



- Steering: steering, adjustment
- Tokio Fukahori (JAEA)
- Cheolho Pyeon (Kyoto Univ.)
   +14 members
- Publications:Call for paper, abstract, CD, journal for selected papers
  - Go Chiba (Hokkaido Univ.)
- +5 members
- Website: Registration, paper submission, review
  - Hanna Shapira (TICSs)
  - Kenji Yokoyama (JAEA)
- +2 members
- Finance: Financial management
  - Teruhiko Kugo (JAEA)
  - +6 members
- Local committee:Technical tour, guest tour, banquet
   Cheolho Pyeon (Kyoto Univ.)
  - Cneoino Pyeon
     +5 members

November 11, 2012, 4-6 p.m., Britany, Town and Country Hotel and Resort, American Nuclear Society REACTOR PHYSICS DIVISION Executive Committee Meeting

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Official organizing committee	Nov. 2012	Done
1st Call for papers:	Nov. 2012	Done
Technical program committee	Nov. 2012	Organization in progress
Website:	Feb. 2013	Preparation in progress
2 <sup>nd</sup> Call for papers:	Apr. 2013	
Papers deadline:	Jan. 2014	
Papers review:	Jan-Apr. 2014	
Author notification:	Apr. 2014	
Final paper submission:	Jun. 2014	
Meeting:	Sep. 2014	
Selection of papers:	~Jan. 2015	
Publication of selected papers:	Mar~. 2015	

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PHYSOR 2014 International Conference "The Role of Reactor Physics toward a Sustainable Future" Status of preparation: On schedule



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American Nuclear Society **REACTOR PHYSICS DIVISION Executive Committee Meeting** 



Sunday, November 11, 2012, 4-6 p.m., Britany, Town and Country Hotel and Resort, San Diego, CA

# **PHYSOR 2014 International Conference**

"The Role of Reactor Physics toward a Sustainable Future"

# Call for Papers-

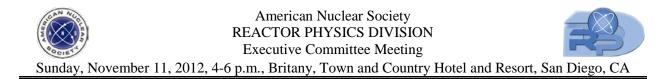
The ANS Reactor Physics Topical Meeting is returning to Japan after 18 years. It will be held in Kyoto, which is one of the most historical and beautiful cities in Japan. The technical program will meet the high standards of recent PHYSOR meetings (Interlaken 2008, Pittsburgh 2010 and Knoxville 2012), including timely and relevant special topics. Students will he actively involved in all the events and activities. Exciting workshops and technical tours will be also offered.

### \*\*\*\* Important dates

January, 2014 April, 2014 June, 2014

Submission of Full Papers Notification of Acceptance **Final Paper Submission** 

www.physor2014.org (From Feb. 2013) 28th Sep. - 3rd Oct., 2014 The Westin Miyako, Kyoto, Japan



## Technical Tracks: (Tentative) 1. Reactor Analysis Method 2. Deterministic Transport Theory 3. Monte Carlo Methods 4. Verification, Validation and Uncertainty Analysis 5. Nuclear Criticality Safety 6. Reactor Physics Experiments 7. Reactor Concepts and Designs 8. Reactor Operation and Safety 9. Transient and Safety Analysis 10. Nuclear Data 11. Research Reactors and Spallation Sources 12. Fuel Cycle and Actinide Management 13. Radiation Applications and Nuclear Safeguards 14. Education in Reactor Physics 15. Researches Related to Fukushima Accident **Conference** Organization: Honorary chair: Prof. T. Takeda (Fukui Univ.) General chairs: Dr. S. Okajima (JAEA) Prof. K. Nakajima (Kyoto Univ.) Technical program chair: Prof. A. Yamamoto (Nagoya Univ.)

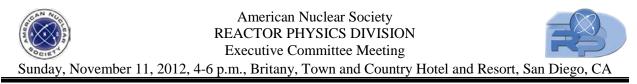
Technical program co-chairs:

Prof. H. Abdel-Khalik (NCSU) Dr. M. DeHart (INL) Prof. I. Pazsit (Chalmers Univ. Technol.)

