

RISK *newsletter*

Published by the SOCIETY for RISK ANALYSIS

Vol. 3, No. 2

December, 1983

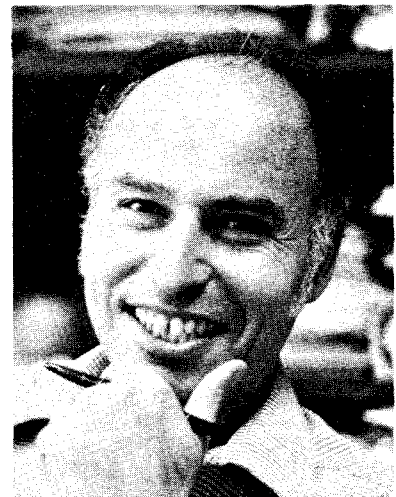
PAUL SLOVIC IS SRA PRESIDENT

Paul Slovic, a psychologist at Decision Research, A Branch of Perceptronics, Inc., Eugene Oregon, assumed the presidency of the Society for Risk Analysis at its Third Annual Meeting held in New York City August 1-3. He replaces Chris G. Whipple of Electric Power Research Institute, Palo Alto, who served as the society's second president during the 1982-83 year.

The new president received his Ph.D. in psychology from the University of Michigan in 1964. He obtained his undergraduate degree in psychology at Stanford University, after having experienced a mediocre career (his assessment) as a basketball player at DePaul University in Chicago.

While at Michigan, Slovic developed an interest in the study of decision making and risk-taking behavior that he has maintained throughout his career. His early research examined the thought processes of persons struggling to make decisions about gambles in laboratory settings. In recent years, he has turned his attention toward studying the judgments and decisions people make when they attempt to cope with the risks they face in their daily lives. Working closely with Sarah Lichtenstein, Baruch Fischhoff, and Don MacGregor, he has carried out numerous studies of the perception and acceptance of risk from natural and technological hazards.

The president's hobby is distance running, which he pursues with no small degree of fanaticism. He has run 13 marathons and published several articles on the statistical relationships between training, diet, and performance in the marathon.



Paul Slovic

1984 SRA ANNUAL MEETING TO BE HELD IN KNOXVILLE, TENNESSEE

The 4th Annual Meeting of the Society for Risk Analysis will be held September 30 - October 3, 1984, at the Hyatt Regency Hotel in Knoxville, Tennessee. Using the theme "Uncertainty in Risk Analysis," the program will consist of plenary sessions plus three parallel sessions on (1) Engineering and Physical Risks, (2) Health and Environmental Risks, and (3) Social Science Issues. A keynote address and luncheon addresses also will be presented, as well as invited papers. (cont. on p. 2)

Slovic is married and has four children. His wife Roz is widely known throughout Oregon as an expert in juvenile justice and other matters pertaining to the welfare of children. Their four children are: Scott, 23, a recent graduate of Stanford University; Steven, 21, a senior at Stanford; Lauren, 20, a student at the University of Wisconsin; and Daniel, 13, an eighth grade student in Eugene.

Elizabeth Anderson Is President-Elect

Elizabeth Anderson, Director of the Environmental Protection Agency's Office of Health and Environmental Assessment, (cont. on p. 2)

CALL FOR PAPERS

for
4th SRA ANNUAL MEETING
 Hyatt Regency, Knoxville, TN
 September 30 - October 3, 1984

Theme: Uncertainty in Risk Analysis

Three Parallel Sessions:

- Engineering and Physical Risks
- Health and Environmental Risks
- Social Science Issues

Individuals interested in presenting a paper at the meeting should submit three copies of a typewritten, double-spaced abstract (at least 200 words) to:

Dr. V. R. R. Uppuluri
 1984 Technical Program Chairman
 PO Box 531
 Oak Ridge, TN 37830

Deadline for abstract submissions is April 15; authors will be notified of the acceptance of their papers by May 15.

1984 OFFICERS (cont. from p. 1)

was introduced at the New York meeting as SRA's new president-elect. A chemist, she received a B.S. in 1962 from the College of William and Mary, where she was a William Arthur Mattox Merit Scholar. She received an M.S. in organic chemistry from the University of Virginia in 1964 and a Ph.D. in organic chemistry from the American University in 1970. While at the University of Virginia she was the recipient of a National Science Foundation grant, and while at the American University, she was a Defense Department Fellow.

