

# R S Volume 27, Number 3 Third Quarter 2007 PevVsletter

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# Reshaping SRA toward a Global Risk Analysis Community

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In a world where risks inevitably cross political boundaries, international interconnectedness is increasing, and geopolitics are rapidly evolving, a global community of risk analysts is needed to help assess, manage, and communicate risks. The Society for Risk Analysis (SRA) can help support and connect this global community. But to do so, the SRA needs to grow into a truly global professional society with a global structure.

In my remarks to the 2007 SRA-Europe Annual Meeting in

June, I outlined the ways that SRA has grown internationally in the past and proposed directions for continued international growth, including a revised global structure of the Society.

The SRA was founded in the United States in 1980, but there is no "American SRA"; the SRA is an international entity. The SRA already has a large international presence among its nearly 2,000 members, and SRA has regional organizations in Europe, Japan, Russia, Kiev, the United Kingdom, Taiwan, and Australia and New Zealand, as well as numerous local groups within the United States and Canada. But

its historical origin in the United States, the large number of U.S. members, the history of officers coming from the United States, and its uneven structure leave the impression that SRA is a U.S. entity with subsidiary bodies outside the United States.

This needs to change as the SRA becomes global. SRA membership must broaden worldwide; officers must come from all regions; and the SRA needs a revised global structure to put all its regions, including the United States, on equal footing. Figure 1 shows the past SRA structure, while Figure 2 depicts one possible or illustrative future SRA structure to achieve this global orientation (figures are on page 3). In the structure imagined in Figure 2, SRA International would run the World Congresses and other global activities, while regional groups (including a new SRA North America) would run annual meetings in each region. Other possible structures could also be envi-

sioned. The structure itself is not the goal; the structure must serve the objectives of the Society in supporting the global community of risk analysts.

The SRA has been taking steps to increase its international presence, including the recent formation of several of the regional organizations noted above (such as Russia and Australia/New Zealand) and the pending formation of new regional organizations in China, Latin America, and elsewhere. In support of these efforts, the changes to the SRA Bylaws voted by

the membership in April 2007 provide, among other things, for the terms "Section" and "Chapter" to be replaced by the term "Regional Organization," thereby offering greater flexibility in the organization of such groups. (Interested groups should contact me or the SRA.) These efforts to spread the SRA and to support the global community of risk analysts also include numerous international meetings, notably the First World Congress on Risk held in Brussels in June 2003, the First International Conference on Risk Analysis and Crisis Response to be held 25-26 September 2007 in Shanghai, China, and the Sec-



SRA President-elect Jonathan Wiener (left) with SRA-E President Roberto Bubbico (right) and SRA-E President-elect Ann Enander in The Hague, June 2007.

ond World Congress on Risk to be held 8-11 June 2008 at the Hilton Guadalajara Hotel in Mexico. SRA members should participate in these meetings, as well as in the regional annual meetings such as the 9-12 December 2007 SRA Annual Meeting in San Antonio, Texas, USA, and the September 2008 SRA Europe Annual Meeting in Valencia, Spain.

This issue of the SRA RISK *newsletter* reports on current happenings in SRA groups around the world. We look forward to continued growth and to an increasingly interconnected network of members. As you read these entries, consider how you can help foster the international growth of SRA: for example, participate in an annual meeting, attend the World Congress, organize a new regional group, and recruit two of your colleagues to join SRA this year. I look forward to seeing you at an SRA event soon!

(Global Community, continued on page 3)

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## President's Message



I just returned from spending nearly three weeks in China as a chaperone for a youth orchestra and I find my thoughts turning to all of the wonderful possibilities for our young and growing discipline to improve our ever-changing world.

The amount of change that I saw between now and when I visited China in 1985 was truly impressive. Roads that used to be unpaved

and filled with bicycles now function as multilane highways filled with passenger cars, and the bamboo scaffolding that used to adorn several-story buildings has been replaced by steel scaffolds and cranes that create massive high-rise complexes. Whereas in 1985 we had difficulty finding American cola products and bottled water was not available at all, now familiar American fast-food restaurants appear at many major intersections and bottled water is everywhere. In Beijing, preparations for the 2008 Olympics are in full swing, with road signs all containing both Chinese and English and amazing arenas sprouting up in every direction. Each road seems lined with trees and landscaping that reminded me of California or Florida. At the same time, the visibility in some of the more industrial cities that we visited was less than half of a mile because the smog was so thick. Asthmatic kids in the group served as sentinels, and I found my limited skills in health care in much demand in efforts to keep one of the kids breathing well enough that we could avoid a trip to a Chinese hospital. The challenges of sustainable development became apparent to me on this trip in ways that I hadn't expected and that I will never forget. Clear opportunities for risk analysis!

So much of what we do in risk analysis focuses on prevention, and yet prevention continues to go underappreciated. It will always be difficult to get credit for avoiding things that might otherwise have happened. I had the wonderful opportunity to explain to some of the young people on the trip what I do, and it reinforced my opinion that we should each take some time to reach out to young people in our communities to get them excited about risk analysis. If each Society for Risk Analysis (SRA) member spoke with a group of kids about the field, then imagine the impact we could have in inspiring excitement and interest in risk analysis. I hope that this message will inspire some of you to reach out and share your experiences with folks—young and old—around you.

Since the last newsletter came out, we have accomplished numerous successes. On behalf of the Council, I want to thank you very much for your overwhelming support of the effort to update and amend our Bylaws. We received several additional suggested changes from members that we will also bring out to you soon for consideration, and the Council is continuing to work on the process to make sure that it encourages all SRA members to participate in SRA's governance (see separate article about this on page 13). We also launched the new SRA blog, although to date with limited success. I am currently working on using the blog to launch the discussion of revising the SRA's glossary and I hope that the blog will serve as an ideal forum for that discussion. SRA-Europe held its very successful meeting in The Hague in mid-June! The search for a new editor of Risk Analysis is now underway with the names of nominees rolling in. The World Congress Committee is actively planning for the 2008 meeting, so this is the time to contact the committee to get involved.

The Council is now working on strengthening our regional organizations (that is, our chapters and sections). We are working to strengthen the services provided by the SRA to its subunits and to ensure full compliance of all U.S. chapters with U.S. laws and regulations. We continue to hope to find ways to strengthen all of our subunits and to encourage their growth. As an organization, we expect the SRA will continue to discuss structural issues and the SRA's international growth, and we encourage you to think more about these since these will likely be topics for discussion at the next annual meeting (as they were discussed during a Wednesday lunch session at the 2006 meeting).

As I head into the second half of my year as president I very much appreciate all of the fabulous efforts of the officers and councilors with whom I have the pleasure of working and the dedication and commitment of our members. Thank you. I am also grateful to have the amazing support of Burk & Associates Inc. and the incredible staff in the Secretariat's office who keep the SRA functioning. Please join me in thanking Dick, Sue, Brett, Lori, David, Heide, Tiffany, Jill, Melissa, Stephanie, and the other folks behind the scenes for all of their efforts. This is also a great time to thank Jim and Ruedi for all of their efforts on the SRA Web site and Genevieve, Mary, and Sharon for the fabulous newsletter. As always, if you have any suggestions or ideas about things that we can do to make the SRA even more valuable to you as a member then please let me or the chair of the appropriate SRA committee know. I look forward to seeing you at the 2007 SRA Annual Meeting in December—don't forget to register early!

Kimberly Thompson, kimt@hsph.harvard.edu

2007 SRA Annual Meeting — 9-12 December 2007 San Antonio, Texas — San Antonio Marriott Rivercenter For the most current information: www.sra.org/events\_2007\_meeting.php (Global Community, continued from page 1)

Figure 1 SRA Structure: Past

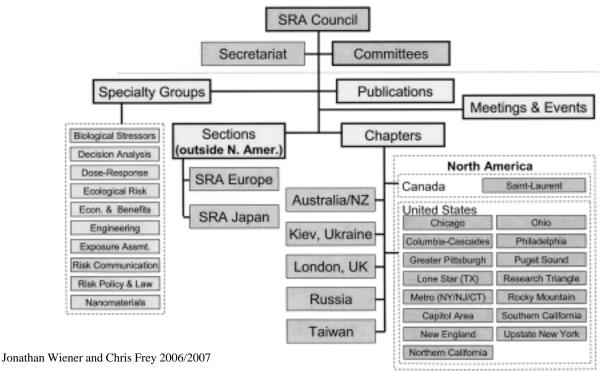


Figure 2

#### SRA Structure: Future? SRA International - a global umbrella SRA-I Council Secretariat Committees World Congress on Risk Publications (every 5, 4, or 3 years?) (global, and/or of each Regional Group) Specialty Groups (global) Regional Groups - all of equal status each with its own Council, Secretariat, Annual Meeting, Publications, ... Asia (or North Latin Pacific Africa Europe subdivide) America America U.S. Africa Japan Australia Central & Europe New Zealand Canada China South Russia? India & other Pacific Mexico? America Korea Mexico? Taiwan Russia? (Other variations are possible, e.g.:

Japan/Russia/China/India each separate; Mediterranean/Middle East group; etc.)

Jonathan Wiener and Chris Frey 2006/2007

## **SRA Japan**

Shoji Tsuchida, Vice President and Secretary-General

The Society for Risk Analysis Japan (SRA-J) has more than 600 members now and the number is increasing.

SRA-J has edited the book *Small Dictionary of Risk Research*, which will be published in September 2007, and is now planning to edit and publish an English version of *Handbook of Risk Research*, which will have about 140 topics in every field of risk research. The number of articles in our journal, *The Japanese Journal of Risk Analysis*, is increasing and three issues will be published in 2007. SRA-J has had an on-Web submission system for the proceedings of our annual conferences since 2005, and we will have an on-Web submission and referee system for *The Japanese Journal of Risk Analysis* in September 2007. SRA-J issues newsletters four times a year, and the newsletters were renewed and enriched in 2007.

SRA-J supports risk education. SRA-J has a committee for accrediting risk education and it qualifies persons who finished the attested risk education for accredited risk managers. So far 24 persons finished the education programs at the graduate school of Osaka University and they have been registered as "Environmental Risk Managers" by SRA-J.

The SRA-J annual general meeting and 20<sup>th</sup> annual symposium was held 22 June at the University of Tokyo. The main theme of the symposium was "Town and Community Management for Safety and Security: Participatory Risk Management

Approach." Dr. Norio Okada (Kyoto University) was the organizer. At the symposium we had six presentations: (1) How to Create a "Field" for Flood Risk Reduction in a Local Government (Dr. Tatano, Kyoto University), (2) For Qualitative Switch of Disaster Relief Volunteers—Thoughts from Support Activity for Noto Peninsula Earthquake Sufferers (Mr. Kurita, NPO), (3) Local Knowledge Engaged in Safe Community Building (Dr. Seki, Osaka University), (4) Communication for Encouragement of Preparedness Considered Altruistic Behavior (Dr. Kanai, Gunma University), (5) Investigating Risk Communication by the Communicative Survey Method (Takeuchi, Kyoto University), and (6) Communication Design for Disaster Mitigation (Dr. Atsumi, Osaka University).

