

Sigma Xi The Scientific Research Society

Conference Call of the International Committee
October 19, 2007 12:30 PM Eastern Time

Chair: Vera Alexander
Staff Contact: Kathy McLane

Satyajit (Sat) Bhattacharya (Absent)
Michael P. Crosby (Absent)
George J. Hammons
Zara Khatib
Antonio Pita
K. Venkatesh Prasad
Robert A. Schwartz (Absent)

Agenda

Welcome	<i>Vera Alexander</i>
Introduction of new member	<i>Vera Alexander</i>
Brief report on committee activities	<i>Vera Alexander</i>
Sigma Xi matters	<i>Kathy McLane</i>
Round table at the Annual Meeting	<i>Antonio Pita /Michael Crosby</i>
The Water topic	
The new Romanian partner installation	<i>Antonio Pita</i>

The chair called the conference call to order, noting that a number of committee members had not joined the call but the need to move on with the call outweighed waiting further.

A roll call then brief introduction of the members to welcome the newest member of the committee Dr. Khatib began the call.

Dr. Alexander reviewed the events following the February meeting of the International Committee.

Dr. Pita presented to the Sigma Xi Board in April the Action Items from the February meeting (Attachment I) for their review and discussion.

Dr. Pita mentioned one of the outcomes from the board discussion was a letter from the publications committee concerning the action item on the American Scientist. (Attachment II). A discussion was also held on the international

initiative of regional meetings every other year with the annual meeting held in the off year. The discussion also touched upon changing the name and focus of American Scientist Magazine.

Dr. Alexander asked the opinion of Dr. Khatib of how the name of the American Scientist Magazine would be received in the Middle East. Dr. Khatib stated that the Middle East and Asia is so very interested in learning about science from the United States that it would not make a difference. As long as it relates to science and politics is not involved it should not make a difference the name of the magazine. Of course there would be a need to market the American Scientist Magazine in the Middle East.

Dr. Khatib also mentioned that Abu Dhabi within the next two to five years would be building a town with zero emissions. The whole town would run on solar power and other non emitting resources. This topic would be of great interest to the scientists in the Middle East and perhaps US scientists could collaborate on this project.

The idea of devoting one to two pages of the existing American Scientist Magazine to the international sector would be of great interest. This would not impact greatly upon the existing structure of the magazine or significantly increase the cost of the journal.

Dr. Alexander asked that we skip the next agenda item and go to the discussion of the annual meeting workshop. This is to be a roundtable with Drs. Pita and Crosby acting as facilitators. The discussion will be a continuation of the action items from the February International Committee meeting. (Attachment III)

Dr. Pita revised a document to be enclosed in all delegate packets as an informational piece for the panel discussion at the annual meeting. This was to educate the members in order to facilitate the discussion.

Kathy McLane gave an update on activities within the Center. The staff has made significant changes to the budget with little effect on services to our members. The staff has initiated several brainstorming sessions to address the problem of the membership decline and loss of revenue. To this end one of the sessions at the annual meeting will involve all delegates and board members. This will be a session on the unique role of chapters without breakout groups on retention. The Society has done well with initiating new members, we just need to rethink how we retain these members. Discussion items from this session and others will be compiled and disseminated out to chapters for their use and implementation.

Ms. McLane brought the group up to date on the activities in Korea with Dr. Kim. The group is very interested in ethics and we have sent a number of copies of our ethics publications to the group for their use. Dr. Kim had hoped to attend the annual meeting and bring a couple of his colleagues from Korea to the meeting.

Ms. McLane also mentioned an e-discussion with member Alvin Smucker. Dr. Smucker is an acquaintance of Dr. Richard Meyer who is very interested in meeting Sigma Xi members in his travels. He is not interested in starting new chapters but he is interested in discussing science with these individuals in his travel. He has been in touch with nine individuals in Edinburgh Scotland where he is attending a conference on soil forensics. Dr. Smucker travels to more than 50 countries each year and is looking forward to forging new relationships with the Sigma Xi Members in his travels. Drs. Pita and Khatib asked to be put in touch with Dr. Smucker as well. Dr. Pita is interested in the outcome of his travels and Dr. Khatib would like to invite Dr. Smucker to an upcoming conference.