Baram, Kunreuther Are Secretary, Treasurer

Michael S. Baram and Howard Kunreuther were elected the society's new secretary and treasurer, respectively, with each to serve two-year terms. Baram is a member of the Bracken and Baram law firm in Boston and a professor of health law at the Boston University School of Law. Kunreuther is a professor in the Department of Decision Sciences, The Wharton School, University of Pennsylvania.

Council Has Three New Members

Society members newly elected to the SRA Council are Francis Fagnani, CEPN, France; M. Granger Morgan, Department of Engineering and Public Policy, Carnegie-Mellon University; and Arthur C. Upton, New York University Medical Center, Institute of Environmental Medicine.

Each council member is elected for three years, the terms of the new members terminating in 1986. Others serving on the council, along with the newly elected officers and the immediate past president, Chris Whipple, are: Vincent T. Covello (1984), National Science Foundation, Washington, D.C.; Michael C. Cullingford (1984), Vienna International Center, Austria; Andrew Sivak (1984), Arthur D. Little, Inc., Cambridge, Massachusetts; David G. Hoel (1985), National Institute of Environmental Health Sciences, Research Triangle Park, N.C.; Lester B. Lave (1985), Carnegie-Mellon University; and Joyce C. McCann (1985), Lawrence Berkeley Laboratory Biomedical Division.

1984 ANNUAL MEETING (cont. from p. 1)

President-elect Elizabeth Anderson will serve as general chairman of the 1984 Annual Meeting. The general program chairman is Ray Boykin and the technical program chairman is Ram Uppuluri. Session coordinators are William E. Vesely (Engineering and Physical Risks), Alan Moghissi (Health and Environmental Risks), and Rae Zimmerman (Social Science Issues). Other members of the meeting committee are A. R. (Tony) Buhl, arrangements chairman; Vince Covello, publications chairman; and Joe Penland, local finance coordinator. Persons having questions about the meeting may contact: Ray Boykin, Monsanto, Mail Code CS6F, 800 N. Lindbergh, St. Louis, MO 63167, Phone (314)-694-7137.

OVER 200 ATTEND 1983 ANNUAL MEETING

Chris Whipple, immediate past president of SRA and a principal organizer of the 1983 SRA meeting in New York, reports that over 200 persons attended the meeting and that 64 papers were presented. The policy of scheduling concurrent sessions appeared to work well. Sponsors for the meeting were the American Petroleum Institute, Chemical Manufacturers Association, U.S. Department of Energy, U.S. Environmental Protection Agency, Exxon Corporation, Shell Oil Corporation, and Union Carbide Corporation.

Committee Chairs Named

Chairmen of SRA's five constitutional committees have been named as follows:

---Finance Committee, Howard Kunreuther (SRA treasurer), The Wharton School, University of Pennsylvania.

---Conferences and Workshops Committee, Elizabeth Anderson, U.S. Environmental Protection Agency, Washington, D.C. (cont. on p. 3)

CONTENTS OF THREE JOURNAL ISSUES SET

According to Editor Curtis Travis, all members should have already received the first issue of Volume 3 of the society's journal, *Risk Analysis*, and the three remaining issues of Volume 3 should be mailed in January. The contents of the first issue of Volume 4 have also been established and the manuscripts have been forwarded to Plenum Publishing Corporation. The tables of contents for Issues 3 and 4 of Volume 3 and Issue 1 of Volume 4 are given below.

Vol. 3, No. 3	
Author(s)	Title
<i>EDITORIAL</i>	
Robert B. Cumming	<i>Editorial: A Question of Scale</i>
<i>ARTICLES</i>	
James J. Buckley	Decision Making Under Risk: A Comparison of Bayesian and Fuzzy Set Methods
Stan Kaplan Harold F. Perla Dennis C. Bley	A Methodology for Seismic Risk Analysis of Nuclear Power Plants
Jya Syin Wu-Chien George Apostolakis	Prospect Theory and Limit Lines
Thomas E. McKone William E. Kastenber David Okrent	The Use of Landscape Chemical Cycles for Indexing the Health Risks of Toxic Elements and Radionuclides
Myron Fiering Richard Wilson	Attempts to Establish a Risk by Analogy
Lester B. Lave Thomas Romer	Specifying Risk Goals: Inherent Problems with Democratic Institutions