The 20th annual research conference of SRA-J will be held 17-18 November 2007 at the University of Tokushima. Dr. Jun Sekizawa (the University of Tokushima) is the chief executive organizer of the conference. The main theme of the conference is "How to Live in the Risk Society of the 21st Century: From Our Daily Lives to Global Issues."

SRA-J is collaborating with the Chinese and Korean counterparts (Professor Shi of Beijing Normal University, China, and Dr. Shin of Yonsei University, Korea) on organizing the 4<sup>th</sup> East Asian Conference on Risk Analysis. We are planning to hold it at Beijing Normal University in spring 2009.

## **SRA Europe**

Julie Barnett, Secretary

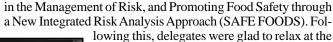
The Society for Risk Analysis Europe (SRA-E) 2007 conference enjoyed two full days of stimulating presentation and

challenging discussions. The 16<sup>th</sup> conference of the SRA-E attracted over 300 participants to the World Forum Conference Centre in The Hague in the Netherlands 17-19 June 2007.

Conference delegates were introduced to The Hague at a Sunday evening reception on the Pier at the seaside resort of Scheveningen before the real work of the conference started on Monday morning.

Delegates were welcomed to the conference by Jan Gutteling (chair of the Conference Organizing Committee), Jonathan Wiener (president-elect of SRA International), and Hubert Coonen (dean of the University of Twente).

The opening plenary session on Monday saw a focus on the main theme of the conference—Building Bridges. Arie Rip (University of Twente, Netherlands) facilitated a debate about multidisciplinary and transdisciplinary research around the stimulating presentations of Nick Pidgeon (School of Psychology, Cardiff), Ortwin Renn (Institute of Social Sciences, Stuttgart University and Dialogik), Josee Van Eijndhoven (Erasmus University of Rotterdam), and Marc Sprenger (Dutch National Institute for Public Health and the Environment). This set the stage for a full day of individual papers and seven special symposia that focused on Integrated Risk Management, Emotions and EMF, Disaster and Media in Europe, Nanotechnologies: Emerging Risks and Societal Responses, Individualisation and Risk Perception, Citizenship and Engagement as a Policy Tool



lowing this, delegates were glad to relax at the conference dinner held at Madurodam, where they were welcomed by the mayor of the city of The Hague.

The relation between science, policy makers, and practice was the focus of the opening plenary session on the second day of the conference. Erwin Seydel (University of Twente, Netherlands) encouraged and challenged discussion of the interesting contributions of Dick Schoof (director general of the Ministry of the Interior and Kingdom Relations), Anita Wouters (director of Water at the Ministry of Transport, Public

Works and Water Management), Maria Jepsen (head of research at the European Trade Union Institute for Research, Education, Health and Safety), and Jan Staman (director of the Rathenau Institute). For both days of the conference seven parallel sessions ran throughout, giving participants a range of choices—and hard decisions—about which presentations to attend. In addition, conference delegates had the opportunity to learn about the work of the Expertise Center for Risk and Crisis Communication of the Ministry of the Interior and Kingdom Relations during workshops run for interested participants. Participants had the opportunity to vote for the conference papers of the highest quality and thanks are due to the *Journal of Risk Research*, which will be publishing a special issue of these papers in 2008.



SRA-E 2007 Organizing Committee Chair Jan Gutteling (left) and SRA President-elect Jonathan Wiener in The Hague

The Executive Committee for SRA-E wishes to express sincere thanks to the Local Organising Committee for presiding over an excellent time of exchange and learning for delegates from 21 European countries, as well as the United States and Canada, Australia, Japan, Korea, Taiwan, Thailand, and Israel. Particular thanks are due to the commitment and endeavour of Dr. Jan Gutteling and Dr. Margot Kuttschreuter and to the generous sponsorship of the University of Twente, the Dutch Ministry of the Interior and Kingdom Relations, and the city and the mayor of The Hague.

The committee is looking forward to continuing to serve the growing community of members of SRA-E and was delighted to welcome 100 new members at the conference. The support and vision for internationalization that Jonathan Wiener expressed were challenging and the new officers of the Executive Committee are delighted to be working with SRA International at this time.

Olivier Salvi's fruitful time as president has come to an end and his new role as past president will continue to be an active one. Roberto Bubbico was welcomed as the new SRA-E president and Ann Enander as president-elect. Ann will also be leading the organization of the 2009 conference to be held in Karlstad, Sweden. The responsibilities of the remainder of the committee were confirmed as Treasurer Alberto Alemanno, Secretary Julie Barnett, Communication Officer Andrea Thalmann, 2008 Conference Organizer Branco Kontic, and Myriam Merad for Specialty Groups. Thanks to Jan Gutteling and Scira Menoni who have now completed their terms of office for SRA-E. The ongoing secretarial support of Raffaella Cozza remains invaluable.

SRA-E's 16<sup>th</sup> conference was a great success and further stimulation of the risk community is anticipated at the 17<sup>th</sup> SRA-E conference to be held in partnership with the European Safety and Reliability Association in Valencia, Spain, 22-25 September 2008.

## SRA Cosponsors First International Conference on Risk Analysis and Crisis Response in China

Chris Frey, SRA Past President

SRA is a cosponsor of the First International Conference on Risk Analysis and Crisis Response, to be held in Shanghai, China, 25-26 September 2007. This conference is organized by the Risk Analysis Council of China Association for Disaster Prevention and hosted by Shanghai Maritime University. In addition to SRA, both SRA Japan and SRA Europe are cosponsors of the meeting.

The conference is motivated by the critical role of catastrophic events in recent years, such as 9/11, SARS, the Indian Ocean earthquake and tsunami, the South Asia Earthquake disaster, and Bird Flu. In China, risk and crisis are increasingly regarded as urgent issues. The conference is intended to strengthen exchange, promote a higher level of methodology and practice in China, and provide an international forum for sharing theory and applications of risk analysis and crisis response. Furthermore, the Chinese government is paying greater attention to risk analysis and crisis response and has issued the Master State Plan for Rapid Response to Public Emergencies.

The Program Committee selected 174 papers through a careful review procedure from more than 300 papers to publish in the proceedings. The authors come from 11 countries: Australia, Austria, Belgium, China, France, Germany, Italy, Japan, Norway, Turkey, and the United States. The papers are on a wide

range of topics, including theories and methods on risk analysis and crisis response and case studies on natural disasters, catastrophic accidents, public health, social safety, financial risks, construction project risks, network security, resource shortage, and terrorist attacks.

The proceedings of the conference will be published by Atlantis Press of Paris as a volume titled *Advances in Study on Risk Analysis and Crisis Response*. Professor Chongfu Huang, of Beijing Normal University, China, is the general chair of the conference, and Professor Jiali Feng, Shanghai Maritime University, China, is chair of the Program Committee.

Many SRA members are involved with the conference. SRA Past President H. Christopher Frey is cochair of the general committee. SRA Councilor and SRA Europe President Olivier Salvi and SRA Japan president Shoji Tsuchida are cochairs of the Program Committee. Other SRA members who are on the Program Committee include Roberto Bubbico, Changchuan Chan, Peg Coleman, Tee Guidotti, Scira Menoni, Raymond Neutra, Marc Poumadere, Ortwin Renn, Jo Anne Shatkin, Maryline Specht, Andrea Thalmann, Kuen-Yuh Wu, and Jay Zhao.

More information about the conference is available at the meeting Web site, http://racr.shmtu.edu.cn/en\_index.asp or by email to RACR07@163.com.

## **Update on the Second World Congress on Risk**

Robin Cantor, Conference Coorganizer and SRA Past President

## **Background**

The second "World Congress on Risk" is an International Conference to be held 8-11 June 2008 at the Hilton Guadalajara Hotel in Mexico.

This is the second of a series of World Congresses on Risk that are important, logical steps to further develop the field of risk analysis and its applications. In partnership with other professional societies and organizations, the Society for Risk Analysis (SRA) launched the first of this series in 2003.

The unifying theme for the Second World Congress is "Risk and Governance," which reflects the worldwide trend toward making better use of risk-oriented concepts, tools, and processes (derived from both research and practice) in public deci-

sion making and risk management. SRA expects to cosponsor the World Congress with other scientific and professional organizations interested in risk.

Conference Organizers: Robin Cantor (Navigant Consulting, Inc.) and Javier Urbina-Soria (National University of Mexico)

## **Planning Subcommittee Chairs**

**Programming:** Robin Cantor (Navigant Consulting, Inc.), Gail Charnley (HealthRisk Strategies), Bert Hakkinen (Gradient Corporation), Garrick Louis (University of Virginia/Environmental Protection Agency), and Javier Urbina-Soria (National University of Mexico)

Marketing and Outreach: Olivier Salvi (L'Institut National de l'Environnement Industriel et des Risques [INERIS]), Jo Anne

Shatkin (Cadmus Group), and Kuen-Yuh Wu (National Health Research Institute)

**Fund-Raising and Finance:** Sabine Bonneck (Cologne, Germany), Michael Dourson (Toxicology Excellence for Risk Assessment [TERA]), and Henry Willis (RAND Corp.)

**Publication:** Elizabeth Anderson (Exponent)

**Local Organizing:** Mabel Padlog (Centro Universitario de Ciencias Sociales y Humanidades de la Universidad de Guadalajara [CUCSH UdeG])

## **Program**

The Second World Congress will consist of meetings over a three-day period. Each of the three days will begin with a plenary session to launch a set of issues or methodological "views." Three "sub-themes" have been developed by the planning committee for purposes of identifying plenary programs and the breakout sessions that will follow. Each sub-theme will also guide the selection of symposia for the afternoon concurrent sessions. These sub-themes are:

- a. Global and trans-boundary risks.
- b. Chemical, biological, and radiological hazards.
- c. Risk and sustainable development.

Speakers for the plenary sessions have been selected by the planning committee to provide broad participation by, and representation of, the physical, environmental, and social science communities and to reflect different international perspectives.

Each plenary session will be followed by breakout sessions that will combine groups of participants to consider the issues and methods addressed in the plenary in the context of specific deliberation problems such as energy planning, infectious disease, and nanotechnology. Planning these breakout sessions will be an important activity for SRA and the partner organizations, involving both a leadership and coordination role, especially in ensuring that groups truly cut across the perspectives of participants. Participants, or their designated rapporteurs, will reconvene after the breakout sessions to share and document insights across groups about risk and governance.

