



American Nuclear Society (ANS)  
Reactor Physics Division (RPD)  
2013-2014

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To: RPD Program Committee (RPD-PC) Members and  
RPD Executive Committee (RPD-EC) Members  
From: Blair P. Bromley (past member of RPD-PC/RPD-EC (2009-2013))  
Date: October 17, 2013  
Subject: Summary of RPD Membership Survey Results and Proposed  
Recommendations

Dear RPD Program and Executive Committee Members,

Over the period of August 21 to October 15, an on-line survey of the ANS RPD membership was conducted using the survey tool, Survey Monkey (<http://www.surveymonkey.com/>). There were 150 participants, representing approximately 7% to 8% of all RPD members. It was hoped that there would be over 50% participation. It is assumed that those who didn't participate were somewhat indifferent and/or are willing to allow the minority of participants to represent their views. Perhaps this may change in the future.

Up to 35 survey questions were prepared in advance in consultation with various members of the RPD-EC and RPD-PC, over the period of April 2012 to May 2013. Over the period of June to July 2013, a prototype on-line survey for ANS-RPD members was created through Survey Monkey, and this was tested, debugged, and revised with the participation and assistance of several members of the RPD-EC. A finalized survey was then sent out to the RPD membership in mid-August, 2013, and a reminder about the survey was sent out in early October, 2013.

The purpose of this survey of the RPD membership was to get their feedback, opinions, and insights on the RPD technical papers and sessions organized at the ANS Annual Meetings (Winter and Summer). This included getting feedback on how the papers are reviewed and judged, how the sessions are organized and executed, etc. There were also survey questions to gain insights on what would make the RPD website more useful, and the ANS annual meetings more relevant and attract greater participation by RPD members.

The data gathered may be used to adjust our technical program and website to better suit the needs and interests of our membership, thus promoting greater participation for the meetings and provide an updated strategy that, if successful, could be implemented also



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by other Divisions. The data may also be useful for the ANS in general, for adjusting how it operates the Annual Meetings.

The survey results, including all the informal comments (the good, the bad, and the ugly) are shown in the attached file, labelled:

- **ans-rpd-2013-survey-results-summary-02.pdf**

Based on the survey results, key results have been identified, and are shown below. Also shown below are recommendations, based on the survey results. It is recognized that these recommendations are subject to interpretation and debate.

It will be left to the RPD executive committee and program committee to decide what recommendations it wants to attempt to implement. Some of these recommendations may require extensive consultations and lobbying with the ANS organizational and administrative leadership to implement changes that are outside the control and jurisdiction of the RPD Executive Committee, or any other division within the ANS.

It is possible that the issues and suggestions identified by RPD members may be similar to those held by ANS members in other technical divisions.

It is hoped that both the ANS-RPD and the ANS leadership will take the results of this survey "to heart" and make a sincere and dedicated effort to address them in a substantial and measurable way.

It is recognized and appreciated that there are many constraints (many related to financial concerns) and competing interests that may make certain changes more difficult to accept or implement. On the other hand, in order for the ANS and ANS-RPD to remain healthy, sustainable, and successful, both need to be willing to adapt or adopt changes.

It is also recognized and understood that various individuals within ANS-RPD and ANS may come to different conclusions and recommendations, looking at the survey results for themselves.

It is intended that these survey results should eventually be sent out to the entire RPD membership, for their information and consideration. They could also be posted on the ANS-RPD website.



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If you have any questions, comments or suggestions regarding the ANS-RPD-2013 survey or the interpretation of the results. Please do not hesitate to contact me at your earliest convenience.

Kind Regards,

A handwritten signature in black ink that reads "Blair P. Bromley". The signature is written in a cursive style with a long, sweeping tail on the letter 'y'.

Blair Bromley

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Current member of ANSTD Executive Committee

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## Survey Results

The following are results and issues identified by ANS-RPD member respondents:

