

American Geophysical Union becomes AIP member society

On 14 March, the Corporation of the American Institute of Physics voted at its annual meeting to accept the unanimous recommendation of AIP's member societies that it accept the American Geophysical Union as a new member society.

AGU represents research-oriented geophysicists in the fields of atmospheric sciences, geodesy, geomagnetism and paleomagnetism, hydrology, ocean sciences, planetology, seismology, solar-planetary relationships, tectonophysics and volcanology (see table on this page). It has about 19 000 members and is now the second-largest member society of AIP after The American Physical Society, which has 37 000 members. AGU's joining AIP boosts total membership in the institute to 94 000, not taking duplicate memberships in more than one society into account. Total readership of PHYSICS TODAY, counting library and non-member subscriptions, will be close to 100 000 when AGU members start receiving the magazine in July.

In the AGU's formal application for membership in AIP, which was sent to the Chairman of the AIP Governing Board on 12 February 1985, AGU President Charles L. Drake said that AGU was particularly interested in "opportunities for participation in the institute's history, public affairs and manpower activities."

"An equal if not more important driving factor for this application of membership," Drake said, "is our interest in joining forces with AIP and its member societies in developing electronic and other alternative publication mechanisms that will serve the scientific community."

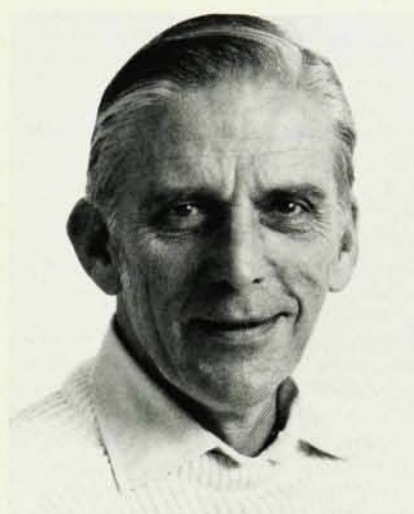
A. F. Spilhaus Jr, the executive director of AGU, expressed much the same views in a recent interview. He said that AGU was even more interested in AIP's newer activities—for example, its work on manpower statistics and physics history—than in its traditional main mission, publishing. He said that AGU also is very interested in cooperating with AIP and AIP member societies on public policy, noting that the American Astronomical Society al-



SPILHAUS

ready has its national office in the AGU building on Florida Avenue in Washington, DC (PHYSICS TODAY, January, page 80). AIP has just agreed to rent space in the AGU building for Washington staff, including PHYSICS TODAY Washington correspondent and senior editor Irwin Goodwin and the APS public-affairs office, headed by Robert L. Park.

Like AIP, AGU is primarily a publisher for its members. AGU journals include *Reviews of Geophysics*, *Geophysics Research Letters*, *Paleoceanography*, *Tectonics*, *Radio Science*, *Water Resources Research* and *Journal of*



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Geophysical Research, which has four sections, *Space Physics* (Section A), *Solid Earth and Planets* (Section B), *Oceans* (Section C) and *Atmospheres* (Section D). It also publishes the weekly newspaper *Eos*, several book series and a series of translation journals. The total number of pages published annually by AGU comes to about 28 000.

A dynamic society, AGU has grown rapidly in recent years. Its membership increased from just over 10 000 in 1970 to nearly 18 000 in 1985, an average annual rate of about 3.5%. The growth is attributable, Spilhaus

AGU section affiliations

	1980	1984
Atmospheric sciences	1007	1319
Geodesy	544	696
Geomagnetism and paleomagnetism	697	782
Hydrology	2290	3156
Ocean sciences	1744	2642
Planetology	681	710
Seismology	1365	1947
Solar-planetary relationships	1604	1911
Tectonophysics	1150	1941
Volcanology, geochemistry and petrology	1295	2071
No affiliation reported	934	921

AGU officers

The current officers of AGU are Charles L. Drake, president, Peter S. Eagleson, president-elect, Peter M. Bell, general secretary, and Juan G. Roederer, foreign secretary.

Drake is a professor of earth sciences at Dartmouth College. He received a BSE in geological engineering from Princeton in 1948 and a PhD in geology from Columbia in 1958. He taught at Columbia until 1969, when he joined the Dartmouth faculty.

Eagleson, a professor of civil engineering at MIT, received a BS in 1949 and an MS in 1952 from Lehigh University and a ScD in 1956 from MIT. He has been on the MIT faculty since 1955, and he was head of its department of civil engineering from 1970 to 1975.

Bell, a faculty member of the Geophysical Laboratory of the Carnegie Institution

of Washington, earned a BS at Southern Louisiana University in 1956, an MS at the University of Cincinnati in 1959, an MA at Harvard University in 1962 and a PhD at Harvard University in 1963. He was a postdoctoral fellow at the Geophysical Laboratory in 1963-64 and has been on the faculty ever since.