## **Mini-Symposia Submissions**

The afternoon sessions will be concurrent mini-symposia sessions selected by the program subcommittee. Current arrangements will allow for 10 concurrent mini-symposia to take place in each of two afternoon meeting periods per day for a total of 60 mini-symposia sessions. Strong preference will be given to proposals for mini-symposia where the presentations cut across different disciplinary, scientific, or regional perspectives. See upcoming details available on the SRA Web site (www.sra.org).

### **Poster Presentations**

The planning committee is also encouraging participation in a limited number of poster sessions. Posters for these sessions will be selected by using criteria consistent with those used in judging the mini-symposia. The deadline for proposals for individual posters for poster sessions will remain open until the end of October 2007. Poster sessions will be grouped by subject and presented in larger groups. Author attendance during the relevant poster session is required as a condition of acceptance.

## **Travel Stipends**

SRA is seeking funding from sponsors to create travel stipends for junior faculty/researchers and participants from financially disadvantaged countries. To be eligible for a travel stipend, an award candidate must satisfy one of the following criteria:

- a. Live in one of the countries eligible for borrowing from the World Bank, or
- b. Be no more than seven years beyond obtaining a PhD or equivalent level of experience (as per guidance found in, for example, the National Science Foundation's Alan T. Waterman Award).

To receive an award, an eligible candidate must demonstrate to the planning committee that he/she has a strong risk analysis career interest. Priority will also be given to candidates who propose to organize and participate in one of the mini-symposia or poster sessions. To apply for a travel stipend, candidates will submit to SRA (1) a statement of personal career goals and the expected benefits to the candidate and the candidate's home institution from participation at the World Congress and (2) a statement outlining the candidate's financial situation and need. The deadline for proposals for travel stipends will remain open until 15 February 2008. See upcoming details available on the SRA Web site (www.sra.org).

## **Preliminary Morning Program**

## Day 1: Global and Trans-Boundary Risks Christopher Bunting, IRGC, Chair

<u>Plenary:</u> Global risks: priorities, interdependencies, and integrated mitigation approaches

—Howard Kunreuther, Wharton School, and John Drzik, Mercer Oliver Wyman

### **Breakout Sessions:**

- · International disasters and critical infrastructure
- Global climate change
- Agriculture, biotechnology, and food safety
- Harmonized decision support

<u>Lunch Speaker:</u> Mario J. Molina, Nobel Prize winner in chemistry (invited)

### Day 2: Chemical, Biological, and Radiological Hazards John Ahearne, Sigma Xi, Chair

Plenary: Nanotechnology and its emerging risks

#### **Breakout Sessions:**

- Radiological risks and long-term waste management
- Information management (for example, REACH, HPV, biomonitoring)
- Environmental justice in Latin America
- Emerging sources of risk (for example, nano-scale materials)

Lunch: Speaker or sponsored poster session (TBD)

## Day 3: Risk and Sustainable Development Bernard Goldstein, University of Pittsburgh, Chair

<u>Plenary:</u> Helene Gayle, MD, MPH, President and CEO, CARE USA (invited) [formerly director of Bill & Melinda Gates HIV/ AIDs Foundation in Africa]

#### **Breakout Sessions:**

- Public health priorities: infectious disease and safe drinking water
- Globalization, trade, and development
- Sustainable energy
- Risks to biodiversity and human health from invasive species

**Lunch:** Sponsored poster session

## **SRA** Taiwan

Kuen-Yuh Wu, Secretary-General

Risk or risk assessment is becoming increasingly popular in Taiwan, and SRA Taiwan was established at the right time. SRA Taiwan is registered to the Ministry of the Interior of Taiwan as an academic organization and is also known as the Taiwan Society for Risk Analysis (TSRA).

Since it was officially established, SRA Taiwan has held a bimonthly seminar, beginning with "Quality of Life as a Tool for Risk Management" given by the former dean of the College of Public Health, Dr. J.D. Wang.

The title of the latest seminar is "The Assessment of Health Risk Resulting from Exposures to Air Pollutants Emitted from a Semiconductor Plant." A risk assessment team consisting of members of SRA Taiwan and led by President-elect Dr. C.C. Chan of Taiwan University assessed the potential health risk for residents living nearby.

Health risk assessment (HRA) was officially incorporated into the Environmental Impact Assessment (EIA) in Taiwan when the EIA committee of Taiwan made a request to National Science Council (NSC) as a conditional passage of the EIA report for the construction of a scientific park in central Taiwan (July 2006).

This is a milestone for the public and industries to recognize and consider HRA as an important tool in the decision-making process. Following this case, HRA was requested when EIA reports were prepared for a new development or investment cases.

Two steel companies, a refinery plant, and several semiconductor plants have contacted SRA Taiwan members to conduct HRA for them. To meet the needs of HRA, the Taiwan Environmental Protection Agency (TEPA) will initiate an HRA review process. SRA Taiwan will proactively help TEPA to prepare HRA and HRA review guidelines to make sure that scientific data and methods will be used in HRA.

For the last three years, Dr. Chan and Dr. Kuen-Yuh Wu have worked with the Institute of Occupational Safety and Health (IOSH) of the Taiwan Council of Labor Affairs to propose the risk-based recommended exposure limits for hazardous materials in workplaces. On 20 April 2007, IOSH held a workshop to promote health risk assessment in workplaces. Wu was invited

to give a two-hour lecture, "Introduction to Health Risk Assessment in Workplaces," to more than 70 participants.

Following the workshop, IOSH held an expert meeting to talk about how to put in practice the framework to propose recommended exposure limits prepared by Chan and Wu.

At the beginning of the workshop, SRA Taiwan and TSRA were briefly introduced to the participants by Wu to recruit new members. With the increase in needs of qualified risk assessors, the College of Public Health of Taiwan University recently initiated a proposal to establish the health risk assessment curriculum.

On 19 May 2007, SRA Taiwan President Dr. Winston Dang was appointed as the acting minister of TEPA, then was named the minister of TEPA. He resigned as president of SRA Taiwan on 25 May and President-elect Chan then took over as president of SRA Taiwan.

Dang worked at the Office of Pesticide Program of the U.S. Environmental Protection Agency for more than 10 years before coming back to serve a three-year term in the Taiwan senate in December 2004. Since coming back to Taiwan, he has vigorously promoted risk assessment in Taiwan. In 2005, he worked with Chan and Wu to prepare the application to become a chapter of SRA. During the annual meeting of 2005, SRA Taiwan was officially chaptered. Dang then continued to establish TSRA and is the founding father of SRA Taiwan and TSRA. He also initiated a proposal to build a National Center for Risk Assessment in Taiwan.

Although very busy as a senator and the director of foreign affairs of the governing party, Democratic Progress Party, he still spared time and an assistant to work with the SRA Taiwan secretary general. His efforts and contributions to SRA Taiwan and TSRA will be remembered. All SRA Taiwan members gave best wishes to him as the minister of TEPA. Dang's contributions have been very critical in establishing SRA Taiwan. For successful international development, it will be critical to find a key person like Minister Dang who has enthusiasm, willingness, interests, and a good understanding of risk analysis and communication skills in a country. He will make good things happen.

## **SRA Australia and New Zealand**

Keith Hayes, President

SRA Australia and New Zealand is holding its second annual conference at the Commonwealth Scientific and Industrial Research Organisation (CSIRO) Marine and Atmospheric Research (CMAR) Laboratories in Hobart, Tasmania, 20-21 August 2007. The conference will be divided into four sessions:

- Advances in decision support tools.
- Biosecurity and syndromic surveillance techniques and the policy context of monitoring data.
- Advances in surveillance methods and approaches.
- Social dimensions to biosecurity surveillance.

Keynote speakers include Professor Yakov Ben-Haim (Technion Institute, Israel) and Dr. Stephen Prowse (CEO, Australian Biosecurity CRC).

The conference will also be preceded by two half-day workshops on 19 August.

The morning workshop on Risk Assessment and Surveillance Methods will be led by Naomi Cogger (Massey University Epicentre, http://epicentre.massey.ac.nz) and Mark Burgman (director, ACERA, http://www.acera.unimelb.edu.au/index.html).

The afternoon workshop on Knowledge Modelling and Uncertainty with Bayes Nets will be led by David Pullar (University of Queensland, http://www.gpa.uq.edu.au/staff/dpullar/).

To register your interest in attending the workshops and conference please contact the Conference Secretariat at sgoudge@unimelb.edu.au.

The conference program and registration form is available at http://www.acera.unimelb.edu.au. Attendance at the workshop and conference will be free for members of SRA Australia and New Zealand.

## **SRA Saint-Laurent**

Stéphane Masson, President, and Yves de Lafontaine, Director

On 28-29 May 2007, the Society of Environmental Toxicology and Chemistry (SETAC)-SRA Saint-Laurent held its 11th annual

symposium at the Rimouski Hotel in Rimouski, Québec. This year's theme was "Toxicological Risks in a Dynamic Environment." The symposium was a success, with over 100 participants from academia, government, and industry in addition to private consultants.

The symposium began with a plenary session chaired by the president of the symposium, Émilien Pelletier from the Institut des sciences de la mer (ISMER) at Rimouski, Québec. The keynote speaker, Karen Kidd from the SETAC in North America board, shared her view on SETAC priorities and how each member can contribute to the Society. The

Chassé, and Séverine Le Faucheur

next two guest speakers were Catherine Couillard, from the Maurice Lamontagne Institute at Mont-Joli (Québec), who

spoke on the interaction between environmental variability and toxic products in marine ecosystems, and Émilien Pelletier, who presented an interesting talk on the trophic models in marine ecotoxicology.

This plenary session was followed by a dynamic poster session including 27 presentations. The afternoon of this first day and the morning of the second day were dedicated to two parallel sessions for a total of 26 platform communications. The first day ended with a cocktail party where attendees had the opportunity to taste a variety of seafood from Québec while discussing the symposium theme.

During the symposium, SRA Saint-Laurent held its annual corporate meeting to elect

the 2007-2008 Board of Directors: President Stéphane Masson (Parc Aquarium du Québec, Sépaq), Past President Christian

Gagnon (Centre Saint-Laurent, Environnement Canada), Vice President Jonathan Bernier (Institut National de la Recherche Scientifique, Eau, Terre et Environnement [INRS-ETE]), Treasurer Dominique Lapointe (INRS-ETE), Secretary Raynald Chassé (Centre d'Expertise en Analyse Environnementale du Québec [CEAEQ]), and Directors Yves de Lafontaine (Centre Saint-Laurent, EC), Louise Champoux (Environnement Canada), and Séverine Le Faucheur (INRS-ETE).

