### Scientific Meetings

### International Council of Scientific Unions

The International Council of Scientific Unions (ICSU) is prepared to meet the new responsibilities thrust upon it by recent developments in the international field. This fact was amply demonstrated at the 7th general assembly of the council held at Oslo, Norway, 9–12 Aug.

Already engaged in timely and useful world-wide scientific pursuits, ICSU plans to engage in other equally practical enterprises. It has increased its scientific strength by taking new unions into its family, and other unions will almost inevitably seek admission later. It has integrated its work further into the interests of the countries by admitting the U.S.S.R. and facilitating the entry of other countries as national members. It has planned to strengthen its financial independence by adopting a revised pattern of contributions from national members.

The United States, moreover, has shown an increasing interest in the programs of ICSU and its unions. It is probably destined to play an even greater role in the future. An American, Lloyd V. Berkner, was elected to the presidency [Science 122, 566 (1955)], and for the first time a general assembly of ICSU will convene in the United States in 1958.

Since the previous assembly at Amsterdam in 1952, ICSU has carried forward with foresight and vigor in organizing the forthcoming International Geophysical Year (IGY), described in earlier issues of Science [119, 3A (9 Apr.), 457, 569 (1954); 121, 664, 751 (1955); 122, 234, 322, 461, (1955)]. A report on the progress of this world-wide program highlighted a new and unique organization for carrying out international scientific cooperation. In order effectively to develop comprehensive programs, ICSU, which initiated the undertaking, asked certain of its unions to set up their own planning committees and sought the collaboration of other interested international organizations. It also asked that national committees be established to prepare national plans for the IGY study. The plans of all these groups are

being coordinated by the Comité Spécial de l'Année Géophysique Internationale (CSAGI) that ICSU had created at the Amsterdam assembly. This kind of organization reflects the considered thoughts of scientific and national members of ICSU, as well as those of others, and combines the efforts of all in bringing into the programs new features demanded by modern times.

Two such features of the IGY program merited special mention at the Oslo meeting; the Antarctic study and plans for launching an artificial world satellite. In the Antarctic ICSU will make possible the study of one-sixth of the world, a large part of which has not been seen by the human eye. With regard to the plan for the satellite launching [Science 122, 322 (19 Aug. 1955)], the peaceful international setting in which it was announced was emphasized, and the scientific objective of ICSU and the IGY, as opposed to the political objective, was pointed out.

Although ICSU has already begun the IGY activity, new developments in the world require that it enter upon other scientific fronts. Thus, at the assembly the delegates considered plans for the study of the biological effects of nuclear radiation. The International Union of Biological Sciences at its Rome meeting last April had asked that the general assembly at Oslo accept responsibility for undertaking such a study. During the discussion of this matter, the new moves on the part of the United Nations for clarification of issues connected with the biological effects of nuclear radiation were considered. In the light of these new moves, the assembly decided to offer to the United Nations through UNESCO its services in connection with the scientific aspects of such matters. In order to provide this assistance, moreover, the assembly agreed that ICSU should establish a special committee to delineate the problems to be explored and to coordinate the information from the studies under-

In the matter of extending ICSU's cooperation to the United Nations, discussions indicated that ICSU can assume only a small, but nevertheless important, part in the study of radiation effects.

This part relates to basic science. It is the part in the larger study that precedes the interpretations that must be made and the decisions that must be reached by other agencies. All the information on which decisions must be made is not yet available. If all the nations of the world provide the facts relating to radiation effects, scientists may proceed in assuming their integral role in the larger study. Since the United Nations will apparently consider a mechanism for this collection, the assembly believed that ICSU should face its responsibility by extending the scientific services it is competent to render.

