

New Orleans in February! The week before Mardi Gras, the parades have started, the French Quarter and jazz are minutes away, and Cajun cooking abounds. During the day you can feast on ideas, listen to experts, gain valuable knowledge, and discuss with your colleagues at the meeting everything and anything in the world of science and technology. What are you waiting for? Join us for the 156th national meeting of the AAAS.

This is the meeting that provides links among all of the disciplines of science and technology, links which grow in importance as our research boundaries move outward and new connections between fields are discovered.

Come explore these new connections and the ways in which your own work can be affected by them. Choose from more than 250 symposia, technical sessions, and workshops covering all of the physical, life, and social sciences and technology, including a major concentration in the biological and medical sciences, extensive treatment of global change, and an in-depth examination of problems in science education and human resources.

And there's more! You can attend intensive seminars on protein folding and on parasitism, gain new skills in short courses on chaos and on computer simulation, hear major plenary lectures, see an exhibition of new products and services, and share ideas in a full series of poster sessions (including a presentation of your own research; see "Call for Poster Papers" on following page).

So why wait? Register now by using the form provided. See you in February in sunny New Orleans! — Arthur Herschman

Seminars (3 days, 16–18 February; additional registration fee required)

Biology of Parasitism: Chagas's disease and leishmaniasis; nonimmune mechanisms of parasite killing; cellular immunity in parasite infections; chemotherapy in trypanosomiasis and leishmaniasis; molecular biology of *Trypanosomes* and *Leishmania*; surface antigens of *Trypanosomes* and *Leishmania*.

Protein Folding: Protein stability in vitro; protein folding, stability, and turnover in vitro; modeling protein structure and folding; relation of amino acid sequence to structure and folding; folding mechanisms; auxiliary factors in folding.

Short Courses (one day, 15 February; additional registration fee required)

Chaotic Dynamical Systems: Instruction on how to apply new ideas about chaos, including the periodic doubling route to chaos, stable and unstable chaos in planar maps, attractors and their basin boundaries, and the Lorenz attractor.

Computer Simulation for Biomedical Scientists: Hands-on instruction in use of personal computers to define, create, and run mathematical models for biomedicine. Covers the mathematics of simulation, using the Simulation Control Program, sensitivity to uncertainties, graphing results, and analyzing model behavior.

Plenary Lectures

Oscar Arias Sánchez* (President of Costa Rica); Richard C. Atkinson (AAAS President); D. Allan Bromley (President's Science Advisor); Anthony S. Fauci (Director, NIAID); David Hornbeck (Carnegie Commission); J. Bennett **Johnston**^{*} (US Senator from Louisiana); Ray Marshall (LBJ School, University of Texas); Victor Nussenzweig (New York University); Max F. Perutz (MRCLabs, Cambridge University, UK); Margaret W. Rossiter (History of Science, Cornell); Richard H. Scheller (Biological Sciences, Stanford); Kevin Trenberth (National Center for Atmospheric Research); Frank E. Young (Commissioner, FDA); and others.

* Not confirmed

Symposia, Technical Sessions & Workshops

Note: Bold headings indicate general subject areas; each short phrase (not bold) represents a symposium, technical session, or workshop.

Natural Sciences & Technology

General Interest (5 sessions): Physical sciences; symmetry; the living universe; law and misconduct in science.

Medicine & Health (13 sessions): Substance abuse by women; racial differences in hypertension; reducing cardiovascular disease; food safety and labeling; meta-analysis; cochlear implants; medical ethics and prisoners; oral recon-

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struction; physiology of exercise; quality health care costs.

Biomedical Research (*11 sessions*): Simian immunodeficiency virus as model for AIDS; nonprimate lentoviruses; hypothalmus-pituitary-adrenal axis; in vivo NMR spectroscopy; facilities for research on obesity; patient-oriented research; use of animals in biomedical research; neurotransplants.

Evolution *(6 sessions):* Early life; mitosis and microtubule systems; symbiosis; evidence for Eve; emergence of modern humans; pollen and sperm competition.