We wish to thank the members of the past Board of Directors for their contribution and welcome the new ones.

In the afternoon of the second day, we ended the scientific program by listening to three lecturers of prestige. Daniel

Martineau, St. Hyacinthe Veterinary Faculty of Medicine, presented a portrait of health of the St. Lawrence beluga whales.

Next, Yves Couillard, Environment Canada, made an overview of the state of Dasserat Lake, which has been influenced by mining acid drainage over a long time. Finally, Michel Auffret, CNRS France, entertained the audience by presenting the immunotoxical approaches used to monitor the toxic risk in European coastal waters. Each conference was followed by several questions from the audience leading to a very interesting discussion.

The symposium ended with the awards for student presentations, and two \$2,000 Excellence Awards were given by SRA Saint-Laurent to MSc and PhD students.

The laureates of the Excellence Awards for this year are Annick Dion-Fortier, Université Laval, Québec, for her MSc

> research project titled "Variability of the By-Products of Disinfection of Water at the Residential Point of Use" and Dominique Lapointe, INRS-ETE, Québec, for her PhD research project titled "Accumulation, Subcellular Distribution and Effects of Metals on the Fathead Minnow (Pimephales promelas)."

> The laureates of the best student platform presentation awards were Mrs. Ariane Bouffard, from Université de Montréal (exæquo prize of \$150 from SRA Saint-Laurent and \$25 from SRA), for her presentation "Interaction between Elementary Mercury and the Lake Sediments" and Mrs. Sabine Stachowski-Haberkorn, Université de Bretagne Occidentale (ex-æquo prize of \$150 from SRA Saint-Laurent and \$25 from SRA),

for her presentation "Use of In Situ Microcosms to Evaluate the Toxicity of Pesticides on Oyster Brood Crassostrea gigas."

> The laureates of the best student poster presentation awards were Karine Dauphin, Université du Québec à Trois-Rivières (first prize of \$150 from SRA Saint-Laurent and \$50 from SRA), for her poster "Contamination of the Terrestrial Food Chains by the Watery Mercury of Origin during Floods" and Maïtée Dubois, INRS-ETE (second prize of \$150 from SRA Saint-Laurent), for her poster "The Transfer of the Elements Traces (Cd and Se) between Preys and Predators: Role of the Subcellular Distribution of the Elements at the Prevs."

We would like to thank all the members of the organizing committee and the numerous

volunteers who contributed to make this symposium a success. We also thank the speakers and participants for their



(left to right): Christian Gagnon, Jonathan Bernier, Dominique Lapointe, Stéphane Masson, Raynald



Saint-Laurent President Stéphane Masson (center) present Maïtée **Dubois** with her best student poster presentation award.



President Stéphane Masson presents Mrs. Dominique Lapointe with her \$2,000 prize for the 2007 PhD Excellence Award.

essential contribution. SRA Saint-Laurent is also grateful to the sponsors for their generous financial support: Centre interinstitutionnel de recherche en écotoxicologie (CIRÉ), Pêches et Océans Canada, Hydro-Québec, Centre d'expertise en analyse environne-mentale du Québec (CEAEQ), Institut national de la recherche scientifique—Eau, Terre et Environnement (INRS-ETE), Institut des sciences de la mer de Rimouski (ISMER), Alcan, Varian, Environnement Canada, Réseau Sépaq, SRA, and SETAC.

The 12<sup>th</sup> annual symposium will be held in Québec City at the end of May 2008. Anyone interested in taking part in the orga-

nization of this event is invited to contact a member of the Board of Directors.

Throughout the year, the Board of Directors, which met five times, worked hard to promote SRA Saint-Laurent through its activities and committees. We welcome those interested in taking part in the activities of SRA Saint-Laurent to contact us. Apart from the annual symposium, SRA Saint-Laurent also organized seminars and small conference series. More details on SRA Saint-Laurent, including its Excellence prize program for MSc and PhD students, can be found at http://chapitre-saint-laurent.qc.ca.

## **SRA UK**

Ellen Townsend, President

SRA UK is holding a conference on 7 September 2007 at the University of Nottingham titled "Risk Perception: Current Themes and Debates." Keynote speakers include Professor Nick Pidgeon (University of Cardiff) and Professor Joyce Tait (University of Edinburgh). Academics from the United Kingdom and overseas are presenting papers on a

wide range of topics including risk perception and new technologies (for example, nanotechnology, biotechnology), risk perception and emotion, and risk perception and climate change. More information about the conference can be found at http://www.psychology.nottingham.ac.uk/research/rasph/SRA\_UK2007.html.

### **SRA Russia**

Professor Valery Lesnykh, Deputy Head of Scientific Council

The annual conference of the Russian Scientific Society for Risk Analysis (SRA Russia) took place in Moscow 20 April 2007. Traditionally, a conference of the Society has been held simultaneously with the international scientific conference on problems of emergency situation risk reduction. This year the three-day scientific conference was devoted to interdisciplinary research in the field of population safety in current conditions. The symposium "Industrial Accidents and Problems of Safety" was organized within the framework of the conference. Organizers of the scientific conference and the symposium were SRA Russia, the Ministry of Emergencies of the Russian Federation, and the Russian Academy of Sciences.

Formed in October 2003, SRA Russia has actively developed and now has 56 regional branches in practically all large regional centers from Moscow to the Far East. More than 2,000 persons are members of the Society.

At the conference, Dr. Michail Faleev was again elected as president of SRA Russia for the next three years. His activity since the formation of the Society has helped shape the organizational structure of the Society and the establishment of steady and fruitful communications with the Ministry of Emergencies (EMERCOM), the Russian Academy of Sciences, and also high school institutions in many cities of Russia.

One of the most significant results of Society activity in recent years is the development of policies on acceptable risk levels and on the estimation of the value of an average person's life. These policies were repeatedly discussed at sessions of the Scientific repeated by the sessions of the sessions of the sessions of the Scientific repeated by the sessions of the se

tific Council and Presidium of the Society and have been maintained by participants of the annual conference.

The policy on acceptable risk levels is offered to establish specifications of a maximum permissible (acceptable) level of individual risk of death and also a level of societal risk. Specifications suggested by the Society are considered as credible recommendations.

For potentially dangerous industrial objects in Russia, the federal specification (national standard) for the acceptable level of individual risk for the population is 10<sup>-4</sup> per year.

The specified standard is differentiated depending on specificity of industrial objects and sources of danger and on the character of their dangerous influence on the population: a. by criterion of novelty of industrial object:

- less than 10<sup>-5</sup> per year for new (designed) objects
- less than 10<sup>-4</sup> per year for objects under existing operation b. by criterion of combined dangerous influence:
- $\bullet$  less than  $10^{\text{-}5}$  per year for regular influence of harmful factors on health of the population
- less than 10<sup>-4</sup> per year for combined influence of various harmful factors on health of the population

Negligible levels of individual risk are recommended to be established at 100 times less than corresponding

acceptable levels.

Acceptable levels of societal risk of death of N persons from the population are recommended to be established at a level of 10<sup>-3</sup>/N<sup>2</sup> per year for new (designed) objects and at a level of 10<sup>-2</sup>/N<sup>2</sup> per year for objects under existing operation.

Negligible levels of societal risk are recommended to be established at 100 times less than corresponding acceptable levels.

Acceptance of the policy on the estimation of the value of an average person's life is a continuation of the establishment of acceptable risk levels. Proposed standards are considered as credible recommendations.

Maintenance of a required level of safety in many respects depends on the proven account and a correct economic assessment of the average person's life. For calculations of the damage connected to destruction of people in extreme events (accidents, catastrophes, disasters), for calculations of the prevented damage connected with carrying out of preventive actions on risk reduction, and also for optimization of expenses



SRA Russia President Michail Faleev

on risk reduction, the recommended range of quantitative values of the cost of an average human life for current conditions in Russia is 30-40 million rubles (\$1-1.5 million).

For the problem of establishing the state or corporate payments to families of victims of extreme events, and also for establishing the insurance amounts connected with professional activity, the range of quantitative values of the cost of an average human life recommended by the Society for current conditions in Russia is 7-10 million rubles (\$0.25-0.4 million).

The Society foresees that the following important activities will occur over the next several years:

• A need for joint efforts by scientists, specialists, representatives of industry, organs of state authority and management, organizations, and representatives of the community for designing and implementing state policy in technical regulation, standardization of the exponents of risks, and providing of safety through the economic mechanisms.

- Implementing SRA Russia's policies on acceptable risk levels and on the estimation of the value of an average person's life.
- Making regional branch research more active.
- Participation in the development of federal and regional scientific programs connected with risk analysis and risk management.
- Continuing to train specialists in the disciplines of risk analysis and risk management.
- Organization of scientific and practical conferences, workshops, and seminars on the problems of risk analysis.
- Generalization and development of experience in normative regulation of risk.
- Communication and publishing activity, including the publication of the official periodical journal of the Society—*Problems of Risk Analysis*.
- Collaboration with international organizations involved in risk analysis and risk management, including emergency management.

## **Formation of SRA Latin America**

Dr. Esperanza López Vázquez (Mexico)

During the winter of 2004, the first idea for the creation of a Latin American chapter was born at the SRA annual meeting in Palm Springs, California, USA. In 2005 numerous emails were exchanged between the Latin American SRA members with the goal of keeping alive the idea of setting up this group. The first informal meeting was made, and the first ideas about the group were considered and registered at the Orlando, Florida, SRA annual meeting in 2005. At that time, our group consisted of about 10 people with many ideas and many expectations.

Promotion of the group and its first activities began in 2006. During the first trimester of the year we got a list of 57 interested persons from nine different Latin American nationalities, and in October 2006 the First Multidisciplinary Meeting of Specialists in Risk Analysis took place in Puebla, Mexico. As a part of our planning we also had a one-day training on "Emergency Management" given by Dr. Jack Rozdilsky from the University of Texas. One of the goals of this event was to promote the group and to get people interested in the field of risk in Mexico together. We assembled 60 specialists from across the country, all of them highly interested in risk and disasters and, of course, in constituting a group to share experiences in the field. We would like to replicate this experience in Chile, Colombia, and other countries, having in mind as one of our first duties keeping risk analysis in Latin America state of the art.

In December 2006 at the Baltimore, Maryland, SRA annual meeting, we presented two symposia related to Latin American studies as a part of our group activities.

We are now preparing for the second meeting in Mexico. We would like to invite our Latin American colleagues to participate with us.

