close contact with all institutions in Finland contributing to instruction and research in theoretical physics, and other universities will be represented on its administrative board. Close contacts will also be maintained with other European research centers, including the Nordic Institute for Theoretical Atomic Physics.

The officers of the Institute will include the director, the general secretary and an administrative board. In order to enable the director to concentrate on research work, most of the administrative duties will be handled by the general secretary and the administrative board. The board will be directly subordinate to the council of the University, and thus the Institute will be independent of the University's departments.

The director and one other member of the Institute will have the rank of professor. In addition there will be several scientists on fellowships from the Institute and from other organizations. Permanent staff members and graduate students of the physics departments of the University of Helsinki and of the Institute of Technology in Helsinki will also attend the lectures and seminars arranged by the institute.

At least two of the staff positions will be used for inviting foreign physicists to Helsinki. NORDITA has arranged for a visiting lecturer, Dr. Sho Tanaka from Kyoto, to come to Helsinki for the academic year 1964-65, and a few other visits are also likely. Therefore foreign languages, mainly English, will be used in the lectures and seminars.

The Institute will begin its operations in a provisional accommodation, as near the existing physics buildings as possible. There are two physics departments at the University of Helsinki: an old Department of Physics and a new Department of Nuclear Physics, both located in the same group of buildings. The Nuclear Physics Department furnishes instruction in theoretical physics and has a library for theoretical physics and a small computing center. In the near future it will get a building of its own as an annex to the old physics building. The permanent site of the new institute will be in this new

building, with the libraries of the physics departments and the computing center of the Department of Nuclear Physics at the disposal of the research institute. The library of the Institute of Technology in Otaniemi (a few miles outside the city), and to a certain degree also a big IBM computer to be located in Otaniemi, will be available to the staff.

Further information concerning the new institute and the opportunities to work there can be obtained from the Research Institute for Theoretical Physics, Siltavuorenpenger 20, Helsinki, Finland.

### CSIRO Computer Center

A new computer research facility established by the Commonwealth Scientific and Industrial Research Organization of Australia is scheduled to begin operations this spring. G. N. Lance, chief of the CSIRO's Computing Research Section, is directing construction of the facility, which is to be located in the Black Mountain section of Canberra.

Controlled Data Corporation of Minneapolis furnished the CSIRO with its data-processing equipment. A large 3600 with accessories and another small computer are now being installed, and the organization plans to purchase three additional small compatible computers for its laboratories in Sydney, Melbourne, and Adelaide.

#### ICSU and IUPAP

Freedom of travel for scientists was raised as an important issue at two recent international meetings. The 11th General Assembly of the International Union of Pure and Applied Physics, which was convened last September in Warsaw, expressed concern about the matter, and a formal resolution was adopted requesting that the International Council of Scientific Unions encourage its national members to promote exit and entry visas for all scientists attending international scientific conferences. It was further suggested that ICSU ask the United Nations to promote such freedom of movement. Two months later, at the November meeting of the ICSU General Assembly in Vienna, the Council passed a resolution of its own, and also created a special committee to consider the problem in detail. The resolution pledged that ICSU would take "all measures within its powers to insure the fundamental right of participation, without any political discrimination, of the representatives of every member organization of the ICSU concerned and of invited observers" at council and committee meetings.

Harrison S. Brown, foreign secretary of the US Academy of Sciences, is one of the committee members who will examine the restrictions on travel. In an interview reported in The New York Times on Nov. 29, 1963, Dr. Brown was quoted as having said, "It's a question of movement in and out of the polarized areas. It's not only the East Germans being cut off from the NATO countries and West Berlin from the East bloc but also interference with movements such as those of the mainland Chinese, or Negroes to South Africa, Jews to the Arab countries and so on." Dr. Brown pointed out that ICSU has only two choices in meeting the problem ". . . either hold scientific meetings only in neutral countries or persuade other host countries to admit the scientists".

In a release dated November 30, the International Council issued the following statement: "Every effort will be made to make it possible for scientists from every country, without any political discrimination, to participate in meetings organized by ICSU. This decision was taken as ICSU 'noted with regret that there are still parts of the world where difficulties exist in the free passage of scientists. This interferes seriously with the progress of modern science.' The venue of the next Assembly will be decided bearing this resolution in mind. At the Vienna meeting there was no such discrimination."

