

nized by the International Centre for Theoretical Physics in Trieste. One will offer a course in monsoon dynamics in Bangladesh. Another, in Ghana, is a Colloquium of Solid-State Physics in Africa that will instruct in basic properties of solids and liquids, electronic and vibrational structures in solids, lattice defects, surface physics, amorphous solids and liquids.

Among ventures aimed at developing productive capacities are the following that have some relevance to physics:

The Fund is assisting the China State Commission for Science and Technology in establishing a central coordinating system for remote-sensing services for national resource exploitation.

In Pakistan laboratories and training programs for industrial silicon production are to lead to manufacture of semiconductor photovoltaic cells for converting solar radiation into electrical power.

Carbon filter technology is being developed in Brazil. This project, executed

by the UN Industrial Development Organization and assisted financially by a Brazilian national agency, is engaged in research and development of materials for application to the construction of boats and propellers for wind power.

In the Seychelles a project will diminish the island group's dependence on imported oil by adapting solar, wind and biomass methods of energy production. A demonstration generator providing 50–100 kW will be built.

Owing to limits of its money, the Interim Fund is so far concentrating on small projects and ones proposed by governments. In each case money sufficient to carry a project to completion is allocated because no one can be certain what will happen when the Fund ends. To make limited funds stretch further, when possible, projects are chosen that can be of relevance in other countries.

The process by which proposals become formulated and accepted involves Fund personnel or consultants at every step.

For some countries the Fund has provided the technical and procedural expertise needed to formulate proposals. In all cases the Fund cooperates in assessing proposals with the local UN Development Program, the focal point for UN activities in a country. Lees's staff often seeks the assistance of other expert UN Agencies, such as UNESCO and the World Health Organization, and the views from country experts of the UN Development Program in New York. Once approval is obtained and documents are signed, funds are made available.

The Interim Fund will come to an end on 31 December 1981. What follows it is now being negotiated within a complicated apparatus formulated at the Vienna Conference. Lees is confident that the program will continue, even at a time of economic recession for much of the world. And if it is to continue, he maintains, "if the effort is to be considered seriously, more money than currently available will have to be provided." —DG

To NASA: Beggs, head; Mark, deputy

President Reagan has nominated James M. Beggs to be Administrator of NASA and Hans Mark to be his Deputy. Beggs succeeds Robert A. Frosch, who is now President of the American Association of Engineering Societies.

Beggs, a 1947 graduate of the US Naval Academy, served in the Navy until 1954.



BEGGS

In 1955 he received a master's degree at the Harvard Graduate School of Business Administration. He has worked at Westinghouse, the NASA Office of Advanced Research and Technology as associate administrator, Summa Corporation and, most recently, General Dynamics Corporation as an executive vice-president.

Hans Mark received a bachelor's degree in physics from Berkeley in 1951 and a PhD in physics from MIT in 1954. He

was assistant professor of physics at MIT, and at Berkeley he was professor of nuclear engineering and physicist at the Lawrence Radiation Lab. In 1969 he became the Director of the Ames Research Center. He was Undersecretary of the Air Force from 1977 and its Secretary from 1979. His fields of research



MARK

have been nuclear and atomic physics, nuclear instrumentation and astrophysics.

Poll: what is the chance of nuclear war?

In a recent PHYSICS TODAY poll of APS members on the threat of nuclear war almost two-thirds estimated that there was a 20% or greater chance of nuclear war

before the year 2000; one-quarter indicated the chance was 50% or more.

The survey was mailed to 300 persons randomly selected from the most recent (1979) APS Directory; 109 returned the survey (in postage-paid envelopes); 8 came back, undeliverable. Responses ranged from 0 to 90% chance of nuclear war. The single figure indicated by the greatest number was 10% (stated by 21 of the respondents). The second most frequently cited number was 50% (by 16).

Respondents were asked "How, in your opinion, can the probability of nuclear war be substantially reduced?" Of the 87 who answered the question, over half specified negotiated arms limitations. Twenty mentioned preventing proliferation of weapons to minor powers. Nineteen mentioned disarmament, abolition of nuclear weapons or unilateral arms reduction. According to one respondent, "There is only one way—complete disarmament." Twelve of the respondents recommended military deterrence, defensive weapons or civil defense. One, for example wrote "the physics community should try to convince both the people and the government that we need a civil defense program against nuclear attack, using passionless logic and hard data as we normally do as a profession. Serious nuclear arms reduction can only hope to begin when nuclear attack no longer assures the total annihilation of the intended enemy." With a quite different view on civil defense, another respondent replied "provide no fall-out shelters for the military planners."

Seventy-five answered the survey's other open-ended question, "What contribution could the physics community and physicists as individuals make to this effort?" The most frequent response—from half of those responding—was, in

the words of one physicist, to "strive for increased public awareness of the devastation that would be brought on by a nuclear war." In the same vein, L. W. Seagondollar wrote, "I was one of the few hundred at Trinity [the site of the first US atom bomb detonation] the night of the explosion there. I went back there and saw first-hand what damage was done. I've seen and heard a lot of material about Hiroshima and Nagasaki. I'm afraid I have a better concept than most persons about how horrible things could become if there was a major exchange of nuclear weapons. . . . It is obvious we must furnish technical information to those who need it."

Other responses mentioned by five or more were: increasing international exchanges, particularly with Soviet physicists (10), appealing to and trying to influence US governmental leaders (10), refusing to work on weapons-related research (5) and getting rid of irresponsible ("jingoistic," "aggressive") politicians (5).