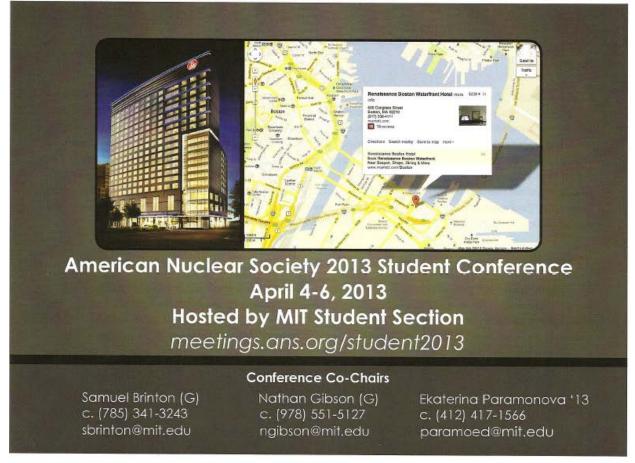
Dr. I. Zmijarevic (CEA)

Organizing committee chairs:

Dr. T. Fukahori (JAEA) Prof. C. Pyeon (Kyoto Univ.)



#### **APPENDIX 11. ANS Student Conference Details**



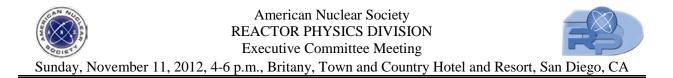
#### **Division Participation**

We welcome ANS Divisions to participate and contribute to making the conference successful. By attending the conference, you can be involved in judging student presentations and in mentoring student attendees.

The Call for Papers, to be released by the end of November, will include technical tracks aligning with each of the Divisions. Awards in each will be given to the top student presenter.

Financial support is appreciated. Divisions often wish to contribute toward student awards. We encourage this but ask that no more than \$200 be designated specifically for this purpose. Contributions of any amount toward the general conference fund are appreciated and will be used to ensure the success of the entire conference program and to support student travel.

A booth at the career fair can be obtained with a minimum \$1,500 contribution. An option for a technical plenary talk will be made available to Divisions which make a minimum \$2,500 contribution. Both options will be available for Divisions contributing \$4,000 or more.



#### Theme

Our conference theme -- "Public Image of the Nuclear Engineer" -- is aimed at ushering in a renewed image of the nuclear engineer by empowering our young engineers to engage with the public and effectively communicate the impact and potential of our work. As part of the theme, we are organizing the "I'm a Nuke!" Campaign internet video project. We will professionally film interviews and dialogues of the charismatic and passionate young engineers that will be attending the conference. Additionally, the conference will feature a variety of outreach and communication workshops as well as a substantial media engagement effort. This conference experience will cultivate a new generation of nuclear professionals equipped to project a positive public image, which will bolster the nuclear industry moving forward.

#### Technical

This year's technical program will feature student podium presentations, a student poster session, expert plenaries, and technical workshops. New this year is a special track for the best student papers, from which awards for best overall undergraduate and best overall graduate presentation will be given. In another new initiative, professional participation in the technical program has been shifted to expert plenaries. These talks will feature specific engineering challenges in order to give students a more meaningful taste of the details of the industry.

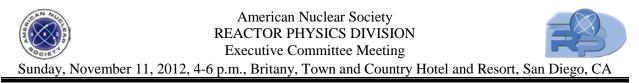
#### International

An innovative central aspect of this conference will be a focus on international participation. We will support student collaboration internationally and recognize the stronger nuclear renaissance occurring worldwide by bringing international students and professionals to the conference. There will be one international keynote speaker and several international participants in the expert plenary sessions. We are working to bring a multitude of international students to the conference, including both those studying in the United States and those studying abroad.





Massachusetts Institute of Technology



#### **APPENDIX 12**



From left to write: Dimitri Cokinos, Hany Abdel-Khalik, Ali Haghighat, Mark Deinert, Blair Bromley, Travis Trahan, Nam Zin Cho, David Orr, Alberto Talamo, Andy Worrall, Sandra Dulla, Akio Yamamoto, Ron Ellis, Mark Pierson, Pavel Tsvetkov, Mark DeHart, Max Fratoni, Piero Ravetto



From left to write: Dimitri Cokinos, Hany Abdel-Khalik, Ali Haghighat, Fausto Franceschini, Mark Deinert, Travis Trahan, Nam Zin Cho, David Orr, Alberto Talamo, Andy Worrall, Sandra Dulla, Akio Yamamoto, Ron Ellis, Mark Pierson, Pavel Tsvetkov, Mark DeHart, Max Fratoni, Piero Ravetto