The main goals we would like to reach with this organization are (1) to create a multidisciplinary group, (2) to know about the work of other specialists on risk in each of our countries and in the Latin American continent, (3) to exchange knowledge and experiences, (4) to focus on specific Latin American issues in the risk field, (5) to adjust theoretical models to the reality and problems of our countries, (6) to organize Latin American meetings, and (7) to establish other particular goals.

This past December in Baltimore, with the objective of creating a more formal organization, Dr. Esperanza López Vázquez from Mexico (one of the principal organizers of the movement and the Mexican meetings) was proposed as the president and Luis Cifuentes from Chile (one of the SRA councilors) as the secretary of the group.

The group now has 17 registered members of SRA, and it has more than 80 supporters. We hope to formalize our group very soon as a part of the internationalization of the SRA.

## On the SRA Web Site Members Only page (http://birenheide.com/sra/membersonly/index.php3)

Review your membership information and make any changes required
Renew your membership
View SRA election results
View Membership Survey Results
Access the Membership Directory
Access the SRA Journal
Review SRA documents
Participate in the SRA Blog
Download the form for Society-Sponsored Proposals





2007 SRA Annual Meeting
9-12 December 2007
San Antonio, Texas
San Antonio Marriott Rivercenter
For the most current information:
www.sra.org/events\_2007\_meeting.php

Torch of Friendship SACVB Photo/Al Rendon

# Record Number of Workshops Offered for the 2007 SRA Annual Meeting

Margaret MacDonell

Each year, continuing education courses are offered in conjunction with the SRA annual meeting on the Sunday before the full meeting begins. These workshops give attendees the opportunity to enhance their understanding of current risk issues and analytical approaches across multiple disciplines and applications. Organized or coordinated by SRA members, the annual meeting workshops have long been a valued resource for participants.

2007 has produced a bumper crop of offerings, reflecting strong interest in a variety of risk topics that include international applications. Seven full-day and 13 half-day courses have been proposed, with several of the latter linked as morning and afternoon pairs—totaling 20 choices overall. These workshops address a number of specific risk issues ranging from contaminated sites to food safety and nanomaterials within the following interrelated themes:

- Human health risk assessment: Relevance of animal mode of action for humans, chemical-specific adjustment factors for noncancer effects, internal doses for chemical mixtures assessment, benchmark dose and categorical regression tools, and "omics."
- Environmental/ecological risk assessment: Regional-scale ecological assessments, and metals geochemical evaluations distinguishing site contamination from background.

- Incorporating risk assessment into risk management, and decision analysis: Cost-benefit analyses and the International Risk Governance Council framework illustrated for food safety, and tools for multicriteria environmental contamination problems and site revitalization.
- Nanotechnology/nanomaterials: Introduction to environmental and health aspects of nanotechnology, and developments and trends in risk management for nanomaterials.
- Statistical analysis, probabilistic analyses, and related approaches: Probability and sensitivity analyses for risk models, probabilistic analyses with limited data, possibilistic mathematics, and R statistical software.
- Educational overview: General outline of the Society and basic risk analysis concepts.

A brief synopsis of each workshop and instructors will be posted on the SRA Web site, along with information on how to register. Members are encouraged to sign up before the early registration deadline for the annual meeting to assure their first preferences can be met.

Be sure to mark your calendars for 9 December 2007 in San Antonio for this unique opportunity to learn about emerging risk topics, techniques, and tools and to share insights with your colleagues!



## **News and Announcements**

## Risk, Uncertainty and Decision Analysis for Environmental Security and Non-Chemical Stressors Summary of the NATO Workshop

By Igor Linkov, Susan Cormier, Elizabeth Ferguson, Abou Ramadan, Richard Wenning, Jeff Steevens, Jose Figueira, Greg Kiker

Population growth, needed economic growth, and social pressures for improved infrastructure coupled with the need for human and ecological health protection and environmental security makes environmental decision making a difficult task when balancing human health and ecological impacts with societal benefits. Environmental security has emerged as an increasingly important concern of governments and their defense establishments, as they have the potential to threaten stability. Due to this threat, risk assessment has emerged as a useful tool to address environmental security issues. Nevertheless, questions of the harmonization of risk-based approaches and decision tradeoffs have not been addressed, especially as it is applied to non-chemical stressors.

The three-day NATO (North Atlantic Treaty Organization) Advanced Research Workshop (ARW) titled "Risk, Uncertainty and Decision Analysis for Environmental Security and Non-Chemical Stressors" attracted more than 60 participants and represented 14 countries. Held 26-29 April 2007 in Cascais, Portugal, the workshop was chaired by Drs. Igor Linkov and Elizabeth Ferguson and hosted jointly by the Society for Risk Analysis (Decision Analysis and Risk Specialty Group), Instituto Superior Technico (Lisbon), and ENVIRON. The meeting was an event supported by the NATO Science Programme.

This was the seventh meeting in a series of workshops on the use of advanced risk assessment and decision analysis tools to understand environmental security that began in 2000 in Lisbon, Portugal. The 2007 NATO workshop started with building a foundation to apply chemical risk assessment approaches and tools to a broad collection of non-chemical stressors, including physical (unexploded ordnance, noise, temperature, pH) and novel technologies, as well as emerging (nanomaterials, pharmaceuticals, and pathogens) and biological materials (invasive species, microbial agents). The principles of risk assessment are unchanged, regardless of the type of problems encountered by assessors. However, in practice, they

are influenced by temporal and spatial scales in which decisions must be made. Some decisions, such as those made within a rapidly evolving crisis, require extensive preplanning and training to prepare decision makers so that they may react instinctively in a timely fashion. Decisions in which the timing of the decision is less critical can occur in a more deliberative, consensus manner. Clearly, a continuum exists across a range of situations. Through structuring, execution, and debriefing of management scenarios, one goal is to achieve consensus regarding the proper course of decision making. The workshop reviewed methods and tools developed in the field of multicriteria decision analysis that apply to these two conditions, as well as in environmental management, focusing on the rapid versus more deliberative process.

The differences between rapid and deliberate decision analysis are apparent from the onset of risk assessment, through the final decision analysis and implementation. The differences begin with initial recognition of the nature of the problem to be addressed and continue through the risk assessment, the actions taken, and the post-decision analysis process, including the evaluation of the effectiveness of the decisions. The measures of success provide data to analyze approaches used and to promote continual improvement of the process.

Assuredly, the NATO workshop was only the first step in a deeper exploration of the topic. It drew distinctions between rapid versus deliberative approaches in risk assessment and related it to specific tools. It gave us an opportunity to consider what we might learn and how we might improve risk, uncertainty, and decision analysis by customizing methods and processes intended to deal with crisis and chronic situations. The workshop concluded that a framework that combines risk assessment and multicriteria decision analysis would be appropriate to address multiple challenges in managing a whole spectrum of emerging stressors.

## Risk Assessment for Nanomaterials: Current Developments and Trends Workshop Summary

Igor Linkov (Intertox Inc.), Mike Ellenbecker (Massachusetts Toxics Use Reduction Institute), and Sam Lipson (Public Health Department, City of Cambridge)

With 300 products in use today, what information is available to demonstrate that nanomaterials do not pose unnecessary risks to human and environmental health? What areas are in need of environmental health and safety (EHS) science? How could risks and environmental impacts of nanomaterials throughout the product life cycle be minimized with engineering practices to improve product safety and to avoid potential future litigation? To help answer some of these questions, a one-day training course at the Massachusetts Institute of Technology (MIT) was designed to help navigate the ever-changing world of nanotechnology. One hundred forty participants representing academia, in-

dustry, government, and consulting attended the one-day course at MIT on 29 May 2007. Fifteen lecturers covered a diverse range of topics essential for professionals in nanotechnology and biotechnology.

In the introductory session, Mr. Robert Healy, City of Cambridge manager, opened the workshop and highlighted its importance for the proposed city ordinance regulating nanomaterial, followed by Dr. Kim Thompson, Society for Risk Analysis (SRA) president, who introduced risk assessment fundamentals and related risk assessment methods and tools for nanotechnology. Dr. Travis Earles of the White House Office of Science and Technology ended the session with a review of

government activities designed to improve nanomaterials and EHS and increase the understanding of risks.

The exposure assessment and risk characterization session started with a presentation by Dr. Mike Ellenbecker of Mass Toxics Use Reduction Institute, one of the workshop's sponsors. Dr. Ellenbecker's presentation reviewed methods and tools available for exposure assessment, which concluded that while sound industrial hygiene practices may reduce worker exposure to nanomaterials, additional research is necessary to confirm that the protection is sufficient to minimize exposure to nanoparticles specific to the process. Dr. Kristen Kulinowski of the International Council on Nantochnology (Rice University) followed with a summary of exposure assessments and risk characterization research. Dr. Jeff Steevens of the U.S. Army Corps presented nanomaterial impacts on ecological receptors, an often overlooked area that is currently attracting attention. Lastly, Dr. Jackie Isaacs of Northeastern University Center for High-Rate Nanomanufacturing (workshop sponsor) introduced life-cycle assessment (LCA) as a tool for a nanomanufacturing process improvement. She highlighted that information on EHS impacts of nanomaterials/products is largely missing.

Occupational exposure is probably the risk frontier for nanomaterials health and safety. Dr. Vladimir Murashov of the National Institute for Occupational Safety and Health (NIOSH) reviewed current activities and programs supported by NIOSH and other agencies in the United States. Dr. Sheremeta presented efforts in Canada, including developing strategic programs that enable relevant risk-focused research. The session ended with Dr. Igor Linkov and Matthew Hull who introduced NanoSAFE, a practical EHS management approach developed from within the nanotech industry, which has been praised by government and industry experts in providing a comprehensive yet practical strategy for managing emerging nanotechnology risks in industrial settings.

The session on policy implications of nanotechnology started with Dr. Evan Michelson's summary of activities at

the Woodrow Wilson Center, focusing on a design to monitor regulatory development in the field of nanotechnology. Michelson moderated the session where Sam Lipson of the City of Cambridge discussed the background behind the proposed city ordinance. John Monica and James Votaw, two attorneys renowned for their work in nanotechnology, reviewed the current regulatory environment on city, state, and federal levels.

The final session included several talks on risk management. The focus of the presentation by Drs. JoAnne Shatkin and Michael Davis was on the current activities in the Environmental Protection Agency/Office of Research and Development, developing a risk management framework and a variety of case studies, while Dr. Delara Karkan of Health Canada focused on medical devices and the management of health risks. Dr. Igor Linkov concluded the workshop by linking the evolving tool of multicriteria decision analysis with emerging issues and data gaps in nanomaterial risk assessment and characterization.