The greatest contrast in responses occurred between the two largest groups, those who saw a 10% chance of nuclear war and those who saw the possibility as 50%. Because each group only comprised about 20, the following correlations are little more than impressions: Those who estimated the lower chance of war, on the

average, specified more conservative ways to reduce its threat: three of them mentioned weapons development; none of the 50% so responded. The 50% group specified more radical measures: Nine mentioned disarmament or refusing to do defense-related work, while only four of the 10% group did. The 10% group more often responded that a war would start due to a third-world or minor power: five recommended limiting proliferation of weapons and/or technology. Only one of the 50% group mentioned nonproliferation.

No difference was observed between the younger half of respondents and the older half. —DG

the physics community

AIP celebrates 50th anniversary

The 1981 Annual Meeting of the AIP Corporate Associates will be held 15–16 October at the National Academy of Sciences in Washington, D.C. This meeting, celebrating the fiftieth anniversary of AIP, will concern "Physics in Retrospect and in Prospect" and will include many distinguished speakers.

Among persons presiding at sessions will be Roland W. Schmitt, Chairman of the Advisory Committee of the Corporate Associates, the group that planned the sessions; Norman F. Ramsey, AIP Governing Board Chairman; and H. William Koch, AIP Director.

After greetings are presented by Frank Press, President of the National Academy of Sciences, and Ramsey, the first session will cover the last 50 years of physics, with speakers Spencer Weart, Director of the AIP Center for History of Physics, Victor F. Weisskopf, Institute professor emeritus, MIT, and Frederick Seitz, President emeritus, Rockefeller University.

A second session will address relations of physics to society and government. Speakers will include George A. Keyworth II, Reagan's nominee for Presidential Science Adviser, John H. Marburger III, President of SUNY at Stony Brook, and John B. Slaughter, Director of NSF.

On 16 October the morning meeting will be devoted to reviews of achievements and challenges to physics. Pierre Aigrain (French Minister of Science to Giscard d'Estaing) will speak on physics in Europe; Solomon J. Buchsbaum (executive vice-president, customer systems, Bell Labs), on physics and communications; C. Lester Hogan (former president of Fairchild Camera and Instruments), on physics and electronics; and Arthur M. Bueche (senior vice-president of corporate technology at General Electric), on contributions of physics to industry.

Among those speaking at a final session

on frontiers of physics will be J. Robert Schrieffer (University of California, Santa Barbara) on novel conductors and Marshall N. Rosenbluth (Director, Institute for Fusion Studies, University of Texas) on plasma physics.

In addition, AIP awards—among them the Tate and Compton medals—will be presented, and a dinner will be held at the Hyatt Regency Hotel.

Those attending Corporate Associate meetings include executives from industry, especially R&D directors, heads of academic physics departments, government officials and officers of AIP societies. At this year's meeting exceptionally many are expected. Persons interested in further information should write to Dorothy M. Lasky, Assistant to the Director, AIP, 335 East 45th Street, New York, N.Y. 10017.

Asian Physical Society forms, chooses officers

An Asian Physical Society has been formed. The Society originated at the Regional Conference on University Physics Education held at the University of Science of Malaysia in Penang in May of 1977. The 98 participants from 11 Asian countries chose Chatar Singh, Dean of the Faculty of Science of the host university as the first chairman and S. Radhakrishna of the Committee on Science and Technology for Developing Countries as the executive secretary.

The new society, which will interact on a regular basis with the APS Committee on International Scientific Affairs, was formed to promote physics research and education in third-world Asian countries and to alleviate such problems as lack of funds for scientific research, excessive cost of textbooks and periodicals (which

are generally published in the developing countries) and an almost total absence of international physics conferences in Asia. Participants recognized that a regional organization could be effective in resolving problems that result from similar educational structures and stages of economic-social development. Moreover, the organization could benefit from the strong cultural and economic ties that exist among these countries and their desire to be self-reliant.

At a meeting of the *pro tem.* committee held in Singapore in September, 1979, the first permanent executive committee was formed following extensive consultations with the existing physical societies in Asia. Officers elected were President, Chatar Singh (Malaysia); vice-presidents, B. Ramachandra Rao (India) and M. Barmawi (Indonesia); Executive Secretary, S. Radhakrishna (COSTED), and Treasurer, S. Kupratakuln (Thailand). Other members of the executive committee are A. Rajaratnam (Singapore), A. K. M. Siddig (Bangladesh), S. M. H. Tirmizi (Pakistan), C. Dahanayke (Sri Lanka), Felino Academia (Philippines), S. Ono (Japan) and P. C. W. Fung (Hong Kong). With the financial support of COSTED, the new society held a symposium on solid-state spectroscopy in Madras, an exhibition of "Demonstration Experiments in Physics" at Penang and a workshop on "Scientific Instrumentation in Developing Countries of Asia" in Bangalore. They will also hold conferences on the "Physics of Materials" in Madras, on "Methods of Teaching Physics" in Khon Kaen, on "Physics of Solid-State Devices" in New Delhi, on "Physics in Industry" in Japan and on "Mechanics of Physics Curriculum Development" in Sri Lanka.

They also plan these activities:

- ▶ Producing a directory of physicists, research facilities and laboratory equipment.
- ▶ Publishing an Asian journal of physics