took place. The FBI, for its part, will not comment on the matter while its investigation of the case is pending.

As for Zehe, nobody recalls whether he attended any sessions, though he identified himself to AVS staff on two separate occasions. He displayed a copy of a letter sent to AVS by a woman graduate student at the Autonomous University of Puebla in Mexico, asking that a back issue of a scientific journal be brought to the Boston meeting, where it would be picked up. Another time he showed a list of scientific books to a member of the American Institute of Physics staff and requested that the books be available for him to buy at the March meeting of The American Physical Society in Detroit. Zehe is not a member of AVS, though he is a paid-up member of APS.

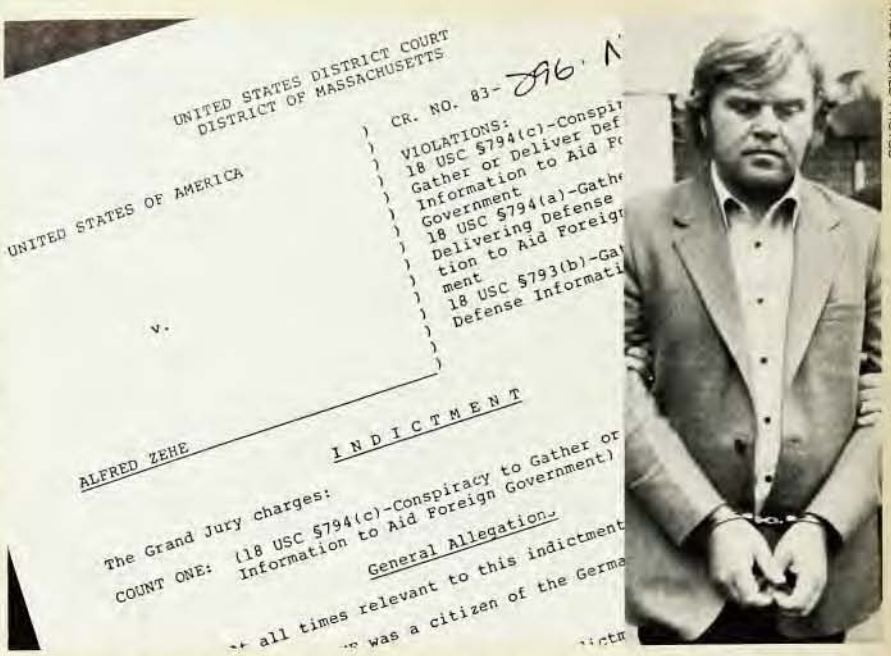
Navy 'mole.' According to the eight-count indictment returned by a grand jury in the US District Court in Boston on 10 November and the affidavit of James E. Lancaster, an FBI special agent, Zehe is a physics professor at the Technical University in Dresden, German Democratic Republic, teaching as an exchange scholar at the University of Puebla. In Lancaster's account, Zehe comes in at the midpoint of the spy caper. It began in December 1981 with a meeting at the East German embassy in Washington, D.C., between a civilian employee "in a responsible position" at the Naval Electronic Systems Engineering Command in Charleston, South Carolina, and Dieter Walsch, an embassy attaché identified in the affidavit as "an officer of the GDR Ministry of State Security, East Germany's intelligence gathering organization." Unknown to the East Germans, the Navy employee, always referred to in court papers as "the confidential source," was cooperating with the FBI and the Naval Investigative Service.

Walsch subsequently paid the US counterspy a total of $3500 for two sets of classified documents that were delivered to the embassy in February and April 1982. The documents were provided by the FBI and NIS. The confidential source then was instructed to deal with officials at the East German embassy in Mexico City, where he was introduced to Zehe as a "scientific–technical expert" who would evaluate the classified documents.

From 25 October 1982, when they first met, until last 7 October, when the last documents and photographs were passed, Zehe or consular officers at the East German embassy in Mexico paid the "mole" another $17 800. At Zehe's insistence, one meeting took place at a house just outside East Berlin, where the double agent was "debriefed" by two members of the GDR Ministry of State Security on his accessibility to additional classified material and his willingness to provide this to East German agents. Earlier, in Mexico, Zehe had supplied a movie camera capable of taking up to 2600 still shots on one film cassette. At three meetings in April, May and October 1983, the source turned over films of classified documents made available by the FBI and NIS, the affidavit reads.