Vol. 3, No. 4	
Author(s)	Title
<i>EDITORIAL</i>	
Robert B. Cumming	<i>Editorial: Of Elephants, and Being Blind, and Bold Experiments</i>
<i>ARTICLES:</i>	
Kenney S. Crump Richard B. Howe	The Multistage Model with a Time-Dependent Dose Pattern: Applications to Carcinogenic Risk Assessment
Bernard L. Cohen	Probabilistic Risk Assessment of Wastes Buried in the Ground
Michael K. Lindell Timothy C. Earle	How Close is Close Enough?: Public Perceptions of the Risks of Industrial Facilities
Frank J. Popper	LP/HC and LULU's: The Political Uses of Risk Analysis in Land-Use Planning
Lauren Zeise Richard Wilson Edmund Crouch	Use of Acute Toxicity to Estimate Carcinogenic Risk
Elizabeth L. Anderson	Quantitative Approaches in Use in the United States to Assess Cancer Risk

1984 OFFICERS (cont. from p. 2)

---Nominating Committee, Margaret Chu, U.S. Environmental Protection Agency, Washington, D.C.

---Publications Committee, Vincent Covello, National Science Foundation, Washington, D.C.

---Membership Committee, Herbert Inhaber, Oak Ridge National Laboratory, Oak Ridge, TN.

In addition to the constitutional committees, three designated committees have been established. These committees and their chairmen are as follows:

---Constitutional Review Committee, Chris Whipple (1982-83 SRA president), Electric Power Research Institute, Palo Alto, California.

---Liaison Committee, Andrew Sivak, Arthur D. Little, Inc., Cambridge, MA. This committee is charged with developing links between SRA and other societies.

---Special Projects Committee, Lester Lave, Carnegie-Mellon University, Pittsburgh, PA. This committee has responsibility for activities of the society that fall outside the purview of the other committees, such as requests for assistance and long-range planning for the society.

Vol. 4, No. 1	
Author(s)	Title
<i>EDITORIAL</i>	
Robert B. Cumming	<i>Editorial: Risk and Behavior</i>
<i>LETTERS TO THE EDITOR</i>	
H. G. S. van Raalte, P. Grasso, and D. Irvine; David Irving; William Gaffey, Mary C. White, Peter F. Infante, and Kenneth C. Chu	
<i>ARTICLES:</i>	
Harry F. Martz	On Broadening Failure Rate Distributions in PRA Uncertainty Analysis
John D. Graham Max Henrion	A Probabilistic Analysis of the Passive-Restraint Question
Adrian K. Lund Paul Zador	Mandatory Belt Use and Driver Risk Taking
Detlaf van Winterfeldt Ward Edwards	Patterns of Conflict About Risky Technologies
Kenneth R. Hammond Barry F. Anderson Jeffrey Sutherland Barbara Marvin	Improving Scientists' Judgements of Risk

Manuscripts to be submitted to the Journal should be mailed to:

Dr. Curtis Travis, Editor
Risk Analysis
Bldg. 4500S, S204
Oak Ridge National Laboratory, PO Box X
Oak Ridge, Tennessee, 37830

CHRIS WHIPPLE HONORED

Upon being introduced as the new SRA president at the society's 1983 annual meeting in New York, Paul Slovic's first official act was to present outgoing president Chris Whipple with a plaque commemorating his services to the society during his tenure in office. Slovic thanked Whipple for his efforts in streamlining the society's operating procedures, helping develop an improved constitution, playing an important role in planning the 1983 annual meeting, and dealing with a wide range of other matters of importance to SRA. Slovic called Whipple an outstanding president and expressed the hope that he would continue to play an active role in the affairs of the society. In addition, Slovic noted that both Whipple and the society's first president, Robert Cumming, had been eager to have input and participation by the membership as a whole in the society's affairs. Following this precedent, Slovic invited the members to give him ideas on how the Society for Risk Analysis might better serve the interests of its members and the interest of society as a whole.

THANKS TO OUTGOING COUNCILORS

As newly elected members of the SRA Council assume their duties, the society extends its thanks and good wishes to five members who completed their terms on the council in 1983. While they are no longer councilors, their assistance in various society projects will continue to be solicited. For past services rendered, we thank Robert Cumming, V. R. R. (Ram) Uppuluri, Norton Nelson, Ray Hockenbury, and Kenneth Solomon.