Ms. McLane informed the group that the development department is forming e-communities. The first groups to the students and emeritus members were a big hit. It is hoped that these two groups would form a mentoring program. The development department is looking to expand these communities into the regular members by segments at a later date. It was also mentioned that the international group could establish their own community with little or no cost to the Society.

Ms. McLane continued with the installation of two new chapters and the loss of one chapter after a long struggle.

Dr. Pita had a discussion with Monterrey Tech University about the possibility of using a student for six months from Monterrey Tech to research items for the international newsletter. The students are already involved in topic management and specialization research so an internship for them would work out very well. A question of cost was raised and Dr. Pita reported the cost would be between \$400 and \$500 a month. We will look into the possibility of writing a grant to cover the cost.

The agenda then moved to the topic of water for the next annual meeting. The international committee is very interested in a forum for the next meeting with the topic being water. This is very much in the planning stage and Drs. Prasad and Khatib will lead the committee in determining the feasibility of this effort.

Dr. Khatib mentioned that this forum would be similar in format to the climate change report and panel. Both Drs. Prasad and Khatib will also investigate the

format for this program, start looking at funding and the time frame. In order to get international scientists to attend the program would need to be longer than just one day. They will need a concept prepared for the conference.

Dr. Pita spoke about the installation of the Romanian Partner. The partner was installed on October 10, 2007 in Bucharest. There were more than 50 people in attendance at the installation in the nuclear physics laboratory. There was a lecture on climate change and what the lecturer thought was needed followed by the installation ceremony.

Later that evening a dinner was held for a small group from the installation with a discussion of what Sigma Xi Romania would like Sigma Xi to do for the partner.

The Romanian government has grant money available for her scientists. The problem is there are not enough reviewers available to read grants. The government would be interested in inviting a group of scientists (4 or 5) to come to Romania to read grants and give opinions as to what project would be funded. A formal request will be sent to Dr. Pita directly. Drs. Khatib and Hammond thought this would be an excellent partnership for US and Romanian scientists.

Ad Astra is still publishing two magazines per year and is looking to move towards a third issue. This magazine is a part of the partnership which is a virtual partner with members all over the world.

Dr. Khatib spoke about establishing a pool of interested scientists to work as establishing chairs in the universities in the Middle East for six months and share the position with another person at another institution. For instance an individual may spend six months in Dubai and six months at another institution outside of Dubai. Further information will be forth coming at a later date.

Dr. Alexander reminded the group to respond to the NSB report directly to Michael Crosby (Attachment IV) She also mentioned the report completed by Betty Kirk. It was an excellent report and although the committee could not tie the report into the session at the annual meeting, the report should be aired further.

This concluded the conference call

Attachment I

International Committee Meeting

Recommendations/Action Items, February 27-28, 2007

1. The International Committee strongly recommends to the Board of Directors that the President send a letter to the Chairman of the National Science Board with respect to the upcoming report to the US Congress on the value of Science and Engineering Partnerships, expressing interest and a willingness to carry out a formal review of their recommendations. Once adopted, Sigma Xi would be pleased to provide any assistance in its implementation.
2. Given the interdisciplinary nature of the Society, Sigma Xi is in a privileged position to assist with the development of policies regarding scientific initiatives that respond to problems on an international scale. Thus, the International Committee recommends that the Board take a pro-active position in reaching out to international organizations such as UNESCO and the World Bank in helping them develop policies that address global problems such as aids, malaria, etc.
3. The International Committee recommends that the Board of Directors of Sigma Xi changes the name of the magazine from American Scientist to more clearly reflect the vision of the Society. The new identity should be carefully crafted, and the change accomplished as an evolutionary and not revolutionary process.