Nanotechnology is a broad and complex field of both research and manufacturing, with many discrete decision points. For example, some decisions might be based upon an ability to predict which nanomaterials will have favorable chemical characteristics and lower toxicities, to identify important knowledge and technology gaps, and to develop effective communication with stakeholders and the general public. The lectures, coupled with panel discussions and questions and answers, allowed participants to gain an awareness of the critical issues in this evolving field and a set of conceptual tools needed to make decisions and prioritize challenges in their own organizations.

The workshop was sponsored by the SRA Decision Analysis and Risk Specialty Group, the City of Cambridge, the Massachusetts Toxics Use Reduction Institute, the SRA New England Chapter, MIT, and Northeastern University. Workshop slides are available from Dr. Igor Linkov (ilinkov@intertox.com) for a modest fee to benefit SRA.

## Council Requests Input on Additional Substantive Changes to the SRA Bylaws

The amendments to the Bylaws passed and the Council very much appreciates the overwhelming member support. Thank you.

During the process, the Council received additional suggestions from members for further amendments in response to its request for members to make additional suggestions. In particular, one member suggested that in Section VII, B (regarding Meetings) the sentence on conference calls or any other means of communication is unnecessarily restrictive and could prevent the use of a conference call or other means of communication if one or more members of the Council were deaf and/or mute and wished to take part in the meeting. The member suggested changing the phrase that now reads "all persons participating in the meeting are able to hear and speak to each other" to read "all persons participating in the meeting are able to adequately communicate with each other." This member also suggested that the word "will" should be changed to the word "shall" in Section XVI, B regarding Auditors and also in Section XVI, G regarding Insurance, so that these two sections would read, respectively: "The Council shall employ a certified public accountant . . . " and "The Society shall purchase liability insurance . . . "

Another member who expressed great appreciation of the Bylaws amendment process used, which in his view allowed all SRA members to participate and to have time to carefully read and review the proposed changes before voting, suggested further changes to Section XVII on Amendments. This member suggested deleting the phrase "at the next meeting of the members" that currently appears at the end of the sentence such that the requirement is to bring any proposed amendment endorsed by 20 percent of members to the entire membership.

The Council hopes that any members who would like to suggest additional substantive changes to the Bylaws will take the time to do so now, and it is working on further improving the process to encourage even greater participation of all members in matters of governance. The Council requests that all members please take the time to read the amended Bylaws (www.SRA.org) and submit in writing (email preferred) their suggestions for additional changes to the Bylaws to Secretary Mitchell Small (ms35@andrew.cmu.edu) and Executive Secretary Dick Burk (RBurk@BurkInc.com). Please suggest specific substantive changes to the language and provide your justification for these so that they can receive full consideration. The Council expects that any such suggestions received by 1 September 2007 will be discussed by Council and brought out to the full SRA membership for approval if appropriate by the end of this calendar year. Thank you for your input and support.

## Call for Risk Analysis Editor-in-Chief Nominations

The Society for Risk Analysis (SRA) seeks nominations for Editor-in-Chief of *Risk Analysis: An International Journal*. The editor-in-chief works with a managing editor and six area editors in Ecological & Environmental Risk Assessment, Engineering, Health Risk Assessment, Social Sciences, Microbial Risk Assessment, and Decision Sciences. Candidates should have strong writing and managerial skills, strong technical accomplishments in one or more disciplines relevant to SRA, preferably prior experience as an editor of scholarly publications, and broad interests. SRA provides limited financial support for editors. The editor-inchief is appointed for a five-year term that is effective from the start date and may be renewed. Nominations should include a statement of the nominee's qualifications, relevant experience, management approach, plans and strategic vision for the journal, a CV, and a list of references. More details are available at www.sra.org and were published in the 2007 second quarter issue of the RISK *newsletter*. Nominations submitted by 1 September 2007 will receive full consideration and should be submitted to Dr. H. Christopher Frey (Chair of SRA Publications Committee), Campus Box 7908, North Carolina State University, Raleigh, NC 27695-7908 or by email to frey@ncsu.edu.



## **Specialty Groups**

## **Ecological Risk Assessment Specialty Group**

Wayne Landis, Chair

This spring was a busy time for me talking about risk assessment up and down the West Coast. Unlike the joint Society for Risk Analysis (SRA) and Society of Environmental Toxicology and Chemistry (SETAC) meeting in March, both of the conferences attended were SETAC chapters, Pacific Northwest and Northern California. Both meetings do have lots of SRA members in attendance, mainly from the Ecological Risk Assessment Specialty Group.

In April the Pacific Northwest chapter of SETAC had its annual meeting in Port Townsend, Washington, at Fort Worden. A special session—"Population Ecotoxicology"—was held on Thursday with Bruce Hope, John Stark, Chris Mebane, Julann Spromberg, and me presenting. It is clear from the presentations that populations can be dealt with from a toxicological and risk point of view. In several cases it is possible to extrapolate effects on growth and mortality to reasonable estimates of changes in population growth rate or persistence. After the presentations there was a long question-and-answer period about the application and practicality of this information to risk and decision making. In my role as editor of the Ecological Risk Assessment area I have asked each author (and each has agreed) to prepare a manuscript for a special issue of *Risk Analysis*.

In May I got to hold a short course on regional-scale risk assessment at the invitation of the NorCal SETAC Chapter in Oakland, California. Seems like ecological risk assessment is gaining in interest among a diverse community beyond toxicologists. Now if we can just figure out how to get more of them on board and into SRA.

Planning is already underway for the 2007 SRA Annual Meeting. Todd Bridges has submitted a symposium titled "Risk-Informed Hurricane Protection and Restoration Planning for

Coastal Louisiana and Mississippi" that is particularly timely. The symposium will cut through the areas of the Decision Analysis and Risk, Ecological Risk Assessment, and Engineering and Infrastructure Specialty Groups and should be a useful integration. A workshop on Regional Scale Ecological Risk Assessment has also been proposed.

## Biological Stressors Specialty Group www.biostressors.org

Sherri Dennis, Chair

We need your feedback! One of the goals of the Biological Stressors Specialty Group (BSSG) this year was to improve communication among our group members. To help with that effort, we have revamped our Web site (thanks to Webmaster Don Schaffner!) which is available at www.biostressors.org. We also held a teleconference in May (see the Web site for meeting minutes). Please let the BSSG Executive Committee (see contact information on next page) know what else we should do to help our members share information on common interests.

One of the outcomes of the May teleconference was the formation of a BSSG Student Merit Award Subcommittee. Please join me in thanking BSSG members Mark Powell, Sandy Hoffmann, and Emma Hartnett for volunteering to serve on the Student Merit Award Subcommittee. The subcommittee developed guidelines and criteria for evaluating the submissions. We also developed a flyer that was sent out to our specialty group members and others to reach out to potential applicants. I am pleased to announce that a selection has been made—stay tuned for an announcement to congratulate the awardee!

Also during the teleconference, we discussed some of the confusion about our name. What does "Biological Stressors" mean? Does the term capture all of the areas (such as food and water safety) that we hoped to include and represent in our

specialty group? These are questions that we should continue to discuss and consider.

Lastly, I was fortunate to have the opportunity, as chair of BSSG, to serve on the Program Committee for the December annual meeting. Based on the abstracts that we reviewed, I think that you will find plenty of posters and presentations on topics of interest to BSSG members. Special thanks to Linda Abbott and Michael McElvaine for helping to review the abstract submissions assigned to BSSG.

For additional information please contact BSSG officers: Chair Sherri Dennis (Sherri.Dennis@fda.hhs.gov), Vice-Chair Emma Hartnett (ehartnett@AnalyzeRisk.com), and Secretary-Treasurer Michael McElvaine (Michael.McElvaine@usda.gov).

## **Exposure Assessment Specialty Group**

Michael Dellarco, Chair

This quarter members of the Exposure Assessment Specialty Group served on the Annual Meeting Committee to review symposia and abstracts pertaining to exposure analysis and assessment. As part of this process, proposals for student and merit awards were evaluated and selected. Winners will be notified in the weeks ahead. Efforts to establish a group Web site continue. A new project being launched is development of a white paper to discuss the parameters and aspects of recent life-stage guidance issued by the Environmental Protection Agency.

## **Decision Analysis and Risk Specialty Group**

Igor Linkov, President, and Greg Kiker, Secretary-Treasurer

We are now celebrating the second anniversary of establishing the Decision Analysis and Risk Specialty Group (DARSG). Our latest progress includes several events cosponsored by the group and significant new interest in this area as evidenced by an increased number of abstracts submitted under the decision analysis track for the next SRA annual meeting. DARSG was the primary organizer and sponsor of the NATO workshop on risk assessment for non-chemical stressors (Portugal, April 2007) and a workshop on risk assessment and risk management for nanomaterials (Massachusetts Institute of Technology, Cambridge, May 2007). Workshop summaries are presented on page 12 of this newsletter.

Almost a quarter of the abstract proposals for the December 2007 SRA Annual Meeting identified decision analysis as their specialty group topic. The large number of submitted abstracts has allowed DARSG to sponsor many sessions in the areas of risk management, decision analysis and risk in industry, risk assessment and decision support for natural disasters, and critical infrastructure protection, among others. The "Risk Assessment and Decision Support for Military and DHS Applications" track includes symposia on "Growing Maturity in DHS Risk Management" (R. Ross), "Decision Tools for Bioterrorism and Infectious Diseases" (G. Parnell), "Estimating Bioterrorism Risk for Homeland Security" (S. Bennett), "Decision Analysis Tools for Food Security" (G. Claycamp), "Decision Tools for Extreme Events, Emergency Response and Transportation Risk" (M. MacDonell), "Advances in Benefit-Cost Analysis for Regulatory Review at DHS" (H. Willis), and "Decision Analysis Support for Emerging Risks/Homeland Security" (T. Barrett). The industrial application track starts with the session sponsored by Pfizer on "Military and Corporate Decision Making at the Crossroads" (D. Slavin and I. Linkov) and includes sessions

and symposia on "Risk/Benefits of Pharmaceuticals" (D. Cragin), "High Stakes in Pharmaceutical and Environmental Risk" (S. Kane), "Risk Practice and Organization" (M. Plum), "Decision Analysis Approaches for Industrial Facilities" (T. Brody), and "Risk Management for Nanomaterials" (I. Linkov). The highlight of the environmental track includes the symposium "Risk-Informed Hurricane Protection and Restoration Planning for Coastal Louisiana and Mississippi" (T. Bridges). Other symposia and sessions include "Real Time and Deliberative Decision Making and Risk Assessment" (E. Ferguson), "Decision Analysis and Risk for Environmental Contamination Problems" (T. Sullivan), and "Approaches and WOE Evaluation in Risk Assessment" (M. Embry).