When he first appeared before the magistrate after his arrest on 4 November, Zehe, a stocky, blond-haired 44-year-old, said softly: "A highly-trained spy? I am very sorry. I am a university professor—a scholar not a spy." At his arraignment on 14 November, Zehe pleaded not guilty. Because he has no diplomatic immunity, he could be sentenced to life in prison, if convicted of espionage.

Zehe's arrest, as it happened, coincided with hearings by a Congressional subcommittee on scientific communication and national security, at which several witnesses expressed fears that regulations restricting the dissemination of scientific information through meetings and publications could be highly detrimental to US science. Some scientists are uneasy about the place and timing of Zehe's arrest. That someone from the Soviet bloc is actually caught at a scientific conference and charged with spying may appear to the public as ample justification that a vigorous response by government is necessary. Right now a Department of Defense task force is completing the final draft of new regulations to handle unclassified, but potentially sensitive, scientific and technical information. The Commerce Department is asking Congress to tighten the Export Administration Act of 1969, under which such items as computers, machine tools and microelectronics with dual civilian and military uses can be banned in foreign trade, and an interagency committee led by the National Security Council has just completed its report on government-wide regulations for commercial and scientific materials and information with national security implications (PHYSICS TODAY, June, page 41). One effect of the Zehe affair, accordingly, is to send a chill through the science community. —IG



East German physicist Alfred Zehe is indicted on espionage charges after his arrest at American Vacuum Society meeting in Boston on 3 November.

Besieged, Congress protects peer review

One of the most intense controversies among academics in 1983 involved the use of political influence to obtain Federal funds for science facilities. This subject was Topic A at a closed meeting in Los Angeles during the last week of October when presidents of 45 leading research universities in the US and Canada, belonging to the Association of American Universities, signed a "gentleman's agreement" affirming that scientific merit, not political clout, should be decisive in determining where government money should be allocated for scientific projects and their related facilities.

By issuing the statement, the AAU implicitly reprimanded two of its own

members—Catholic University in Washington, D.C., and Columbia University in New York City. Both had angered many academic scientists and university presidents by hiring a well-known lobbying firm, Schlossberg–Cassidy & Associates of Washington, D.C., to convince Congress to support the construction of new science buildings in the FY 1984 appropriations bill for the Department of Energy (PHYSICS TODAY, August, page 45). Neither of the laboratory buildings had been approved by orthodox peer-review procedures, which have been used for government grants to science over the past 30 years. This was particulary nettlesome to many scientists and DOE officials, because some $10 million for the facilities was taken out of the budgets for other projects that had gone through some form of peer review.

No sooner had the AAU statement appeared than the governing council of the National Academy of Sciences, on 30 October, issued a resolution calling on university officials and government leaders to "exercise vigilance" in protecting peer review in the decision-making process for supporting scientific research proposals as well as for awarding funds for scientific facilities and instrumentation. "Informed peer judgments on the scientific merits of specific proposals, in open competition, should be a central element in the awarding of all Federal funds for science," reads the resolution of the NAS council.

Neither the NAS nor the AAU mentioned any institutions by name, but Robert E. Marshak, president of The American Physical Society, did in a letter on 17 October to all 535 members of Congress. He argued against the "pork-barrel" tactics used by Congress to fund new buildings at Catholic and Columbia universities while making an end-run around "the established procedures of submission and review... Failure to follow such procedures leads invariably to a widespread perception that success in the competition for Federal research funds is less dependent on scientific merit than on having the right connections. In our opinion, confidence in the system has been seriously shaken by these instances and will be restored only by the rigorous adherence to the established procedures in all future scientific funding."