Roederer, director of the Geophysical Institute of the University of Alaska in Fairbanks, earned a doctorate in physics at the University of Buenos Aires in 1952. He was group leader at the Argentine Atomic Energy Commission (1953-62), director of the Argentine National Cosmic Ray Center (1962-66), a physics professor at the University of Buenos Aires (1959-66) and a faculty member at the University of Denver (1966-77). He has been at the University of Alaska since 1977.

said, to the society's efforts to reach out to students, to the growing number of subfields and to broadening definitions of subfields. He mentioned as examples the way solar physics has evolved into solar-planetary physics and the increasing interaction between biologists and geophysicists in the study of climate, sea chemistry and terrestrial phenomena such as deforestation.

It is Spilhaus's impression that AGU serves as a second society to many individuals, such as members of the American Meteorological Society, the Seismological Society of America and the Geochemical Society. Among oceanographers and space physicists, on the other hand, it probably serves as the society of principal allegiance, in Spilhaus's estimation.

Even some political scientists, geographers and economists are finding AGU to be of substantial interest, Spilhaus said. *Water Resources Research*, for example, is coedited by an economist and a hydrologist.

Astronomers in the planetary division of AAS cosponsor a regular conference on lunar and planetary sciences with AGU and several other societies. The Acoustical Society of America has cosponsored roughly two-thirds of the biennial conferences on ocean sciences.

At least half of AGU's members and probably more work in academia, Spilhaus thinks, and a quarter or so work for government. Perhaps 10% work for industry.

Asked whether one should visualize the average AGU member as someone like Robert Redford in the film *Out of Africa*, flying about in a biplane collecting rocks, Spilhaus observed with a slight hint of regret that one sees more ties and fewer field boots when one attends AGU-sponsored conferences these days. An increasing proportion of AGU's members work primarily in

laboratories, he said. Still, AGU members are indeed great travelers, Spilhaus noted, and one can pretty much forget about getting them to attend conferences in the summer—unless, of course, the conferences take place in sufficiently interesting places.

Chapman conferences, an important conference series sponsored by the AGU, are specialized meetings designed to attract on average about 125 participants in some quite specialized subfield. The Chapman Conference series was established in 1976 and named after Sydney Chapman, a physicist who did pioneering research on the upper atmosphere. The conference series is modeled on the Penrose Conferences of the Geological Society of America and the Gordon Conferences.

Chapman Conferences often are convened to discuss a newly emerging subfield, and sometimes such conferences take place in a location that has a bearing on the subject under discussion. This May, for example, there will be a Chapman Conference on fast glacier flow at Whistler Village in British Columbia, Canada, and in March there was one on modeling of rainfall fields at the Universidad Simon Bolivar in Caracas, where one of the best Latin American water-resources institutes happens to be located.

Relations with Latin American scientists, a matter of considerable current interest in APS and other AIP member societies, have received considerable attention from AGU, which decided some years ago to make Latin America the focus of its Third World development efforts. A Chapman Conference is to take place at least once every two years in a Latin American country, and the AGU brings about three Latin American geophysicists to the United States each year, with

preference given to individuals who otherwise would have trouble traveling.

Even more than in other sciences, Spilhaus observed, international cooperation is absolutely essential in geophysics because so much work can be done only outside the United States. Promotion of international programs ranks high among the goals stated in the AGU charter.

AGU was founded in 1919, mainly to interact with the US National Committee for the International Union of Geodesy and Geophysics, which even now is housed at AGU headquarters. AGU hired its first staff member in 1944, geophysical research having received a boost from the war.

Waldo E. Smith, the first staff member and executive director of AGU, served for 25 years, until 1970, when Spilhaus succeeded him. A major milestone in the AGU's history was its acquisition of the *Journal of Geophysical Research* from the Carnegie Institution. Carnegie donated the journal to AGU in 1959 during the International Geophysical Year. Another milestone was the establishment of a journal for hydrologists in 1963.

Spilhaus joined the staff in 1967, and he currently is supported by a staff of 85. Cynthia Bravo directs meetings and member programs, and Judy C. Holoviak is director for publications.

Spilhaus did his undergraduate and graduate study at MIT. He earned a BS in chemical engineering in 1959, an MS in geology and geophysics in 1960 and a PhD in oceanography in 1965.

—WILLIAM SWEET

New AIP database provides data on meetings, jobs, abstracts

A new electronic database containing advance abstracts, information on jobs and society meetings, and other news became available on 31 March; it is free to members of AIP member and affiliated societies during a one-year pilot period. Called Pi-NET, for Physics Information Network, the database can now be called up via GTE Telenet by any member who has a personal computer with a serial port, modem and communication software.

Pi-NET contains abstracts of papers accepted for future publication in the journals published by AIP and its member societies. These are the same abstracts that are published in AIP's *General Physics Advance Abstracts* and in APS's *Physical Review Abstracts*.

Pi-NET also contains a frequently updated calendar of meetings based on data from *PHYSICS TODAY*, information on job opportunities in physics, announcements and news releases, titles