DARSG also plans to offer a Best Student Paper Award. Several submissions have been received; if you are interested in being a peer reviewer of submitted papers, please let us know. In addition, DARSG is currently sponsoring a NATO Workshop on Risks and Benefits of Nanomaterials (Spring 2007, Portugal).

In the fall, we will be running our first election for the group leadership. Please send your nomination for the president-elect and treasurer-elect positions to Igor Linkov. We would like to solicit your ideas on activities and topics you would like us to address. Please feel free to contact Igor (ilinkov@yahoo.com) or Greg (gkiker@ufl.edu).

## Engineering and Infrastructure Specialty Group www.sra.org/eisg

Jim Lambert, Chair

Thanks for your submissions of papers and workshop proposals to the annual meeting. Stanley Levinson, Amir Mokhtari, and Jim Lambert represented the Engineering and Infrastructure Specialty Group (EISG) at the annual meeting Program Committee meeting in June. You can look forward to innovative and diverse engineering and infrastructure topics in San Antonio! Over the summer we are deciding on the winner of the EISG student paper award. The EISG of the Society for Risk Analysis (SRA) is open to all SRA members interested in the development, testing, and use of risk analysis methods for engineered systems broadly defined and critical infrastructure. The group's membership spans academia, government, and industry. We welcome new members.

On 31 May-1 June the U.S. Geological Survey, with SRA cosponsorship, held the Earthquake Insight tour beginning and ending in Memphis, Tennessee. The tour featured presentations by engineers, geologists, emergency managers, and risk analysts toward an audience with interests in insurance, finance, portfolio management, and business continuity. The next Earthquake Insight tour will be 12 October 2007. Contact psteckel@charter.net.

Please continue to submit your papers for publication in *Risk Analysis*, the journal of the SRA. For questions regarding the submission of engineering papers to the journal, contact Professor Yacov Haimes (haimes@virginia.edu), the engineering area editor. We are grateful that Professor Seth Guikema (sguikema@civil.tamu.edu) continues to maintain our Web page (www.sra.org/eisg). The Web page displays our welcome and mission statement, the names of our executive committee, how to join, the past student paper awards, the EISG charter, the allied professional societies in engineering and infrastructure, and related journals. You can contact our EISG chair, Professor Jim Lambert, at lambert@virginia.edu, 434-982-2072, with your suggestions and any issues needing attention of the EISG members.



## **U.S. Regional Organizations**

## National Capitol Area www.ncacsra.org

Ann Bradley, President

The National Capitol Area Chapter will be expanding our Web site to include a listing of upcoming lectures, seminars, and events being held throughout the organization's area. The list will be updated on a quarterly basis using input from chapter members. We hope to receive input from members about area events they know of that Society for Risk Analysis (SRA) members would be interested in attending. With the large number of events going on in Washington, DC, Maryland, and Virginia, we hope this list will prove to be a useful resource to help members stay abreast of news and events in the field of risk analysis. Please visit our site at http://www.ncacsra.org to view the event calendar.

The National Capitol Area Chapter has been busy planning events for the fall of 2007. We are working on teaming with groups including the Society of Toxicology and American Association for the Advancement of Science to explore ideas for a joint seminar/reception.

Additionally, we are hoping to offer events in conjunction with seminar series being held at Johns Hopkins School of Public Health and other local universities. Any members who are interested in helping to plan events should send an email to contact@ncacsra.org.

# Chicago Regional www.sra.org/chicago

Jerry Mathers, Secretary

The annual business meeting of the Chicago Regional Chapter was held on 12 June 2007 at the Rosebud Restaurant in Chicago. Outgoing President Heidi Hartmann gave a recap of the year's events, which included the major events of a Brownfields Symposium/Field Trip and the joint SRA/Society of Environmental Toxicology and Chemistry meeting.

The Chicago Regional Chapter is currently finalizing its bylaws and developing plans for the upcoming year. Discussed were events, membership, publicity/Web policy, and student outreach. The organization's elections were completed: Outgoing President/Advisory Councilor Heidi Hartmann, President Serap Erdal, President-elect Mark Johnson, Treasurer Mario Mangino, Events Councilor Laurel Berman, and Membership Councilor Amy Pelka Mucha.

## Northern California www.sra.org/ncc

Kay M. Johnson, President

On 10 May 2007, the Northern California Chapter cosponsored a symposium with the Northern California Chapter of Genetics and Environmental Toxicology Association (GETA). The symposium, titled Genetics and Environmental Risk Factors for Autistic Spectral Disorders, provided an opportunity for members to learn about different perspectives on autism. Four experts from the University of California, Davis, Stanford University, and the Orion Academy described their research

findings on the epidemiological, clinical, environmental, and genetic aspects of autism. In addition the speakers discussed effective and proven approaches for academic and social development of children with Asperger's and other neurocognitive disorders.

Currently, the Northern California Chapter is planning its next activity, a conference scheduled for 4 October 2007 on Risk Assessment in Homeland Security. Invited speakers will describe the new Chemical Facility Security regulations issued by the Department of Homeland Security, vulnerability assessments, and chemical/biological attack risk management measures.

A call for abstracts has also been released for members or other interested parties to provide presentations on topics including (1) risks/hazards of emerging chemicals, such as nanotechnology, (2) emerging public health risks, such as endocrine disruptors in baby products, or (3) hazardous material transportation risks. Interested SRA members are encouraged to provide an abstract or attend the meeting. Further details on this conference and other Northern California Chapter activities will be emailed to members and posted on the organization's Web page: http://www.sra.org/ncc/.

## New England www.sra-ne.org

Michael Hutcheson, President

The New England Chapter met at the Massachusetts Institute of Technology and had seven seminars this past year, including presentations on a preliminary operational classification system for nonmutagenic modes of action for carcinogenesis (Dr. Dale Hattis), patterns and processes of mercury in the environment (Dr. Michael Bank), the occurrence, health effects, and regulation of perchlorate in Massachusetts (Dr. Tsedash Zewdie), recent trends in multicriteria decision analysis (Dr. Jose Figueira), a case study of arsenic in soil regulation at the local level (Dr. Jo Anne Shatkin and Donald Cooper, Esq.), cosponsorship of a short course on risk aspects of nanomaterials, and a panel presentation on where things are going with children's risk issues (Drs. Sandra Baird, Gary Ginsberg, and Helen Goeden).

Our last session was particularly interesting given the presenters' and audience's active involvement in elucidating the unique exposures and susceptibilities of early life stages and incorporating these into risk-evaluation protocols and environmental standards.

In response to member input, we have started to vary the format of our activities from what originally was a monthly two-seminar format to less frequent, alternative-format offerings such as the cosponsorship of the short course, an annual joint dinner meeting with the Association of Licensed Site Professionals of Massachusetts, and provision for conference call-in participation to presentations.

We are exploring a joint activity with the North Atlantic Chapter of the Society of Environmental Toxicology and Chemistry for the coming year.

The New England Chapter has been fortunate to benefit from the creative energies and continuing contributions of Past Presidents Igor Linkov, Jo Anne Shatkin, Dale Hattis, and Tom Angus.



## What Do We Do?

## — a quarterly look at the incredibly diverse field of risk analysis —

## Warwick Smith

## What is your job title?

Smith: Not sure that I have one, other than scientist. My em-

ployer is the Institute of Geological and Nuclear Sciences, or GNS Science for short. We are the New Zealand government agency with responsibility for all aspects of earth science. My focus is on risk assessment for natural hazards.

### How is risk analysis a part of your job?

**Smith:** We have a research program called Regional Riskscape, which seeks to develop risk assessment tools for earthquake, volcano, flood, storm, and tsunami. None of these last four is as easily modelled as earthquake, especially when you try to express the risk estimates in terms of the probability of losses. Anything more than once over lightly is quite a challenge.

### How did you decide to pursue this career?

Smith: I stepped aside from a management role a

few years ago. I had responsibility for the seismograph network in New Zealand and the seismological research that went with it. The challenge of developing our expertise in risk assessment came along, and this was a natural development of what I had done earlier.

## What got you to where you are in the field of risk analysis today?

**Smith:** My graduate degree was in seismology at the University of California, Berkeley. Some years later I published, with a geologist colleague, what was really the first quantitative study of earthquake hazard in New Zealand. That study has had various upgrades since then, particularly with the new geological investigations of active faults and better recordings of strong ground motion. Hazard and risk have been a continuing interest.

### What is the most interesting/exciting part of your job?

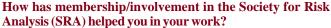
**Smith:** I would say it is the opportunity to put together the research results from my colleagues, to produce a really useful product. It is quite a challenge when a risk manager from the Regional Council, for instance, says, "How should I spend the

funds I have for mitigation against natural hazards? Should I strengthen public buildings against earthquakes, or should I

raise the levees to protect against flood? What about the coastal hazards—how bad is the tsunami risk here? Where is the best bang for the buck?" These are not easy questions to answer.

# What would you recommend to those entering the field of risk analysis interested in a job like yours?

Smith: I think you need to come at risk assessment with some experience in the actual science. But at the same time you need to listen to the people who will use the results. This is a basic principle of risk analysis, of course, that if you don't listen to the end users, and understand the constraints that they are working under, you won't be able to express the risk analysis results in the most useful way.



**Smith:** I joined SRA at the 2004 Annual Meeting in Palm Springs. I went to that meeting in search of a broader appreciation of risk analysis than I have found in the seismological literature. I found there a forum that would benefit risk analysts in the natural hazards area. Since attending that meeting, I have endeavoured to encourage seismologists to broaden their understanding of earthquake risk analysis.

#### Is there anything else you would like to add?

Smith: I think the SRA has an important role in risk assessment for natural hazards. The seismological community seems more geared to servicing engineering requirements, that is, how strongly buildings should be built. The insurance sector's interests are recognized, but it seems to me that risk managers are like buyers of insurance, and their needs are not being met. I would encourage the Society to strengthen its influence in the area of natural hazards. I know there are efforts being made to do just this.



## **Member News**

## Frédéric Bouder, David Slavin, and Ragnar Löfstedt

Edited by SRA members Frédéric Bouder, David Slavin, and Ragnar Löfstedt, *The Tolerability of Risk: A New Framework for Risk Management* presents the new "Tolerability of Risk" concept, which is emerging as a new, perhaps universal method to guide decisions in risk management.

Written by leading academics and risk practitioners from industry and government, the book presents a summary of theoretical perspectives on risk approaches, provides a detailed elicitation of the methods and approaches used to build the Tolerability of Risk framework, and looks at the

prospect for universal application of the framework across a wide area of risk.

For more information and to order online: http://shop.earthscan.co.uk/ProductDetails/mcs/productID/758/.

