

Knapp denies that his clean sweep at NSF is a political move

Three of the Presidential appointees at the National Science Foundation have been forced to resign. A fourth position, left vacant following his promotion, leaves newly appointed NSF director Edward Knapp in the unprecedented position of being able to select all of the top management at NSF. Knapp announced 9 December that he will seek replacements for Donald Langenberg, deputy director of NSF, Francis Johnson, assistant director for astronomical, atmospheric, earth and ocean sciences, and Eloise Clark, assistant director for biological, behavioral, and social sciences. Langenberg and Johnson were appointed by President Carter; Clark was appointed by President Ford. As of this writing, Langenberg and Johnson have already left or plan to leave early in 1983; Clark's departure will be somewhat later.

Additionally, the position of assistant director for mathematical and physical sciences, which remained unfilled for a year following William Klemperer's resignation in 1981, is once again vacant. Knapp, who assumed that job in September (PHYSICS TODAY, October, page 51), was appointed to the directorship in November and now awaits Senate confirmation.

Why were these people let go? Johnson told us that "the action was essentially politically motivated." Knapp said, however, "I can assure you that

the politicization of the NSF is not a goal of this reorganization. The changes were made to improve the management operations of NSF."

Scientists we spoke to, while commenting favorably on Knapp's qualifications for the directorship, were concerned that political priorities might be given too much weight in making selections to fill the four positions now open. Knapp told us that the replacements will be selected by the President after a search run by himself and the National Science Board, which Knapp described to us as "a neutral organization."

Asked why Langenberg and Johnson, who were already planning to leave NSF, were asked to leave promptly, Knapp said, "There are two reasons. Both the search and the confirmation hearings for Presidential appointees are very time-consuming and can take up to six months. I also feel strongly that I need my team of people, a team that I have selected, to make some changes in the management of NSF which will be better for the long-term good of science."

Langenberg, who was one of the candidates for NSF director proposed by the National Science Board, resigned effective 31 December. He will become chancellor of the University of Illinois at Chicago Circle on 1 February. According to Langenberg, he was

asked by Knapp to submit his resignation. Prior to coming to NSF, Langenberg had served as vice-provost for graduate studies and research and as professor of physics and of electrical engineering and science at the University of Pennsylvania.

Johnson told us that he was not asked to resign and has not submitted a resignation. He said, however, "Everyone knew that I planned to leave but it was made clear to me that if my plans had not been to leave I would have had to change them." Johnson now intends to return early in 1983 to the physics department at the University of Texas, Dallas, where he will resume his appointment as the Cecil H. and Ida Green Honors Professor of Natural Science.

Clark had no plans to leave NSF. Trained as a biochemist and biophysicist, she came to NSF in 1969 from Columbia University where she had been a professor of biology and biochemistry. While at NSF the positions she has held have ranged from serving as program director for the Developmental Biology Program, and holding various jobs in the biological sciences, to her current position as assistant director. At Knapp's request she submitted an open-ended resignation in December. She said her plans are not yet final; she anticipates leaving NSF this spring. —JC

Theorist Ne'eman becomes Israel's first minister for science

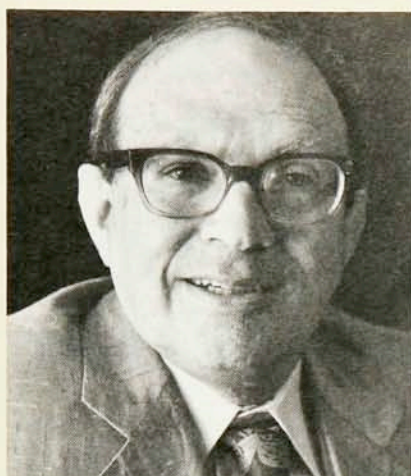
Yuval Ne'eman is Israel's first Minister of Science and Development. A prominent physicist, Ne'eman holds the Wolfson Chair Extraordinary in the School of Physics and Astronomy and is director of the Sackler Institute of Advanced Studies at Tel Aviv University. Simultaneously he represents the Tehiya Party in the Knesset, the Israeli parliament, and he is co-director of the Center for Particle Theory at the University of Texas, Austin.

Ne'eman, who assumed the new Cabinet-level position in July, told us that he is now working to establish the

ministry properly. The primary functions of the science minister, he said, will be to advance the interests of science at the national level, to encourage the development of science, particularly in those areas of science that can contribute to the economic development of Israel, and to act as a science adviser to the Cabinet.

Expanding on his role, Ne'eman said, "If Israel officially wants to become a member of CERN, for example, or to upgrade the nuclear accelerator at the Weizmann Institute or the 40-inch telescope at Tel Aviv University, these

would be Cabinet-level decisions." He also told us of his plans to create the Israeli equivalent of NASA to advance space research. The newly created space authority, as well as the Atomic Energy Commission (which deals with nuclear science) and the National Council for Research and Development (which administers general science), will all be under his direction. Physicist Haim Harari (Weizmann Institute) now heads the University Grants Commission, set up in 1971 to channel funds to universities (following the model of the United Kingdom); the research



NE'EMAN

functions, but not the education functions, of this commission will also come under the new ministry. As part of current plans to encourage the growth of science-based industries, Ne'eman said that initially his ministry is concentrating on the electronics industry, but later plans to develop the computer software field and to explore possibilities in the biological sciences.