To nearly everyone's surprise, the proclamations drew an immediate response in Congress. Amendments providing a total of $44.3 million for renovation and construction of buildings at Boston University and the universities of Pennsylvania and New Mexico were attached to the Labor, Education and Health and Human Services appropriations bill by the Senate on 4 October. Then came the spate of statements by the AAU, NAS and APS. On 9 November the funds were deleted by a House–Senate conference committee. "This is out-and-out pork," shouted Representative Robert H. Michel (R-Ill.), the House minority leader. Michel's view had the backing of the majority as well. A week earlier, House Speaker Thomas J. (Tip) O'Neill Jr (D-Mass.) agreed with Representative Don Fuqua (D-Fla.), chairman of the House Science and Technology Committee, that peer review would henceforth be honored in evaluating proposals for Federal funding of scientific research facilities and large scientific instruments. —IG

Keyworth appoints five OSTP assistants

Speculations on the goings and comings of top people at the White House Office of Science and Technology Policy, where the deputy director and all four assistant directors have jumped the ship of state since August, came to an end over the Thanksgiving weekend. The positions were filled with a modest three-page announcement by George A. Keyworth II, the President's science adviser. By retitling some of the jobs and adding a fifth assistant director, Keyworth indicated that he was restructuring the office, which is already three times the size of OSTP during the Carter administration. Even more significant, though, are his choices—half of them research scientists with little or no Washington connection rather than career bureaucrats or members of the academic "club" who move in and out of Federal advisory jobs.

The new deputy director is John P. McTague, a physical chemist who was chairman of the National Synchrotron Light Source Department at Brookhaven National Laboratory and, simultaneously, Adjunct Professor of Chemistry at Columbia University. He had been professor of chemistry at UCLA from 1970 to 1982 and staff scientist at North American Aviation from 1964 to 1970. He replaces Ronald Frankum, a non-scientist who departed OSTP on 1 October to be chairman of Telecom Futures, Inc.

The assistant directors:

▶ Ralph M. DeVries, General Science, who headed the nuclear-physics program at Los Alamos National Laboratory, Keyworth's *alma mater* before becoming director of OSTP. DeVries has taught at the Center for Nuclear Studies at Saclay, the University of Washington and, before joining Los Alamos in 1978, the University of Rochester. He succeeds N. Douglas Pewitt, a physicist who made Washington science policy his specialty at the Center for Naval Analysis, Office of Management and Budget, DOE and OSTP. He has gone to Western Research Corp.

▶ Richard G. Johnson, Space Science and Technology, a physicist at Lockheed Missiles and Space Co. since 1956. This assistant directorship apparently reflects Keyworth's occupation with a proposed missile defense system that has been dubbed "Star Wars" (PHYSICS TODAY, December, page 43).

▶ James G. Ling, Institutional Relations and (acting) for Life Sciences. Born in China, Ling received his PhD in nuclear resource management from Stanford in 1967 and spent 21 years in various civilian posts at the Air Force. He held management posts at the Department of Energy and MITRE Corp. before joining OSTP in 1981, where he provided staff work, notably, for the panel of the White House Science Council, led by David Packard, that recently examined the condition of the Federal laboratories (PHYSICS TODAY, September, page 39). Ling replaced Denis Prager, a Carter holdover who left last May for the National Academy of Sciences, then joined the MacArthur Foundation in Chicago.

▶ Wallace R. Kornack, Energy, Natural Resources and International Affairs. A mechanical engineer, Kornack has served on the staff of the former Atomic Energy Commission and Energy Research and Development Administration and, more recently, at the Department of Energy before joining OSTP in 1982. This assistant directorship had been held by John Marcum, who went to the Organization for Economic Cooperation and Development in Paris.

▶ Maurice A. Roesch III, Defense Technology and Systems. A Marine Corps colonel on active duty, Roesch acquired a PhD in systems management from the University of Virginia in 1979. His biography states he has "extensive experience in combat engineering, systems acquisition, intelligence and operations analysis" and has taught naval science at the University of Virginia and systems management at the University of Southern California. He replaces Victor Reis, who left in August for Science Applications, Inc.

The creation of an acting assistant director for life sciences suggests that Keyworth intends to make the post permanent—an action that would dispel in part strong criticism by the life sciences and social sciences communities for OSTP's emphasis on physical sciences and technology in the Keyworth era. —IG □