Notice:

CALL FOR 1984-85 NOMINATIONS

The Nominating Committee, chaired by Margaret Chu, invites members of the Society for Risk Analysis to submit names for consideration by the committee as possible candidates for office. The positions to be voted on in 1984 are those of the president-elect and three councilors, the latter for three-year terms. Suggestions should be mailed by February 29 to:

Dr. Margaret Chu
Carcinogen Assessment Group
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

ASME SEEKS JOINT ACTIVITIES WITH SRA

Christian van Schayak, Director of Strategy and Planning of the American Society of Mechanical Engineers (ASME), has invited the Society for Risk Analysis to join ASME in developing coordinated activities on issues of mutual concern. ASME, organized in 1880 as an educational and technical society and today having a membership of more than 100,000, plays a major role in helping engineering technology better serve the public interest.

The SRA Liaison Committee, chaired by Andrew Sivak, will be exploring possible cooperation with ASME in a number of areas. One area that appears promising is that of publications. ASME publishes 13 quarterly journals plus a monthly magazine, *Mechanical Engineering*, that is distributed to all its members. The November, 1984, issue of the magazine will be dedicated to topics of industrial safety and risk assessment, and SRA members wishing to contribute to that issue are invited to contact the editor, Charles Beardsley, before April 1. A proposal or letter of inquiry should precede any formal submission of a manuscript. Beardsley's address is:

Charles W. Beardsley, Editor
Mechanical Engineering
345 East 47th Street
New York, NY 10017

ASME ESTABLISHES TECHNICAL COMMITTEE TO STUDY DIOXIN EMISSIONS

The American Society of Mechanical Engineers has established a technical committee to study dioxin emissions and other trace chlorinated hydrocarbons from combustion sources. A research subcommittee has proposed a program to: (1) determine the amount and characterization of trace chlorinated hydrocarbons produced by a modern mass-burning waterwall resource recovery plant, operated under optimal conditions, in the flue gas upstream of the air pollution control device; (2) determine the range of furnace operating conditions which minimize the quantity of polychlorinated dioxins (PCDDs) and furans (PCDFs) which leave the plant, either via stack emission or in the residue, i.e., the various fly ashes and bottom ash; and (3) compare rigorously quantified dioxin levels in various plant discharges with "safe" emission levels and determine adequate methods for ultimate disposal of contaminated residuals. The subcommittee has set near-term, mid-term, and long-term objectives, one of the long-term objectives being to use risk assessments to establish scientifically sound levels of "acceptable" emissions of PCDDs and other trace chlorinated hydrocarbons.

1983 NATO CONFERENCE: EXAMINES ROLE OF PSYCHOLOGICAL AND DECISION SCIENCES IN TECHNOLOGY ASSESSMENT

The NATO Advanced Study Institute (ASI) on Technology Assessment, Environmental Impact Assessment, and Risk Analysis, which was held at the Les Arcs Conference Facility, Les Arcs, France, on August 21-31, 1983, and was cosponsored by SRA, was attended by 103 participants, including 40 lecturers and discussants. The Institute reviewed the contribution to assessment and risk studies by the psychological and decision sciences, covering the major topics of (1) quantitative methods and mathematical models in psychology and the decision sciences; (2) public responses to technologies, hazards, and impacts; (3) judgments about levels of risk and impact; (4) decisions about managing technologies, hazards, and impacts; and (5) case studies of applications of the psychological and decision sciences. The directors of the ASI were V. R. R. Uppuluri, Oak Ridge National Laboratory (USA); Pieter Stallen, TNO, The Netherlands; and Vincent T. Covello and Jeryl Mumpower, both with the U.S. National Science Foundation.

The proceedings of the NATO/ASI will include 35 papers and will be published in 1984 by Springer-Verlag as part of their NATO/ASI publication series. For additional information about the meeting or about the proceedings, contact: Vincent Covello, Risk Analysis Program, National Science Foundation, 1800 G St., NW, Washington, D.C. 20550.