The accumulation of new kinds of scientific data, often cutting across scientific disciplines, and the specialization on the part of certain scientists to the study of these materials are symbolic of the swift and changing times. This modern development of scientific thought has led to fresh groupings of scientists who have reoriented the statements of practical and theoretical problems, reordered a segment of scientific knowledge, and worked out unique scientific methods and techniques. Such new groups of scientists are represented by the International Union of Physiological Sciences and the International Union of Biochemistry. These unions had requested admission to ICSU as new scientific members. In the light of current trends in the growth of scientific thought and on the basis of the qualifications and activities of these organizations, the assembly considered the admission of these two unions timely and desirable. The assembly decided to defer consideration of admitting the International Union of Scientific Psychology, however, pending an advisory report, to be prepared and submitted to the executive board next summer by representatives from appropriate ICSU Unions.

ICSU is expanding its activities, not only by admitting new scientific unions, but also by bringing in new national members. The assembly welcomed the U.S.S.R. into ICSU, and now that country has national, as well as scientific, representation. The Soviet Union already adheres to four of the ICSU scientific unions.

In order to facilitate complete representation in ICSU, the assembly agreed that when a country adheres to one or more of the ICSU unions, the bureau shall invite that country to become a national member. The assembly also agreed that countries that had been delinquent for the past few years in the payment of their dues should be advised of the new pattern of membership contributions, described in following paragraphs, and invited to join ICSU under the revised arrangement.

The assembly decided to strengthen

ICSU's financial structure. A disparity between the increasing need for operating funds and the amounts annually available made this step necessary. ICSU's income is dependent on dues paid by national members and by scientific members, but this income has proved insufficient in the face of rising administrative and operating costs. UNESCO has provided in recent years an annual subvention, a considerable portion of which has had to be used for administration. The assembly acknowledged that the receipt of the grants-inaid for the work of the unions and other agencies of ICSU has been of the utmost benefit. The assembly believed, however, that in order that ICSU maintain its equality of status, a sufficient income in its proper right, particularly for its own administration, appeared to be a necessity.

As is indicated in foregoing paragraphs, new unions have been admitted into ICSU, and other well-qualified unions will doubtless apply for membership in the near future. New ventures, moreover, have recently been undertaken by ICSU, two of them conspicuously important—the ICSU Abstracting Board and the IGY. The abstracting board makes commonly available in usable form, through arrangements with abstracting journals, the latest scientific knowledge in physics and chemistry. These new undertakings will doubtless be expanded, and other new ventures are likely to follow.

All these matters were thoroughly discussed at the assembly, which reached a decision to augment ICSU's income by adopting a new plan for the payment of national membership dues. In contrast with the present plan, under which national members uniformly contribute \$196 and which yields a total annual income of roughly \$8000, the new plan is expected to yield about \$50,000. At the same time, the plan is so devised that any country need not contribute more than a minimum of \$100 but may pay a larger amount if it chooses. Under the revised plan, membership is divided into six categories. A base contribution of \$20 will be made by a national member choosing to subscribe to category I membership; \$40 if category II; \$80 if category III; \$150 if category IV; \$300 if category V; and \$600 if category VI. The annual dues for a national member will be determined by multiplying the base contribution by the number of ICSU unions to which the national member adheres. Thus, assuming that the United States chooses to be a category VI member and adheres to 13 scientific unions, its annual dues will amount to \$7800 ( $$600 \times 13$ ). The new plan is expected to come into effect in November 1956. This date gives national members ample time to decide on their categories.

The United States' interest in ICSU's activities and those of its unions has been steadily increasing. American scientists from the Government, the universities, and other institutions have more and more taken leading roles in the programs of these organizations. The National Academy of Sciences-National Research Council has assumed a more active part as the adhering body to these international organizations. Certain Government agencies, particularly the Department of State and the National Science Foundation, have increasingly been concerned with these programs of international science. It was not unnatural, therefore, that the composition of the American delegation [Science 122, 410 (1955)] to Oslo should reflect the interests of all these groups.

As an indication of its increased interest in the programs of ICSU and its unions, the U.S. delegation extended to ICSU, on behalf of the United States Government and the Academy–Research Council, an invitation to hold its 8th general assembly in this country. The assembly unanimously accepted. It will accordingly meet in Washington, D.C., in 1958.