ICSU will hold its next general assembly only in a country which does not discriminate against specific groups.

Elections were held by both ICSU and IUPAP during their general assembly meetings. Harold W. Thompson, a spectroscopist from Oxford University, became president of ICSU, succeeding Sven Hoerstadius of Swe-

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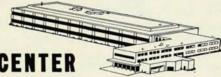
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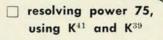
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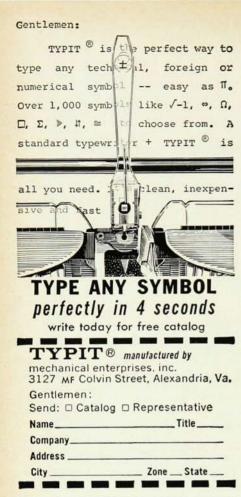


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den, who remains one of the principal officers with the title of past president. The new secretary general is Dionyz Blaskovic, vice chairman of the Czechoslovak Academy of Sciences. Georges Laclavere, a French geographer, was elected treasurer.

At the IUPAP meeting, C. C. Butler was elected secretary-general, succeeding Pierre Fleury of the Institut d'Optique in Paris, who had held that post for many years. Professor Butler is head of the Physics Department at Imperial College in London. Professor Butler, collaborating with G. D. Rochester in 1947, discovered the first of the so-called V-particles, in cosmicray showers. Observed initially in twocloud-chamber photographs, existence of the particles was confirmed two years later by Carl D. Anderson and colleagues. Professor Butler's most recent research has employed bubble chambers in the study of elementary particles.

An urgent need for reorganization led ICSU to convene its general assembly a year earlier than usual. Formerly, ICSU had an eight-man Bureau and an Executive Board, which consisted of the Bureau members and one representative from each of ICSU's fourteen scientific unions. Under the reorganization, an executive committee was formed instead. The latter consists of the four principal officers, one member from each scientific union, and ten members representing national academies and research councils of ten of the fifty-one nations associated with ICSU. Physicists among the national members of the committee are: Y. Fujioka, Japan; R. V. Garcia, Argentina; I. Malecki, Poland; D. F. Martyn, Australia; and G. Polvani, Italy. In an earlier action, the IUPAP general assembly had urged that, in ICSU's reorganization, the balance of power held by the scientific unions over the national members be preserved.

IUPAP is one of the fourteen scientific unions associated with ISCU. Thirty-four countries, from all parts of the world, are associated with IUPAP. The United States participates through a national committee appointed by the National Research Council. IUPAP's primary activities are: promoting international coopera-

tion in physics, coordinating the preparation of abstracts and tables of physical constants, standardizing symbols, units, and nomenclature, and organizing conferences on special topics. Financial support for these activities has been fairly constant for the last several years. In 1962 IUPAP received \$24,000 in member dues and \$14,000 from UNESCO.

## Tropical Meteorology

An Institute of Tropical Meteorology will be established at Poona, India, as part of the Indian Meteorological Department. Under the terms of an agreement signed last August in New Delhi, the United Nations Special Fund will provide a total of \$873 500 toward the project through the World Meteorological Organization, which has agreed to serve as the administering agency. An additional \$1.05 million will be supplied by the Indian Government.

The operations of the Institute will involve research on problems in tropical and subtropical meteorology, including the monsoons and their forecasting, warnings for tropical cyclones, medium-range forecasting for agriculture and allied fields, flood forecasting, and development of instrumental techniques for surface and upper atmospheric observations. The Institute is intended ultimately to develop into an international center for research in tropical meteorology.

## Astronomy in Venezuela

The Cagigal Naval Observatory of the Department of Navigation and Hydrography in Venezuela is currently engaged in expanding its facilities for research in astronomy and astrophysics. Equipment installed last fall at the Observatory's site in Caracas include a Photo-Zenith telescope, an Am-100 transit, a Universal theodolite AUZ-27, and a Transit AM-190.

In addition, equipment for astrophysical experiments (including a Schmidt camera telescope, a refractor of 650 millimeters, a Cassegrain-Coude telescope, and a double astrograph) will be installed on the grounds of the University of the Andes in Mucubaji in the State of Mérida.