SRA BROCHURE READY

A small brochure describing the Society for Risk Analysis has been prepared by Herbert Inhaber, Vincent Covello, Paul Slovic and Chris Whipple and will soon be mailed to the membership. The brochure tells how the society came to be organized and what its goals are. It also lists typical professions represented in the society, gives examples of the types of articles included in its journal, and describes how annual meetings are conducted.

Each brochure will contain a membership application form. Inhaber, chairman of the SRA Membership Committee, is eager for the brochure to reach potential society members. He requests that SRA members send him the names and addresses of potential members, including, if possible, the membership lists of other scientific societies. His address is as follows: Dr. Herbert Inhaber, Building 4500S, Oak Ridge National Laboratory, PO Box X, Oak Ridge, TN, 37830.

In addition to the brochure, a membership directory is in preparation. SRA members needing a list of the membership before the directory is distributed may request the information from Inhaber.

CONGRESSIONAL AIDE DISCUSSES RISK BILL (H.R. 4192)

In an address at Oak Ridge National Laboratory on December 13, Ms. Paulette Altringer, science adviser to Congressman Don Ritter of Pennsylvania, described how two separate bills on risk assessment had been introduced in the U.S. Congress and had subsequently been combined in one bill; however, the bill is currently stalled due to opposition from environmental groups.

Altringer reported that a bill (H.R. 3840) introduced by Congressman Ritter in the 97th Congress "to establish coordinated interagency research and demonstration projects for improving knowledge and use of risk assessment by ...Federal agencies..." came very close to passage, but was sidetracked at the last minute. Subsequently a second bill (H.R. 3976) was introduced in the 98th Congress by Congressman James H. Martin of North Carolina "for the establishment of a Central Board of Scientific Risk Assessment as a means of improving the scientific review and evaluation of risk assessments made by Federal agencies..." These bills have been combined and are being considered as H.R. 4192 by Congressman James Scheuer's Subcommittee on Natural Resources, Agriculture Research and the Environment of the Committee on Science and Technology. The first section of the bill deals with proposed research and development projects in the use of risk assessment by Federal agencies. The second part of the bill would establish a Central Board of Scientific Risk Analysis in the National Academy of Science to improve risk assessments of Federal projects.

Altringer said that the environmental groups opposing the bill question the usefulness of risk assessment. She suggested that members of the scientific community could help Congress evaluate the bill by obtaining copies of it from their own congressmen, or from Congressmen Ritter, Martin, or Scheuer, and then sending them comments on it. She encouraged the scientific community to ensure that their opinions were heard while they still have a chance to shape the legislation. (—H. Inhaber)

Notice:

SRA SECRETARIAT HAS NEW ADDRESS

Richard J. Burk, Jr. Executive Secretary of SRA, has moved his offices from Bethesda, MD, to McLean, VA. His new address is:

Richard J. Burk, Jr.
Executive Secretary, SRA
1340 Chain Bridge Road
Suite 300
McLean, VA 22101

Telephone: (703)790-1745

RISK RESEARCH IN DEVELOPING COUNTRIES ENCOURAGED

While interest in risk analysis largely has been focused in the industrialized and developed countries, a case could be made that risks to health and the environment are greater in the developing countries. Certainly a comparison of the average life expectancies in the two sets of countries would lead to that conclusion, although part of the difference is due to the incidence of childhood diseases. However, risk research in most developing countries is either in its infancy or is nonexistent.

Vincent Covello of the National Science Foundation and Herbert Inhaber of Oak Ridge National Laboratory have been exploring ways to encourage risk research in the developing countries under the aegis of the International

Division of NSF, which can support bi-national research between scientists in developing countries and those in the United States as part of its Science in Developing Countries Program. A difficulty in developing such a program is determining (a) which scientists in the developing countries have an interest in risk, (b) what those interests are, and (c) which scientists in the United States have corresponding interests.

In September, Inhaber wrote to about 100 scientists and administrators in developing countries to solicit their ideas and suggestions. He has received a number of replies and wants to devise a scheme to match those who responded with U.S. scientists of similar interests. Readers of this newsletter can be

of help by scanning the list below and notifying Covello (202-357-9828) or Inhaber (615-576-4884) of any interest they might have in developing bi-national programs with the individuals listed. They may also write directly to the scientists, each of whom has already received a copy of the NSF Program guidelines.