Walter M. Rudolph U.S. Department of State, Washington, D.C.

### Meeting Notes

■ The Society of Rheology will hold its annual meeting in New York at the Henry Hudson Hotel, 2–4 Nov. At each of five technical sessions, four papers will be presented, thus allowing ample time for discussion and questions.

This year's meeting will feature an unusually wide field of subject matter: plasticity studies of metals; flow phenomena encountered in geologic studies; and rheology of polymeric materials. Two sessions will be devoted to papers on a number of different subjects, including hypoelasticity, fracture of viscoelastic liquids, and determination of dispersion structure by viscometry. As in the past, nonmembers are welcome. Complete programs are available from F. D. Dexter, Bakelite Co., Bound Brook, N.J.

■ Surgery of the heart will be featured in the program of the 41st annual clinical congress of the American College of Surgeons that is to take place in Chicago, Ill., 31 Oct.—4 Nov. The program includes 30 separate lectures, scientific exhibits, discussion sessions, and television and motion-picture demonstrations describing heart operations considered impossible until very recently.

Attendance at the congress is expected to reach 10,000, including surgeons and other physicians from all over North America and many foreign countries. In addition to heart surgery, the program will present results of research and demonstrations of new techniques in all branches of surgery. Especially important is the "Forum on fundamental surgical problems," in which younger surgeons conducting original research programs will present the results of their experimental work to an audience of practicing surgeons.

More than 175 projects will be considered this year, grouped into forum sessions on surgery of the heart and great vessels, infections and burns, surgery of the gastrointestinal tract, urology, plastic surgery, metabolism and nutrition, surgery of the liver and pancreas, orthopedics, tumors, gynecology and obstetrics, surgery of the lungs, and neurosurgery.

During the congress, operations performed at the University of Illinois Research and Educational Hospitals will be telecast in color to screens in the hotel meeting rooms. Surgeons in the audience may relay questions to the operating team while the operation is in progress, and the questions may be answered and discussed during the presentation.

Major addresses will be presented by Warren H. Cole of the University of Illinois, who is succeeding Alfred Blalock of Johns Hopkins University as president of the college, and by Grayson Kirk, president of Columbia University. Frank B. Berry, Assistant Secretary of Defense, will deliver the annual Trauma Oration; his subject is "Mass casualties."

- At its meeting in Zurich on 23 July, the Commission on Macromolecules of the International Union of Pure and Applied Chemistry made the following decisions regarding the International Symposium on Macromolecular Chemistry, to be held in Israel, 3–9 Apr. 1956:
- 1) From 10 to 20 minutes will be allowed for each paper.
- 2) The official languages of the symposium will be French and English.
- 3) Before 1 Dec. 1955, a full abstract (up to 1000 words) should be sent to the central office of the symposium at the Weizmann Institute of Science, Rehovoth, Israel.
- 4) Before 1 Feb. 1956, two copies of the manuscript should be sent to the central office of the symposium.
- 5) Abstracts of the papers to be presented will be printed by the Weizmann Scientific Press in book form and provided, free of charge, at the beginning of the symposium.
- 6) Papers and discussions will be published in a special issue of the *Journal*



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of Polymer Science before the end of

7) Preprints of the manuscripts will not be available at the symposium, but galley proofs will be sent to authors by the *Journal of Polymer Science*.

### **Forthcoming Events**

#### November

3-4. Hawaiian Acad. of Science, Honolulu, T.H. (D. C. Cox, 1527 Keeaumoku St., Honolulu 14.)

7-9. Assoc. of Military Surgeons of the United States 62nd annual, Washington, D.C. (AMSUS, 1726 Eye St., NW, Washington 6.)

7-9. Geological Soc. of America, annual, New Orleans, La. (H. R. Aldrich, 419 W. 117 St., New York 27.)