Rationale:

If Sigma Xi is going to achieve its vision to be the global honor society of science and engineering, its highest visibility product must evolve, and its title must be globally inclusive.

4. As part of the evolutionary process, the Board of Directors should implement a new, on-line, international magazine. This new publication would include articles from American Scientist, but also would accept articles that differ from the American Scientist norm in that they may be of less broad interest and be different in approach and format.

A strong hands-on volunteer editorial board would be available to work with contributors, and augment the existing editorial staff. All contributors must be Sigma Xi members.

5. The International Committee recommends that the Board of Directors eliminates the Canada/International Constituency Group. In its stead, redefined regions will be designated based on a minimum of 6 chapters/partners.

Initially, there would be 9 regions:

The United States (6 regions)

Canada

Europe

Global Region at Large (to include anybody not in a currently qualified defined region)

Additional regions can be formed by petition to the Board once the minimum number of chapters/partners has been attained. Potential future regions include Asia, Latin America and Oceania.

The International Committee recommends that the Annual Meeting format and venues be revised. The current Annual Meeting will only be held on a biennial basis, referred to as the Global Meeting. In alternate years, only regional meetings will be held. The venues and formats for the individual regional meetings will be determined by the regions themselves.

The Board of Directors meetings would be held in conjunction with each global meeting and on a rotating basis in off-years in various regions. The Global Meetings themselves will also rotate among the regions.

Attachment II



Vera Alexander
Professor Emeritus and Special Assistant to the Provost
School of Fisheries and Ocean Sciences
P.O. Box 757220
University of Alaska
Fairbanks, Alaska 99775-7220

Dear Dr. Alexander:

Some of the International Committee's recent recommendations to the Board of Directors of Sigma Xi concern activities that fall under the scope of the Committee on Publications. At our meeting on June 5, 2007, we had a lively discussion of these recommendations, which is summarized below. Members of the Committee on Publications concur with the International Committee that broadening Sigma Xi's scope to reach more scientists outside North America is highly desirable. We agree that one means to accomplish this might be some form of publication that caters to members on other continents. Committee members can imagine a number of different forms of publication that would be consistent with both Sigma Xi's mission of highlighting science of the highest calibre and *American Scientist's* long tradition of offering the finest editing and graphics to convey the work of the world's most accomplished scientists. We also agree that online publication is the most feasible medium for reaching international members in a low-cost and timely way.

The committee considers it imperative that any Sigma Xi publication, and any scientific material offered on the Internet in the name of Sigma Xi or *American Scientist*, represent the highest possible standards in science. This presents a problem under the Society's tight budget constraints. Launching a new high-quality international journal, as suggested by the International Committee, may be impossibility under current constraints. It would be very expensive to launch and maintain a journal characterized by top-notch peer review and editing and the substantial effort that would be necessary to attract top papers away from established international journals. An online journal with lower standards (of the kind that could be organized by a group of volunteer members without a large investment) would be more economical but, in the committee's opinion, would not represent Sigma Xi's standards to the world; for this reason, we would oppose such a venture.

Our publishing agenda is straightforward: present good science. *American Scientist* is a vehicle for doing so. We encourage the magazine editors to make all possible effort to cast their nets wide in search of the best authors on the planet. The magazine will benefit if extra effort is made to find excellent science outside North America.

In addition, the committee would encourage Sigma Xi to find a way for members to exchange information on

how the process and practice of science, science policy and ethical issues in science vary around the world, so

that the Society promotes the kind of understanding that fosters the progress of science everywhere and equips

scientists with information that helps them support the work of colleagues in other countries. *American Scientist* could be a vehicle for publishing such material and assuring that existing coverage of these topics is expanded to be worldwide.

Finally, the committee supports regional newsletters, especially the concept of inserting regional news in overseas copies of *American Scientist*, as a good way to help members keep in touch and share regional news.