Scientist(s)	Interest(s)	Scientist(s)	Interest(s)	Scientist(s)	Interest(s)
B. Currey World Bank Office Dhaka, Bangladesh	Food crisis management	Alica Bauman Laboratory for Environmental Radioactivity, M. Pijade 158 YU-41001, Zabreb Yugoslavia	Radioactivity from coal, health physics, epidemi- ology, radiation monitoring	Anjali Mookerjee School of Environmental Sciences, J. Nehru University New Mehrauli Road New Delhi 110 067, India	Molecular biophysics, carcinogens, heavy metals, DNA radiation
A. V. Gheorghe Polytechnic Institute 313 Independence St. Bucuresti, Romania	Offshore engineering, methodology	Xia Yongming (from People's Republic of China) College of Engineering University of Houston Houston, TX 77004	Petroleum waste water management	A. M. Mohan Rao Air Monitoring Section Bhabha Atomic Research Centre Trombay, Bombay 40085, India	Benzo(a)pyrene risk
John Killas Dept. of Nuclear Technology Greek Atomic Energy Comm. Aghia Paraskevi Attiki, Greece	Nuclear power, reactor accidents, radiation from lignite	P. C. Liu Atomic Power Department Taiwan Power Company 242 Roosevelt Road Taipei, Republic of China	Probabilistic risk analysis	B. Bowonder Administrative Staff College of India, Bella Vista, Hyderabad 500 475, India	Public health, environment, third world issues, energy
Franklin McDonald Office of Disaster Preparedness Office of the Prime Minister 2a Devon Road Kingston 10, Jamaica	Natural hazards, risk management	A. Dubi Faculty of Engineering Sciences Ben Gurion University of the Negev Beer Sheva 84 105, Israel	Monte Carlo method, reliability, probability	Dai Chuanzeng Institute of Atomic Energy P.O. Box 275, Beijing, People's Republic of China	Nuclear safety, probabilistic risk analysis
M. G. Angelopoulos National Technical University of Greece, 42, Oct. 28 Street Athens 147, Greece	Radioactivity in lignite	M.S.S. Murphy Div. of Radiological Protection Bhabha Atomic Research Centre Trombay, Bombay 400 085, India	Radiation equivalent chemical, comparative risk, genotoxicity	B. G. Sharma R & D Center, Jyoti Ltd., Vadodara 390 003, India	Chemical risk (general)
Victor Manuel Tovar Munoz Physics Dept., Subsecretaria de Asistencia, Hospital General de Mexico, Dr. Balmis no. 148, Mexico City 7, Mexico	Braquitherapy, radiotherapy, nuclear power, medical risk	S. A. Goksel Health Physics Dept. Cekmece Nuclear Research and Training Center P. K. 1 Havaalani Istanbul, Turkey	Exposure to ionizing radiation		

PUBLICATIONS

--*Proceedings of the Symposium on Waste Management*, held annually at Tucson, Arizona, American Nuclear Society, 555 N. Kensington Ave., La Grange Park, Illinois, 60525. Cost ranges from \$40 for 1982 proceedings to \$7 for 1975 proceedings. Also from ANS, *Nuclear Power and Its Environmental Effects*, by Samuel Glasstone and Walter H. Jordan, \$26.95 hardbound, \$18.95 softbound.

--Series of eight working papers on Risk and Consent, The Center for Philosophy and Public Policy, University of Maryland, College Park, Maryland, 20742. Subjects covered are centralized decision making, airborne risks, legitimizing risky activities, occupational safety and health policy, current intellectual debate on risk, cost-benefit analysis, culpable ignorance, and passive smoking. (cont. p.8)

NATIONAL CAPITAL AREA CHAPTER TO HEAR SLOVIC; ANNOUNCES OFFICERS

The speaker at the February 8 meeting of the National Capital Area Chapter of SRA will be the society's president, Dr. Paul Slovic, who will talk on "Public Perceptions of Risk." The meeting will be held at 6 PM at the Capital Hill Holiday Inn. Persons wishing additional information on the meeting should contact Janice Longstreth at 468-2500. (Note: Dr. Jack Moore, previously announced as the February 8 speaker, notified the chapter he would be unable to attend the meeting.)