Ne'eman told us that because of his appointment as Minister of Science and Development, he was unable to receive the Wigner Medal during the 11th Group Theory Conference held last August in Istanbul (see page 85). Although he was scheduled to speak and to be awarded the Medal during the conference, once his appointment was

announced Turkey denied visas to all Israeli scientists planning to attend and refused to let Ne'eman accept the award by proxy, he said. By agreeing not to attend the conference himself, Ne'eman said that he was able to obtain visas for the other Israelis, but not in time to enable some scientists (who had refused to attend in protest over the denial of visas to Israelis) to attend themselves.

Ne'eman was trained in engineering and physics, receiving a degree in mechanical engineering from the Technion in 1946, and obtaining his PhD in physics from Imperial College, London, in 1961. Since 1962 he has been affiliated with Tel Aviv University, where he has served as head of the physics department since 1963 and as a professor of physics since 1965. He was president of the University 1971 to 1975. He has also been active in the military, serving in the Israel Defense Forces from 1948, retiring as a colonel in 1960. From 1952 to 1955 he was Israel's Defense Planner, a job that entails preparing strategic plans for use in the event of a future war. The plans Ne'eman made during these years became important during the Six Day War. He also served as director of the Israeli Atomic Energy Commission laboratories from 1961 to 1963 and has been a member of the commission since then. As a physicist he is perhaps best known for his work in elementary-particle theory. He is currently interested in supergravity and astrophysics. —JC

NSF gives aid to poorly funded states

Scientists in five of the US states that receive the smallest amounts of Federal support for science are gaining recognition for the advances they are making in their fields; they are also beginning to receive nationally competitive grants. At the same time, both popular and governmental interest in science in their states has grown.

The scientists are recipients of a small-scale but remarkably effective NSF program to boost promising researchers and their research environments into the mainstream. The Experimental Program to Stimulate Competitive Research (EPSCOR) is now in the third year of its five-year grants to scientists in Arkansas, Maine, Montana, South Carolina and West Virginia. The program will cost NSF \$13 million over five years.

Careful planning. EPSCOR was planned so that every step of its process would promote its overall goals: to stimulate research communities; to increase state governments' commitments to science and promote industrial involvement

and public concern with science; to establish ties between scientists in the funded states and those doing front-line research elsewhere; and at the same time to boost the efforts of promising scientists whose work could, with a little help, become nationally competitive.

In each of the five states that is receiving money and in two others that competed for the grants, NSF started a committee of scientists prominent in the state by appointing a handful of committee members who then chose the remainder. NSF used this indirect selection procedure to ensure that the committees would be responsive to state priorities and that their programs would be more attractive to local industry.

With NSF grants of \$125 000 in each state, the committees assessed what barriers militated against effective research and devised funding strategies to overcome the barriers as they solicited proposals for grants. The grant proposals were subjected to extensive

review by out-of-state scientists of national stature, some of whom also visited the states. By this means channels were made from formerly isolated scientists to the mainstream. At the same time, scientists in the EPSCOR states benefited from reviewers' recommendations. The proposals the committees approved were subject to the constraint that grants would go only to those fields eligible for NSF money. In addition they were individually reviewed at NSF. Twenty out of 88 projects were eliminated. At the conclusion of the NSF review, two of the seven competing states were eliminated, a condition of the program from the beginning.

To ensure state commitments and to maximize the chances that the programs would outlive the five-year grants, EPSCOR required that the states share the costs in increasing percentages each year; in most cases, 10% the first year, 50% the fifth. Cost-sharing money has usually come from the state universities that house the departments receiving funds. In some cases, funding priorities had to be shifted within the universities. In other cases, state legislatures provided the money by increasing university budgets. In some states, some private money was raised from local industries. Such opportunities were scarce: Montana, with no headquarters of large national corporations and little opportunity to find corporate funds, has perhaps the extreme case of a problem common to the five states.

States' programs. Owing to the autonomy enjoyed by state EPSCOR committees, the programs have been organized differently in individual states. In Montana, where the program is called MONTs (Montanans on a New Track for Science), it has generated so much support that it is known widely to nonscientists, according to program director Gary Strobel, a plant pathologist. There grants were made to individuals. Out of 115 proposals initially received by the state committee (more proposals than the NSF had received from the state over the previous five years), 28 were funded. The physicists who have received MONTs grants are in the physics department at Montana State University: Richard Robiscoe is investigating parity violations in hydrogen nuclei; George Tuthill is working in ferromagnetism; John Hermanson is doing metallic surface theory; John E. Drumheller, studying electron spin resonance, has already left the MONTs program, having received a nationally competitive NSF equipment grant; Richard Smith and Wolfgang Goepel are faculty members receiving MONTs funds and working with Gerald Lapeyre (a member of the state committee) and James Anderson on surface