Making such regional news available online would help members in other regions informed. The Committee on Publications recognizes that the recommendations from the International Committee were intended to begin discussion; we would be glad to receive a more detailed proposal (consistent with the principles above) so that we can discuss the pros and cons of specific options. As to the name of the Society's publication, *American Scientist*, the Committee on Publications appreciates the International Committee's caution in suggesting a name change, as the *American Scientist* brand carries great value established over many decades. Such an effort should only be undertaken with very careful consideration.

We look forward to continued conversation on how we can extend Sigma Xi's international outlook.

Sincerely,
Rosalind Reid
on behalf of:
Lawrence M. Kushner
2006–07 Chair, Committee on Publications
A. Fred Spilhaus
2007–08 Chair, Committee on Publications

cc: Antonio Pita-Szczesniewski
Richard L. Meyer
Kathy McLane

Attachment III

The following reading material is provided as background for the ROUND TABLE DISCUSSION that will be held at the 2007 Annual Meeting of the Society on Friday

November 1st from 9:00 to 9:45 am, by the International Committee and the Canadian/International Constituency Group. This round table has as its main objective the discussion of the recommendations made by the International Committee to the Board of Directors of the Society, regarding the Internationalization of Sigma Xi. It also seeks additional suggestions from all the members interested in participating and in making Sigma Xi *the* Global Honor Society of Science and Engineering.

International Committee Members

Committee Chair

Dr. Vera Alexander (Fisheries & Ocean Sciences; Univ of Alaska)

Members of the Committee

Dr. Michael P. Crosby (The National Science Board)

Dr. George J. Hammons (Philander Smith College)

Dr. Gretchen Kalonji (Dir Int Strat Dev; U of Ca Office of President)

Dr. Satyajit (Sat) Bhattacharya (Pres & CEO Harlem Children Soc)

Dr. Robert A. Schwartz (Dermatology Dept MSBH)

Dr. K.Venkatesh Prasad (Ford)

Dr. Zara Khatib(Shell Oil Co.)

Dr. Antonio Pita (Dir. Canadian/International Constituency Group)

International Committee Recommendations made to the Board of Directors April 21st 2007

At its meeting held February 27th at Headquarters, the International Committee discussed and debated the issues surrounding the steps that should be taken to advance the Society into achieving its vision of being "*the* global honor society of science and engineering".

In doing so the Committee addressed the issue of "What does it mean to be an International Society" and what added values could it offer to its International Members. During its discussion it handled the basic questions, as well as the suggestions that were brought forth in the round table discussion that was held at the Society's annual meeting of 2006, held in Detroit. These questions asked if being an International Society is to:

- create chapters & stick pins on a map
- have an international journal/magazine?
- have regional and international forums?
- promote international partnerships?
- provide commentaries or advice on global S&E issues?
- nurture the next generation of scientists?
- link science with informed global public policy?
- or.....?

As part of its conclusions, the International Committee decided to strongly recommend to the Board of Directors the enactment of 6 basic points related with:

- | | |
|-------------------------------|------------------------------|
| 1) Involvement of the Society | 4) An International Magazine |
| 2) Proposals on Global Issues | 5) Regionalization |
| 3) The American Scientist | 6) Meetings |

1) Regarding INVOLMENT, the International Committee strongly recommended to the Board of Directors that the President send a letter to the Chairman of the National Science Board, with respect to the upcoming report to the US Congress on the value of Science and Engineering Partnerships. This letter should not only express interest and a willingness to carry out a formal review of their recommendations, but that once adopted, Sigma Xi would be pleased to provide any assistance in its implementation. **(Done)**

2) On PROPOSALS ON GLOBAL ISSUES, the Committee noted that given the interdisciplinary nature of the Society, Sigma Xi is in a privileged position to assist with the development of policies regarding scientific initiatives that respond to problems on an international scale. Thus, the International Committee recommended that the Board take a pro-

active position in reaching out to international organizations such as UNESCO and the World Bank in helping them develop policies that address global problems such as aids, malaria, etc.