### Michael Siegrist and Heinz Gutscher

Edited by SRA members Michael Siegrist and Heinz Gutscher, along with Timothy C. Earle, *Trust in Cooperative Risk Management: Uncertainty and Skepticism in the Public Mind* draws on a variety of disciplines, including psychology, and explores diverse empirical case studies from mobile phones to vaccination. The book is widely applicable to risk management and communication in business, including issues of consumer trust,

industrial hazards, and environmental, health, and food regulation.

For more information and to order online: http://shop.earthscan.co.uk/ProductDetails/mcs/productID/778/.

#### **Dennis Paustenbach**

Dennis Paustenbach, founder and president of San Francisco-based ChemRisk, Inc., was presented with an honorary doctor of engineering degree 26 May 2007 during the 129<sup>th</sup> commencement ceremonies at Rose-Hulman Institute of Technology. Rose-Hulman is a private, undergraduate engineering, mathematics, and science college that has been ranked for the past eight consecutive years by *U.S. News & World Report* as the nation's best college that offers the bachelor's or master's degree as its highest degree in engineering.

ChemRisk is a consulting firm specializing in human and ecological risk assessment and risk analysis of pharmaceuticals and medical devices. In addition to its headquarters in San Francisco, the company has offices in Houston and Austin, Texas; Pittsburgh, Pennsylvania; and Boulder, Colorado.

Paustenbach has earned distinction for his expertise on how to clean up chemically contaminated sites and for creating a better understanding about the health risks of chemicals posed by national and man-made environments. He is a board-certified toxicologist and industrial hygienist with nearly 25 years of experience. Paustenbach has served as advisor to and visiting scientist at the Harvard Center for Risk Assessment and on panels for the National Center for Environmental Health, the Centers for Disease Control and Prevention, and the Environmental Protection Agency.

Paustenbach graduated from Rose-Hulman in 1974 with a bachelor's degree in chemical engineering. He earned master's degrees in industrial hygiene from the University of Michigan, a master's in counseling psychology from Indiana State University, and a PhD from Purdue University.

Paustenbach served as a council member for the Society for Risk Analysis from 1998 to 2000 and has also received the Society's Outstanding Risk Practitioner Award.

### **Eugene Rosa**

Eugene A. (Gene) Rosa, Professor of Sociology, Edward R. Meyer Distinguished Professor of Environment and Natural



Resources, Affiliated Professor of Fine Arts, Affiliated Professor of Environmental Science, and Faculty Associate in the Center for Integrated Biotechnology, was selected to deliver the 2007 Distinguished Faculty Address during the 23 March Showcase event at Washington State University (WSU). The Distinguished Faculty Address is the first award created at WSU to recognize faculty excellence and is awarded annually to a

distinguished faculty member from any of the university's fields of study. In 2006 Rosa was also honored with the Distinguished Achievement Award of the College of Liberal Arts at WSU.

Rosa was chosen for the Distinguished Faculty Address because his research, scholarship, and teaching place him at the forefront of his field. He is a world-renowned environmental scholar and international leader in multidisciplinary work assessing the environmental impact of the United States and other countries and their attempts to resolve social risks associated with environmental change. Through his research, policy work, and teaching, he has changed how people everywhere view environmental impact and consequences. His work warns of the risks emanating from various societal concerns ranging from nuclear power to global warming. He has published in not only leading social science journals, such as American Sociological Review, American Journal of Sociology, and Social Forces, but also in leading scientific journals, such as Science, Proceedings of the National Academy of Sciences, Risk Analysis, and others. His books on nuclear power and wastes and on the epistemology of risk have attracted critical acclaim.

He currently serves on the standing committee Human Dimensions of Global Change of the National Academy of Sciences as well as the task committee of the Academy advising NOAA (National Oceanic and Atmospheric Administration) on its newly formed climate decision support program. He was also recently appointed to the Federal Advisory Committee of the U.S. Environmental Protection Agency. Past service for the National Academy of Sciences includes a term on the Board of Radioactive Waste Management, the Committee on Metrics for Global Change Research, the Committee to Review the U.S. Climate Change Science Program, and the Committee on Principles and Operational Strategies for Staged Repository Systems.

Rosa was elected a Fellow of the American Association for the Advancement of Science and to the Sociological Research Association, serves on the editorial boards of five journals and one encyclopedia, and received the 1999 Distinguished Contribution Award of the Section on Environment and Technology of the American Sociological Association. He recently gave the keynote address "A Thousand Flowers, A Thousand Weeds: New Challenges to the Rationality of Risk" at the University of Cambridge.

## Nikolay Tikhomirov

Nikolay Tikhomirov, a longtime member of SRA, was awarded StrategicRISK magazine's 2007 European Risk Management

Award–Environmental Initiative of the Year at a ceremony in London in April.

StrategicRISK, a widely read British magazine dealing with different aspects of risk management, holds an annual competition for the best example of risk management in Europe every year.

This year's award was given to Tikhomirov for his work in leading the project "Chemical Weapons Destruction: Methods of Risk



Analysis and Risk Management"—carried out through the Plekhanov Russian Academy of Economics (RAE) in Moscow—involving recycling of chemical waste from Russian military facilities.

Tikhomirov is the dean of the Department of Mathematical Economics at Plekhanov RAE, the largest economic institution of higher education in Russia and the former Soviet Union.



## **Advertisements**

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## **Process Safety Consultant**

Primatech Inc., a worldwide leader in providing consulting, training, and software in process safety and risk management seeks experienced PSM consultants based out of Houston, Texas, and other locations within the United States. Services will include all elements of PSM, including PHA/LOPA studies, management systems, audits, RMP services, training course instruction, and other specialized areas. You will also be involved in business development activities.

Candidates must possess a BS in chemical engineering or related field and have at least five years of experience in PSM. Experience as a consultant, outstanding interpersonal skills, and a willingness to travel are also preferred.

Please submit your résumé to Attn: Human Resources Manager; 50 Northwoods Blvd.; Columbus, OH 43235; or email to employment@primatech.com.

## Risk Assessment/Toxicology Practice for Sale

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### **Dose-Response Assessment Boot Camp**

Toxicology Excellence for Risk Assessment (TERA) is proud to announce its Dose-Response Assessment Boot Camp, a new initiative providing intensive, in-depth hands-on training in hazard characterization and dose-response assessment for developing human health risk assessments. This week-long course with emphasis on dose response assessment will be based on our popular chemical risk assessment training sessions developed and presented to various audiences in the past decade. It is designed to provide systematic training in current assessment practices as well as in the latest methods in human health chemical risk assessments. The boot camp 2007 will be held in Cincinnati, Ohio, 22-26 October 2007.

More detailed information is available from TERA's Web site (http://www.tera.org/training/bootcamp/bootcamp.htm). If you have any questions regarding this boot camp, please feel free to contact Ms. Patricia Nance, phone: 513-542-7475 x25 or email: nance@tera.org.

## ChemRisk'

ChemRisk® is seeking applicants with graduate degrees (MS, PhD, MD) and training in toxicology, epidemiology, the environmental sciences, risk assessment, biomedical engineering, industrial hygiene, medicine, or health physics. Key job duties will include:

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ChemRisk®, a nationwide scientific consulting firm, provides state-of-the-art toxicology, industrial hygiene, epidemiology, and risk assessment services to organizations that confront public health, occupational health, and environmental challenges. We have a long-standing reputation for thorough scientific analysis and for sharing our work in the peer-reviewed scientific literature. Many of the over 250 papers published by scientists in the firm are frequently referenced in both litigation and regulatory decision making. We believe we provide one of the best environments for occupational and environmental professionals to rapidly advance their careers. Our mission is to provide creative and scientifically rigorous approaches to answering questions about the human health hazards posed by chemical, biological, pharmaceutical, and radiological agents. Please visit our Web site at www.chemrisk.com.

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Electronic résumés may be submitted to hr@chemrisk.com.

### RISK newsletter Advertising Policy

Books, software, courses, and events may be advertised in the Society for Risk Analysis (SRA) RISK *newsletter* at a cost of \$250 for up to 150 words. There is a charge of \$100 for each additional 50 words.

Employment opportunity ads (up to 200 words) are placed free of charge in the RISK *newsletter*. Members of SRA may place, at no charge, an advertisement seeking employment for themselves as a benefit of SRA membership.

Camera-ready ads (greyscale) for the RISK *newsletter* are accepted at a cost of \$250 for a 3.25-inch-wide by 3-inch-high box. The height of a camera-ready ad may be increased beyond 3 inches at a cost of \$100 per inch.

The RISK *newsletter* is published four times a year. Submit advertisements to the Managing Editor, with billing instructions, by 30 December for the First Quarter issue (published early February), 30 March for the Second Quarter issue (early May), 30 June for the Third Quarter issue (early August), and 30 September for the Fourth Quarter issue (early November). Send to Mary Walchuk, Managing Editor, RISK *newsletter*, 115 Westwood Dr., Mankato, MN 56001; phone: 507-625-6142; fax: 507-625-1792; email: mwalchuk@hickorytech.net.



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Address Changes: Send to SRA@BurkInc.com

SOCIETY FOR RISK ANALYSIS 1313 Dolley Madison Blvd., Suite 402 McLean, VA 22101

### **Deadline for RISK** *newsletter* **Submissions**

Information to be included in the **Fourth Quarter 2007** SRA RISK *newsletter*, to be mailed early November, should be sent to Mary Walchuk, RISK *newsletter* Managing Editor (115 Westwood Dr., Mankato, MN 56001; phone: 507-625-6142; fax: 507-625-1792; email: mwalchuk@hickorytech.net) no later than **20 September 2007**.



The Society for Risk Analysis (SRA) is an interdisciplinary professional society devoted to risk assessment, risk management, and risk communication.

SRA was founded in 1981 by a group of individuals representing many different dis-

ciplines who recognized the need for an interdisciplinary society, with international scope, to address emerging issues in risk analysis, management, and policy. Through its meetings and publications, it fosters a dialogue on health, ecological, and engineering risks and natural hazards, and their socioeconomic dimensions. SRA is committed to research and education in risk-related fields and to the recruitment of students into those fields. It is governed by bylaws and is directed by a 15-member elected Council.

The Society has helped develop the field of risk analysis and has improved its credibility and viability as well.

Members of SRA include professionals from a wide range of institutions, including federal, state, and local governments, small and large industries, private and public academic institutions, not-for-profit organizations, law firms, and consulting groups. Those professionals include statisticians, engineers, safety officers, policy analysts, economists, lawyers, environmental and occupational health scientists, natural and physical scientists, environmental scientists, public administrators, and social, behavioral, and decision scientists.

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