Geosciences; Natural Hazards (9 sessions): Global change in the geosphere; solid-earth sciences; continental oil and gas resources; improved recovery from existing fields; impact of hurricanes; reducing the toll of natural hazards; assessing earthquake hazards; weather modification; groundwater contamination in the southeast.

Chemistry; Biotechnology (9 sessions): Chemistry of clusters; photochemistry; chlorofluorocarbons; electrochemistry; cold fusion; medicinal plants; biodetection; biotechnological development; animal biotechnology.

Physics; Astronomy; Engineering (10 sessions): Particle accelerators; high temperature superconductors; exploring Mars; supernova 1987A; engineering ethics; human factors and nuclear experience; advanced nuclear power; acoustics; technology for disability; instrumentation.

Mathematics & Computing (9 sessions): Geometry; modeling of oil and water resources; supercomputing; computer worms and viruses; computing research; radon and Penrose transforms; zero knowledge proofs; property rights to software and hardware.

Popular Science (6 sessions): Physics of everyday experience; chemistry is fun; creatures that fly; Cajun culture and cooking.

Global Change

General Issues; Population (8 sessions): Human dimensions; policy and values; cooperation in the Pacific; cultural and demographic change; women and development; population growth and environment.

Climate; Global Warming (10 sessions): Scientific uncertainties and pol-

icy; models and policy; energy and the greenhouse effect; economic impacts; Western Hemisphere; media coverage.

Oceans, Rivers & Coasts (11 sessions): Large marine ecosystems; sea level rise; Mississippi River system; Mississippi Delta and Louisiana coast; offshore technology; riparian resources.

Ecology (*4 sessions*): Oil spills; polar ecosystems; arid lands; chaos in nature; models for resource management.

Biological Diversity (6 sessions): Molecular studies; southeastern United States; marine and terrestrial habitats; agriculture.

Tropical Forests (9 sessions): Amazonia; regeneration; social science perspectives; forest science.

Agriculture & Food (11 sessions): Sustainable agriculture; biological control of insects, plant disease, and weeds; US aquaculture, especially shrimp; intellectual property in agriculture; fisheries management; agricultural biotechnology and research—ethical issues.

Environment (14 sessions): Halogenated hydrocarbons; developing countries—foreign assistance, pesticides; data for decision making; agricultural chemicals—water quality, health costs; environmental reporting; human response; environmental law; environmentalism.

Social & Behavioral Sciences

Human Resources (14 sessions): Expanding the talent pool—precollege, college, and graduate issues; women and minorities—programs and strategies; young scientists; medical careers; NSF graduate fellowship program; graduate experience; senior and retired scientists.

Psychology; Neurobehavior; Gender (7 sessions): Genetics of mental illness; genes, environment, and behavior; emotions and brain; empathy in development; surveying sexual behavior; human sexuality; psychology and law.

Anthropology; Archaeology; Race (5 sessions): Mississippi Valley before

1492; evolutionary biology and behavior—race and gender; Chaco Canyon people and drought; archaeological dating methods; how archaeologists know.

Sociology; Political Science; Aging (*8 sessions):* Teenage pregnancy; aging process; intergenerational relations; democracy and science in Latin America; perestroika and scientific freedom in the USSR; mathematical methods; social science research; reapportionment and redistricting.

Economics; Industry; Communications (9 sessions): American competitiveness; technology policy; academic R&D; information and the USSR; information controls and reporting; scientists and the library crisis; information technology and competitiveness; international computer networking; writing strategies for scientists and engineers; universityindustry ties.

Arms Control (7 sessions): Verification, intelligence, and national security; lessons of the Iran-Iraq war; ABM treaty in the '90s; ballistic missile proliferation; deep cuts in European forces; chemical disarmament.

History & Philosophy of Science (10 sessions): Metaphors in science; the universe in philosophical perspective; neurobiology and self; influence of family on Einstein; contributions of R.A. Fisher; science, philosophy, and theology; controversial religious groups; philosophy of mathematics; rhetoric in science; history of science education.