3) With respect to the AMERICAN SCIENTIST, the International Committee recommended that the Board of Directors of Sigma Xi change the name of the magazine from American Scientist to more clearly reflect the vision of the Society. The new identity should be carefully crafted, and the change accomplished as an evolutionary and not revolutionary process. The *rationale* behind this petition is that if Sigma Xi is going to achieve its vision to be the global honor society of science and engineering, its highest visibility product must evolve, and its title must be globally inclusive.

4) As part of the evolutionary process, the Committee also recommended to the Board of Directors the implementation of a new, on-line, INTERNATIONAL MAGAZINE. This new publication would include articles from American Scientist, but also would accept articles that differ from the American Scientist norm in that they may be of less broad interest and be different in approach and format. A strong hands-on volunteer editorial board would be available to work with contributors, and augment the existing editorial staff. All contributors must be Sigma Xi members.

5) On REGIONALIZATION the International Committee recommended to the Board of Directors the elimination of the Canada/International Constituency Group. In its stead, redefined regions should be designated based on a minimum of 6 chapters/partners. Initially, there would be 9 regions: The United States (6 regions); Canada; Europe; Global Region at Large (to include anybody not in a currently qualified defined region)

Additional regions can be formed by petition to the Board once the minimum number of chapters/partners has been attained. Potential future regions include Asia, Latin America and Oceania.

6) Finally and in dealing with MEETINGS, the International Committee recommended that the Annual Meeting format and venues be revised, so that the current Annual Meeting be held on a biennial basis, referred to as the Global Meeting. In alternate years, only regional meetings would be held and the venues and formats for the individual regional meetings should be determined by the regions themselves. The Board of Directors meetings would be held in conjunction with each global meeting and on a rotating basis in off-years in various regions. The Global Meetings themselves will also rotate among the regions.

In its April meeting, the Board moved to compliment the International Committee for their report and its wealth of ideas and recommended that it should follow up on as many recommendations as prove viable.

On the other hand, at their meeting of June 5, 2007, the Committee on Publications reviewed the recommendations made by the International Committee and responded that regarding the name of the Society's publication, American Scientist, it appreciates the International Committee's caution in suggesting a name change, as the American Scientist brand carries great value established over many decades, but that such an effort should only be undertaken with very careful consideration.

It also considered imperative that any Sigma Xi publication, and any scientific material offered on the Internet in the name of Sigma Xi or American Scientist, should represent the highest possible standards in science and that launching a new high-quality international journal, may be impossibility under current constraints. It therefore concluded that an online journal with lower standards (of the kind that could be organized by a group of volunteer members without a large investment) would be more economical

but, in the committee's opinion, would not represent Sigma Xi's standards to the world and for this reason, it opposed such a venture.

In addition, the committee encouraged the magazine editors to make all possible effort to cast their nets wide in search of the best authors on the planet. The magazine would certainly benefit if extra effort is made to find excellent science outside North America. The committee also supports regional newsletters, especially the concept of inserting regional news in overseas copies of American Scientist, as a good way to help members keep in touch and share regional news. Making such regional news available online would help members in other regions be informed.

Finally, the Committee on Publications expressed that it looks forward to a continued conversation with the International Committee on the how can Sigma Xi's international outlook be extended. It also recognized that the recommendations were intended to begin discussion and expressed that it would be glad to receive a more detailed proposal (consistent with the principles above), so that it could discuss the pros and cons of specific options.