7-9. Mineralogical Soc. of America, New Orleans, La. (C. S. Hurlbut, Jr., 12 Geological Museum, Oxford St., Cambridge 38, Mass.)

7-9. Paleontological Soc., New Orleans, La. (K. E. Caster, Dept. of Geology, Univ. of Cincinnati, Cincinnati 21, Ohio.)

7-9. Soc. of Economic Geologists, New Orleans, La. (O. N. Rove, Union Carbide and Carbon Corp., 30 E. 42 St., New York 17.)

8. Assoc. of Geology Teachers, New Orleans, La. (R. L. Bates, Dept. of Geology, Ohio State Univ., Columbus 10.)

9-12. American Council of Independent Laboratories, Phoenix, Ariz. (H. M. Dudley, 4302 East-West Highway, Washington

9-13. International Symposium on Tuberculosis in Infancy and Childhood, Denver, Colo. (L. S. Smith, National Jewish Hospital, Denver 6.)

10. Assoc. of Vitamin Chemists, Chicago, Ill. (M. Freed, 4800 S. Richmond, Chicago 32.)

10-11. American Philosophical Soc., Philadelphia, Pa. (L. P. Eisenhart, 104 S. 5 St., Philadelphia 6.)

10-12. American Astronomical Soc., Troy, N.Y. (J. A. Hynek, McMillin Observatory, Ohio State Univ., Columbus 10.)

10-12. American College of Cardiology, 4th, Memphis, Tenn. (P. Reichert, American College of Cardiology, Empire State Bldg., New York 1.)

11. Centennial Symposium on Modern Engineering, Philadelphia, Pa. (C. C. Chambers, Univ. of Pennsylvania, Philadelphia.)

11-12. Inter-Society Cytology Council, 3rd annual, Cleveland, Ohio. (P. F. Fletcher, 634 N. Grand Ave., St. Louis 3. Mo.)

11-13. United Cerebral Palsy Convention, 6th annual, Boston, Mass. (Convention Dept., UCP, 369 Lexington Ave., New York 17.)

13-18. American Soc. of Mechanical Engineers, 75th annual, Chicago, Ill. (C. E. Davies, 29 W. 39 St., New York 18.)

14-16. Technical Conf. on Electrical

Techniques in Medicine and Biology, 8th annual, Washington, D.C. (T. Rogers, Machlett Laboratories, 1063 Hope St., Springdale, Conn.)

14-17. International Automation Exposition, 2nd, Chicago, Ill. (R. Rimbach Assoc., 845 Ridge Ave., Pittsburgh 12, Pa. 14-17. American Petroleum Inst., 35th

14-17. American Petroleum Inst., 35th annual, San Francisco, Calif. (API, 50 W. 50 St., New York 20.)

14-18. American Public Health Assoc., Kansas City, Mo. (R. M. Atwater, APHA, 1790 Broadway, New York 19.)

14-18. New England Inst. for Hospital Administrators, 7th, Boston, Mass. (D. Conley, ACHA, 620 N. Michigan Ave., Chicago 11, Ill.)

15-17. American Meteorological Soc., Honolulu, Hawaii. (K. C. Spengler, AMS, 3 Joy St., Boston 8, Mass.)

15-17. Geophysical Soc. of Hawaii, Honolulu. (L. Eber, Pineapple Research Inst., Honolulu.)

16-17. Industrial Hygiene Foundation, 20th annual, Pittsburgh, Pa. (C. R. Walmer, IHF, Mellon Inst., Pittsburgh.)

16-18. Soc. for Experimental Stress Analysis, Chicago, Ill. (W. M. Murray, SESA, Box 168, Cambridge 39, Mass.)

17-19. American Anthropological Assoc., Boston, Mass. (W. S. Godfrey, Jr., Logan Museum, Beloit College, Beloit, Wis.)

18-19. American Mathematical Soc., Knoxville, Tenn. (E. G. Begle, Yale Univ., New Haven 11, Conn.)

(See 16 Sept. issue for comprehensive list)