The chapter held its first elections earlier this year and chose as president A. Alan Moghissi, who had served as provisional president during the chapter's organizational period. Moghissi, a physical chemist who received his education at the University of Zurich, Switzerland, and the University of Karlsruhe, Germany, before migrating to the United States in 1965, is manager of the Integrated Health and Environmental Risk Analysis Program of the U.S. Environmental Protection Agency.

The president-elect of the chapter is Janice Longstreth, a biomedical scientist with the Dynamac Corporation. The secretary is Jerry Chandler, a biogeneticist and senior scientist in the United States Public Health Service Corporation, and the treasurer is Lee Abramson, a mathematical statistician who has been a statistical advisor with the U.S. Nuclear Regulatory Commission since 1977. Elected councilors are Michael Gough, Peter Barton Hutt, and Lori M. Ramonas.

EAST TENNESSEE CHAPTER SPONSORING RISK LECTURES

The president of the East Tennessee Chapter of SRA, V. R. R. Uppuluri, reports that the chapter inaugurated an annual "Risk Analysis Methods Day" on October 5 with three cosponsors, the Oak Ridge National Laboratory (ORNL) Office of Risk Analysis, Oak Ridge Associated Universities (ORAU), and Science Applications, Inc. (SAI), Oak Ridge. The "Day" immediately followed a two-evening symposium on "Ethics, Engineering, and Public Policy" sponsored by the American Institute of Chemical Engineers and cosponsored by the chapter.

At its November 15 meeting, the chapter heard Dr. A. P. Malinauskas, ORNL, discuss "Three Mile Island II: The Accident and Its Aftermath," and on December 13, members of the chapter acted as hosts to Ms. Paulette Altringer, science adviser to Congressman Don Ritter, who lectured at ORNL on the status of a risk assessment bill (see story elsewhere in this newsletter).

On February 23 the chapter will cosponsor (with the East Tennessee Chapter of the Health Physics Society) an all-day session on "Risk to Lifestyles and Survival" at the 11th Annual WATtec Energy Conference and Exhibition, an international conference held in Knoxville, TN; and on February 24, it will cosponsor a one-day meeting on "Risk, Media, and Society" at the ORAU Energy Building Conference Room in Oak Ridge. Other sponsors of the February 24 meeting are ORAU and *The Oak Ridger*, Oak Ridge's local newspaper.

CALENDAR OF EVENTS

--Feb. 8. TECHNOLOGY AND HUMAN RISK SEMINAR, Headquarters, Engineering Society of Detroit, Detroit, Michigan, 8 AM - 4 PM. Sponsored by ESD Science Court and Research Institute. Keynote speaker: Chauncey Starr, Electric Power Research Institute. Other speakers: Paul J. Eisele, Detroit Edison Co.; Arthur Olenick, Un. of Michigan School of Public Health; Tom Anderson, retired Michigan State Legislator; Robert Frosch, General Motors Research Laboratories; Frank Hoerger, Dow Chemical; George Pickering, University of Detroit. \$100 for ESD members, \$125 for non-members. Contact: Marla Janness, ESD Headquarters, 100 Farnsworth, Detroit, Michigan, 48202, telephone (313)-832-5400.

--Feb. 21-24. WATtec 11th ANNUAL ENERGY CONFERENCE & EXHIBITION, Hyatt Regency Hotel, Knoxville, Tennessee. Sponsored by 33 Knoxville-Oak Ridge area chapters of technical and professional societies. East Tennessee Chapter of SRA cosponsoring (with East Tennessee Chapter of Health Physics Society) one-day session on Feb. 23 (see chapter news). \$80 full conference, \$50 one day, (cont. on p. 8)

NSF AWARDS ANNOUNCED

Vincent T. Covello, Program Manager of the National Science Foundation's Technology Assessment and Risk Analysis Program, has announced the following recent awards:

---"The Role of Information in the Perception of Risk from Technological and Natural Hazards." Principal Investigator: Timothy Earle, Battelle Institute, Seattle, Washington.

---"A Comparative Study of Risk Management in the United States and Japan." Principal Investigator: Kavuhiko Kawamura, Vanderbilt University.

---"Bayesian Statistics in Risk Analysis." H. W. Lewis, University of California, Santa Barbara.

---"On the Application of NSF/PRA Risk Studies to Risk Management/Risk Policy Formulation." Principal Investigator: David Okrent, University of California, Los Angeles.

For more information on NSF awards, write to Covello at NSF, 1800 G. St., NW, Washington, DD, 20550.