Science & Technology Education (10 sessions): Assessing scientific literacy; science museums; science fiction; books for children; using technology; scientist-teacher partnerships; education in Latin America; pre-adult attitudes in Japan; college student papers; scientific writing.

Educational Curricula (11 sessions): Project 2061—implications for policy and curricula redesign (and teacher workshop); new curricula in physics, chemistry, and mathematics; innovations for undergraduates; scope and sequences for secondary schools; new models for biology; marine education; geological sciences; probability and statistics.



Register now, and you can use your AAAS badge for free access to the combined meeting in New Orleans of the American Geophysical Union and the American Society of Limnology and Oceanography (12–16 February).

1990 AAAS Annual Meeting

New Orleans, 15 – 20 February

Call for Poster Papers

Poster sessions at the AAAS Annual Meeting provide an informal, visually oriented way for you to present a contributed paper to your peers. Appropriate topics include all of the physical, life, behavioral, and social sciences as well as the specific topics of the two seminars (see previous pages). If your abstract is accepted, you will be assigned to a poster session (based on general subject area) and provided with a bulletin board on which to display graphics and large, easy-to-read text for 90 minutes. Accepted abstracts will also be published and distributed to all Meeting registrants.

Eligibility: An abstract for a poster presentation will be considered only if it is submitted or endorsed by a AAAS member or fellow. In addition, the presenter must be registered for the AAAS Annual Meeting. (Presenters of seminar papers must also be registered for the corresponding seminar.)

Abstracts: Type the text on plain white paper to fit within a 5" square. Use only a typewriter or letter-quality (not dot matrix) printer. Use black ink for all hand lettering. Indent, space, underline, and capitalize as in the example at right. Do not double-space the body of the text. Do not box or cut out the abstract.

Submission: Above the 5" square, type the name of the broad discipline that encompasses the subject matter and provide three index words to describe the area within that discipline (in the case of seminar papers, just indicate the name of the seminar). Below and to the left, type the full name, address, and phone number of the person to be contacted regarding status and scheduling. Below and to the right, type the name, affiliation, and complete membership number (from *Science* mailing label) of the member or fellow endorsing the abstract, and provide his/ her signature. Send original plus one copy no later than 9 November to:

Deadline for Poster Session Abstracts: 9 November 1989

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as i	indicated in this example.*

Contributed Papers, AAAS Meetings Office, 1333 H Street, NW, Washington, DC 20005.

Discount Air Fares to New Orleans

Fly United Airlines or Delta Air Lines to the AAAS Annual Meeting in New Orleans, and save when you travel during 10–25 February 1990:

- 5% off lowest published round-trip fares, subject to availability and qualifying conditions, and 5% off first class. (Not available in Canada.)
- 40% off regular round-trip fares; no minimum stay necessary, no advance purchase required. (In Canada, discount up to 35% only.)

These discounts are available only through the airlines' convention reservation desks, and seats may be limited. You or your travel agent should call one of the toll-free numbers below and give the appropriate convention code:

United Airlines: Convention Code 0004D Call 7 days a week; 8:00am–11:00pm Eastern time USA (incl. HI, AK) & Canada: 1-800-521-4041

Delta Air Lines: Convention Code R0030 Call 7 days a week; 8:00am–8:00pm Eastern time USA (incl. HI, AK, PR): 1-800-241-6760 Canada: Call Delta locally

Invitation to Exhibit

If your organization provides products or services that would be of interest to AAAS members, or if you would like to publicize your latest advances in science and technology before a worldwide audience, you should exhibit at the AAAS Annual Meeting.

The Meeting serves as an important public forum in which registrants share information with each other and (through extensive press coverage) with their colleagues around the world. By exhibiting, you can meet face to face with many of the more than 5,000 attendees, including scientists, educators, and researchers from virtually every field of scientific inquiry.

Organizations that should exhibit include publishers, computer software and hardware companies, on-line information services, government agencies, and scientific societies.

For complete details, contact Ed Leonardo or Stacy Weinberg at 202-326-6462.

Register Now!

Use registration form on next page.