Attachment IV

To: nsbinternational@nsf.gov

From:
Date:

Dr. Michael Crosby
National Science Board Office
National Science Foundation
4201 Wilson Blvd., Ste 1220
Arlington, VA 22230

Dear Dr. Crosby:

Sigma Xi, the Scientific Research Society, joins many others in applauding NSB's report on International Science and Engineering Partnerships: A Priority for U.S. Foreign policy and Our Nations' Innovation Enterprise. It would be our privilege to be actively involved in and to support the proposed recommendations. We would like to offer some additional comments as you finalize this very timely guide to policy.

1. We commend the National Science Board for tackling such an important issue as the key role international science and engineering partnerships can play in "soft diplomacy" and the role that US scientists and engineers can play in being "good will" ambassadors. The key is getting more US scientists and engineers involved in international cooperation. This is the major component of the Sigma Xi report "Ensuring a Globally Engaged Science and Engineering Workforce" that can be found on its website: www.sigmaxi.org/global.
2. The following comments will focus on recommendations that speak to what NSF and other federal funding agencies can do to move the global agenda along. We offer four major points.
 - A US change in direction toward more international scientific and engineering collaboration will not necessarily be brought about by high level administrative changes in OSTP, USAID, and the Department of State, but by developing a large and active US constituency in Congress and in the decision-making public (as well as the general public) that understands the importance of US investment in international S&E cooperation as an important arm of US "soft power" or "transformational diplomacy". In order to achieve this goal, many more US educators, researchers, technician, and science policy makers much participate in international activities. Setting a goal of 1,000,000 US scientists and engineers studying or conducting research abroad every year in meaningful bilateral or multilateral projects would be an admirable target that funding agencies like NSF can integrate into their existing programs. Within this context, institutional changes within US community colleges and four-year and graduate colleges and universities should be encouraged to develop exchange programs that directly address global problems and contribute to cutting-edge research to promote innovation and economic development.
 - The report should address more specifically the role that US government agencies can play in supporting non-governmental organizations like scientific and engineering associations to promote "soft power". The associations, through their international programs, meetings, and

publications are often the initial contact for networking needed to develop international ties. Support for these types of bridge-building activities by these organizations should be supported by US mission agencies more directly.

- The report does not reference the problem that mission agencies have in promoting international projects and their lack of enthusiasm for keeping track of their successes for fear of coming under attack by Congress or Executive leadership. Many agencies do have international programs, including most of our national laboratories, but their successes and funding are often obfuscated in mission requirements that lie firmly within US national priorities. Intergovernmental initiatives like the National Coordination Office for Information Technology Research and Development and the National Nanotechnology Initiative do not address the important role that international research programs can play in assuring that US science and engineering are at the cutting edge of important R&D areas. OSTP should include a direct charge to these and other programs to include specific international components in their integrated programs and consider international R&D in its grand challenges approaches.
- None of the recommendations suggested can succeed without the firm and long-term commitment of US and foreign leadership. To train scientists and engineers in a country where there is no hope of employment there can contribute to social and political instability instead of fostering a civil society. Similarly, with the US political system changing Executive and Congressional leadership, countries are leery of signing agreements or memoranda of understanding with no long-term funding commitments. Federal agencies should have direct and constant budget funding lines for international programs. Programs within USAID that promote substantive science and engineering exchanges that address real problems, should be revitalized and augmented.
- Perhaps the NSF might establish a substantial program to support scientists displaced by the current US wars. It could be a systematic and sustained focus for the broad and unfocused activity of the Scholars at Risk network.
- One of the most powerful mechanisms to accomplish the goals of the report is the National Resource Center Program of the International Education Programs Service of the U.S. Department of Education. The program provides grants to establish, strengthen, and operate language and area or international studies centers that will be national resources for teaching any modern foreign language. Grants support: instruction in fields needed to provide full understanding of areas, regions or countries; research and training in international studies; work in the language aspects of professional and other fields of study; and instruction and research on issues in world affairs. There are many flourishing Centers around the country, with everything in place to achieve the aims envisioned.

Thank you for the opportunity to provide some suggestions for this report and further issues that the NSB can address. We commend this initiative and stand at the ready to support it.