- **The high cost associated with attending the ANS meetings (registration, hotel, airline, etc.) discourages participation.**
- Nearly 40% are not aware that they can attend division meetings, space permitting.
- The ANS President's reception (held on Sunday evening) is too short, starts too early, and has insufficient tables and chairs.
- While generally satisfied with the existing standard technical sessions, RPD members are open to adjusting some of the sessions to give more focus and reduce overlap of topics.
- There is a strong interest by in the technical sessions of other divisions, particularly MCD, FCWMD, NCSD, and THD.
- RPD members prefer the majority of technical presentations to be 20 minutes long, although in some cases, perhaps for special topics, 25 minutes would be appropriate.
- A majority prefer technical sessions to start at 8:30 am.
- To accommodate more papers, technical sessions should run until 5:00 pm, although in some cases, it may be acceptable to allow sessions to run to 6:30 pm, especially if there is an afternoon coffee break.
- A majority do not want parallel technical sessions, and believe that having shorter presentations (20 minutes), holding an evening poster session, and making better use of late afternoon and early evening oral sessions (from 4 to 6:30 pm) would help increase attendance.
- Oral technical sessions are of the greatest value, while panel discussions without any record in the ANS Transactions are of the least value.
- Authors should be given the choice in advance if they would like to present in an oral or poster session. Papers that have strong positive review should be given higher priority for oral sessions.
- RPD technical sessions should be scheduled evenly throughout the week, including Thursday afternoon.
- There is a strong interest in holding short coffee breaks in mid-morning and mid-afternoon.
- A majority believe that the quality of the extended abstracts is the same as in the past.
- At least three reviewers are needed for an adequate review of extended abstracts.



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- At least two positive reviews of an extended abstract are needed for acceptance.
- At least two negative reviews ("reject") of an extended abstract are needed for rejection without recourse for revision.
- Technical session organizers and chairs are most responsible for reviewing papers, although it is recognized that it is preferred that any RPD member who is willing and able should be recruited to assist in reviewing abstracts.
- At least two volunteers should be recruited for organizing and chairing technical sessions.
- Extended abstracts should be judged, scored and ranked during the review process to determine finalists for the RPD best paper award.
- Greater effort is needed to recruit qualified reviewers/judges, with independence and objectivity.
- While there is a range of opinions, extended abstracts should be no more than 4 pages, and this limit should be enforced.
- A majority of RPD members think that page charges for the ANS Transactions are too high, or no longer justified, and should be dramatically reduced, preferably to zero.
- If non-technical issues are found in the extended abstracts (e.g., formatting, spelling, etc.), these should be identified by the reviewers, and assigned as "reject unless revised". However, providing updated and consistent templates and several examples of "high quality" extended abstracts, combined with some quick pre-screening would help.
- While many RPD members are glad to download the ANS Transactions, many still prefer to receive a CD/DVD at the conference. Putting the Transactions on a portable USB drive would also be attractive.
- Nearly half of RPD members almost never visit the RPD website. Less than 12% visit it more than 4 times per year.
- Putting Powerpoint slide presentations from past ANS meetings onto the RPD website would make it more interesting and useful.
- A majority of RPD members would be willing to have their contact information put on the RPD website, with a password-protected access.
- About 20% of RPD members would be willing to assist with maintaining the RPD website.
- 75% of the Survey respondents took 20 minutes or less to complete the survey.



### **Recommendations to ANS-RPD and ANS for Future**

The following recommendations are made, based on the survey results, including the many informal comments.

1. The cost of attending ANS meetings needs to come down, by significantly reducing early registration fees for ANS members (perhaps to ~\$500), and also by picking cities and venues that will have significantly lower airline travel and hotel costs. Ideally, a venue should have many nearby services. Past conferences that have been held in Washington-DC, Hollywood-FL, and San Diego-CA have been unattractive due to high costs, inadequate local services, and other factors.
2. The Sunday Evening President's Reception should start at 6:30 pm and be extended to 2.5 hours, to allow more time for networking and socializing.
3. The RPD membership should be informed of the time and location of the RPD committee meetings, indicating that they are welcome to attend as observers, space permitting. This could be done via the RPD website and/or newsletter.
4. The following should be instituted as standard RPD technical sessions with 20-minute presentations:
  - a. Reactor Physics General
  - b. Reactor Physics Analysis Methods
  - c. Reactor Physics Code Verification, Validation and Benchmarking.
  - d. Reactor Physics Advanced Modeling and Simulation
  - e. Reactors Physics in Design and Operations
5. For special-topic sessions, organizers and proponents should have the goal of having such sessions co-sponsored by other technical divisions (particularly MCD, FCWMD, NCSD and THD), to attract greater participation and to reduce overlap.
6. Technical session presentations for regular sessions should be limited to 20 minutes (including 5 minutes for questions and discussion). Time-permitting, special-topic or co-sponsored sessions may schedule 25-minute presentations.



