

the conduct of science and technology:
► Physicists must assume at least some responsibility for their research and its applications.

► Although it may be impossible to control the science-technology spiral fully, a plurality of controls should be established to do as much as possible.

► Universities should maintain independence of industry, and industry should respect their independence.

► Industry should not attempt to influence university research programs other than suggesting certain themes or supporting work in a general way.

► Universities should not accept conditions of secrecy and industrial security.

► Industry should not insist on exclusive rights to inventions developed in the universities.

► Scientists should be informed of the military implications of their work.

► Relations between the military and the universities should at the very least follow similar rules as those between industry and the universities.

In conclusion, Casimir said, "No scientist in an academic position should of his own free will be active in or advise on military technology." He said that although this might be called hypocrisy, since the scientist would still enjoy the benefits of governmental protection, it still could be a meaningful gesture.

John Teem to direct AEC's physical-research division

John M. Teem is the new Director of the Atomic Energy Commission's Division of Physical Research effective 1 January 1973. He succeeds Paul W. McDaniel, who retired recently after heading the division for 12 years.

Teem is Director, Technical Staff, Corporate Research and Development for Xerox in Stamford, Connecticut. He has been working on the long range planning of research programs and on forecasting the economic and sociological environments for research projects.

Since January 1972 he has been a member of a small group of Xerox employees on social-service leave. During this time, Teem has been working in an experimental school in White Plains, New York, teaching physics in a science program he designed that is intended to prevent students from dropping out of school.

Before joining Xerox, Teem was a vice president of Electro-Optical Systems Inc. in Pasadena. Prior to this he was at Cal Tech where he did research in elementary-particle physics and taught undergraduate physics. He received his PhD in nuclear physics from Harvard in 1954 and worked at the Cyclotron Laboratory there.

The AEC Division of Physical Re-

search is responsible for basic research programs in the physical sciences at the AEC national laboratories and under contract at many universities and colleges. The Division budget for FY 1973 is about \$350 million.

New institute will study industrialized societies

The International Institute of Applied Systems Analysis, a nongovernmental institute dedicated to the study of the problems of industrialized societies, has been established in Vienna. The staff of the institute will work with visiting scholars, systematically comparing the ways in which the various nations have sought to deal with problems arising from industrialization, and attempting to devise new methods of analysis of these problems by mathematical modeling.

Jermen M. Gvishiani, representing the Soviet Academy of Sciences, was elected to a three-year term as chairman of the council of the institute. Howard Raiffa, professor of managerial economics at Harvard University, was appointed to the full-time post of director. The institute will be run by member organizations from 12 countries: the United States, the USSR, the United Kingdom, Canada, France, Italy, Japan, West Germany, the German Democratic Republic, Czechoslovakia, Poland and Bulgaria. The Soviet Academy of Sciences and NAS will each contribute \$1 million a year to the institute's annual budget of approximately \$3.5 million, with the other member institutions paying the remainder.

Soviet-designed accelerator to be made by American firm

The Institute of Nuclear Physics of the Siberian Section of the Academy of Sciences of the USSR has signed an agreement with an American firm, licensing the use of Soviet patents and technology in the production of low-energy electron accelerators for commercial applications.

The company, Energy Sciences Inc., of Burlington, Mass., which has been producing commercial accelerators with energies between 50 and 500 keV, will now offer Soviet-designed accelerators with higher energies. The accelerators can be used in industry for high-speed continuous curing of polymers and sterilization.

Those involved in the licensing agreement on the Soviet side include Gersh I. Budker, the director of the Institute of Nuclear Physics in Novosibirsk, V. A. Sederov and Vadim Auslander, Secretary of the Institute. The Institute

has been active in accelerators and controlled thermonuclear fusion.

The agreement gives ESI permission to use the knowledge, experience and patent rights of the Institute in producing electron-beam equipment, accelerator systems and high-voltage power supplies. Also, the Institute will give ESI technical drawings and data and will supply any parts that ESI might find difficult to manufacture quickly.

Sam V. Nablo, Vice President of ESI, told us that according to the agreement the Institute will provide technical assistance to ESI and will send technicians to the US if necessary. The Institute also agreed to "do all in its power" to allow ESI personnel to visit members of the Institute staff if it becomes necessary. Nablo said that several visits have taken place and "were handled very professionally by the Russians."

The actual licensing agreement was negotiated with Licensintorg, the Soviet government branch that deals with foreign licensing of Soviet technology.

ESI has so far taken delivery on an 800-kV resonance transformer accelerator (Elit 0.8) and has begun the manufacture of other units under the terms of the agreement.

in brief

A film about Lawrence Livermore Laboratory's Baseball II controlled-fusion experiment is available on free loan from the AEC film library, PO Box 62, Oak Ridge, Tennessee 37830 and Lawrence Livermore Laboratory, Technical Information Library L-3, Livermore, California 94550.

New addresses and telephone numbers for the offices of the American Association of Physics Teachers, the American Institute of Physics Education Division and the Society of Physics Students are: AAPT, Drawer A-W, Stony Brook, N.Y. 11790, (516) 862-8700; AIP Education Division, PO Box 617, Stony Brook, N.Y. 11790, (516) 862-8787; SPS, PO Box 775, Stony Brook, N.Y. 11790 (516) 862-8787.

The new Duane Physical Laboratories of the University of Colorado, including the buildings of the Joint Institute for Laboratory Astrophysics, the Laboratory for Atmospheric and Space Physics and the George Gamow Tower, were recently dedicated.

A telescope designed for both solar and stellar observations was installed at the Bartol Research Foundation in Swarthmore, Pa. A 36-inch light collector sends light to a fixed-position 24-inch image-forming telescope on the floor below. □