RISK newsletter is
published by
The Society for
Risk Analysis

George F. Flanagan, *Editor*
Lorraine S. Abbott, *Associate Editor*
Katie Ingersoll, *Production Assistant*

Society Officers:

Paul Slovic, President, 1983-84
Elizabeth Anderson, President-Elect, 1983-84
Michael S. Baram, Secretary, 1983-85
Howard Kunreuther, Treasurer, 1983-85
Chris G. Whipple, Past President, 1982-83

Members of SRA Council:

Vincent T. Covello, 1984
Michael C. Cullingford, 1984
Andrew Sivak, 1984
David G. Hoel, 1985
Lester B. Lave, 1985
Joyce C. McCann, 1985
Francis Fagnani, 1986
M. Granger Morgan, 1986
Arthur C. Upton, 1986

Society Secretariat: Richard J. Burk, Jr., Executive
Secretary, Society for Risk Analysis, 4720 Montgomery
Lane, Suite 506, Bethesda, MD, 20814, (301) 654-3080

Note: Contributions to the newsletter should be
mailed to the editors at following address:

Bldg. 6025, Oak Ridge National Laboratory
PO Box X, Oak Ridge, TN, 37830, USA

School of Nuclear Engineering and Health Physics, Georgia Institute of Technology, Atlanta, Georgia, 30332. Telephone (404)-894-3720.

--September 30 - October 3. 1984 ANNUAL MEETING OF SOCIETY FOR RISK ANALYSIS, Hyatt Regency Hotel, Knoxville, Tennessee. Theme: Uncertainty In Risk Analysis. Contact: Ray Boykin, Monsanto, Mail Code CS6F, 800 N. Lindbergh, St. Louis, Missouri, 63167. Telephone (314)-694-7137.

PUBLICATIONS (cont. from p. 6) -- *Risk Assessment Approaches in Establishing Environmental Health Standards*, W. D. Rowe et al., CRC Press, Boca Raton, Florida, 1983.

--*Fuzzy Sets, Natural Language Computations, and Risk Analysis: A Tutorial*, K. J. Schmucker, Computer Science Press, Rockville, Maryland, 1983.

CALENDAR OF EVENTS (cont. from p. 7)

\$35 retirees. To register, write: WATtec, PO Box 629, Oak Ridge, Tennessee, 37831-0629, or call Gayle Smith, (615)-482-6200, or Bob Stepp, (615)-483-3047.

--Feb. 24. RISK, MEDIA, AND SOCIETY, Energy Building Conference Room, Oak Ridge Associated Universities, Oak Ridge, Tennessee. One-day meeting cosponsored by East Tennessee Chapter of SRA, ORAU, and *The Oak Ridger* (local newspaper). Contact: V. R. R. Uppuluri, PO Box 531, Oak Ridge, Tennessee, 37830, telephone (615)-574-3145.

--April 9-13. INTERNATIONAL SYMPOSIUM ON RISKS AND BENEFITS OF ENERGY SYSTEMS, Julich near Aachen, Federal Republic of Germany. Sponsored by International Atomic Energy Agency. For information write: Risk Symposium, IAEA, Vienna International Centre, PO Box 100, A-1400 Vienna, Austria. Telex No. 1-12645. Cable address: INATOM VIENNA. Or contact: Edith Piller, telephone (0222)-2360-1314.

--May 26. THE CULTURAL SELECTION OF RISK, Session at May 24-29 meeting of American Association for the Advancement of Science, Hilton Hotel (and nearby hotels), New York City. Participants include Mary Douglas (author of "Risk and Culture," paper published in SRA journal) and Dorothy Neikin. Contact: Brandon Johnson, Department of Geography, University of Pittsburgh, Pittsburgh, Pennsylvania, 15260, telephone (412)-624-3782.

--June 11-15. FOSSIL BASED SYN FUELS SYMPOSIUM, including session on "Risk Analysis," Atlanta, Georgia. Sponsored by federal agencies, industrial organizations, academe, and professional groups. Contact: Melvin W. Carter,

SOCIETY FOR RISK ANALYSIS
1340 Old Chain Bridge Road
Suite 300
McLean, VA 22101

Bulk Rate
U. S. Postage
PAID
Permit #12
Oak Ridge, TN