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7. Technical sessions should be run until 5:00 pm to accommodate more papers and to avoid having too many parallel sessions, particularly with those held by other divisions that may be of great interest to RPD members. Having some technical sessions run until 6:30 pm is a possibility, but it is preferred to end most by 5:00 pm.
8. Authors should be asked in advance if they would be like to present in an oral or poster session, and if they would be willing to present in an oral session to help minimize time conflicts.
9. An evening poster session with refreshments and a cash bar should be held to accommodate extra papers, and this should be held preferably on Monday night from 6:00 to 8:30 pm.
10. Panel discussions with no extended abstract or publication record should be avoided. If such panel discussions are to be held, then they should be scheduled after 4:00 pm, or perhaps in the early evening.
11. Mid-morning (~10 am) and mid-afternoon (~3 pm) coffee breaks should be held. Sponsors should be recruited/solicited by the conference organizers to help pay for coffee breaks. If the right venue is chosen, the coffee break could be held in the same room as the exhibitors. As a possibility, the refreshment stations could be set up at the booths of the exhibitors.
12. The national meeting organizers, in conjunction with the national technical program committee, should make a greater effort to ensure an even distribution of technical sessions throughout the conference, to minimize the number of parallel sessions. This may require that some divisions with fewer papers and technical sessions will need to be shifted to time slots later in the week. In addition, technical sessions should be arranged such that there are no wasted time slots in the late morning or late afternoons. Where possible, smaller technical sessions with few papers (4 or less) should be consolidated with others.
13. Session organizers and chairs should take a leading role in reviewing technical papers, supplemented by subject matter experts recruited individually from the RPD Program Committee and the RPD membership. This will likely require more effort from the leadership within the RPD Program and Executive committees.



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14. Extended abstracts should be limited to 4 pages (max). If some papers go above this limit, then the author should be encouraged to submit two extended abstracts instead of one. These rules and guidelines need to be made very explicit and clear to prospective authors.
15. Extended abstracts should have a minimum of 2 pages, since anything less will not yield much in terms of useful information. There needs to be meaningful technical content of good quality.
16. If reviewers find non-technical errors in the extended abstracts, they should be encouraged to assign "reject-unless-revised".
17. A greater effort to mentor and coach reviewers, and technical sessions organizers and chairs may help improve the quality of the extended abstracts and associated presentations.
18. An updated and consistent template for the ANS Extended Abstract should be provided in an easy-to-find location on the ANS Meeting website, and preferably should always be included with the call-for-papers.
19. In addition, updated instructions and guidelines for the papers should be provided, along with several examples of extended abstracts from previous meetings that are considered "high quality", and meet the requirements for formatting. The template, the guidelines, and the sample abstracts should be made very obvious and easy-to-find on the ANS meeting website.
20. If possible, the ANS Meeting Technical Program Committee and its recruited volunteers should do a "quick look" at extended abstracts to pre-screen papers that have obvious problems (e.g. wrong template/format, excessive spelling errors, lacking details (less than a page)) and bounce them back to the authors for correction. This will reduce the burden on the reviewers downstream.
21. Page charges for extended abstracts in the ANS Transactions should be significantly reduced, and brought down to zero, if possible. At the very least, it should be reduced to \$20 per page.





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22. In addition to extended abstracts being made available on-line, members would like to see PowerPoint presentations (in \*.pptx or \*.pdf format) uploaded and made available as well, if possible. These should be uploaded and made available on the RPD website to RPD members.
23. ANS Transactions should be made available at the ANS Meeting on portable USB drives, eventually replacing CDs/DVDs.
24. RPD members rarely visit the ANS-RPD website, but would be more apt to if additional information was made available, such as conference slide show presentations, benchmark problems, and links to online courses and associated documentation.
25. Contact information for willing RPD members should also be uploaded to the RPD website, in a password-protected area.
26. All the old ANS Transactions should be scanned and uploaded to the ANS Website and made available to ANS members.

### **Lessons Learned in Conducting Survey**

The following are insights and "lessons learned" from conducting the survey, based on the nature of the responses and comments provided by the participants. These lessons may need to be implemented in future surveys.

- Survey respondents prefer to give their opinions on what they need and want, rather than to answer a multitude of multiple choice survey questions.
- All questions should be optional.
- Ideally, a multiple choice question should be limited to 5 choices or less.
- Allowing informal comments on each question is very helpful and appreciated, and it helps to capture the diversity of opinions, ideas and suggestions.
- Questions involving ranked choices should be avoided, or minimized.



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- Questions should allow an individual to suggest an alternative choice.
- If another survey of RPD members is conducted in the near future, it is suggested that it be conducted in late November, 2014 after the 2014 ANS winter meeting, and that there be simply one survey question posed:
  - "What suggestions or ideas do you have to improve the value of the ANS Winter/Summer meetings, and the RPD website?"