apparatus which is widely used in clinical work. A brilliant piece of work is KROGH'S and LINDHARD'S investigation on the relative value of fat and carbohydrate as sources of muscular energy, demonstrating an efficiency which is higher on carbohydrate diet than on fat diet. For the gas analysis in these experiments KROGH constructed a gas analysis apparatus accurate to 0·001 per cent. The relation between temperature and metabolism in various animals has been investigated by KROGH. For the purpose of such investigations on chrysalides KROGH constructed his micro-respiration apparatus.

In 1928 KROGH's laboratory was transferred to the new "Institute of Physiology of the University" built from means granted by the Rockefeller Foundation and the International Education Board. The name of the laboratory was changed to: The Laboratory of Zoophysiology. In the more spacious localities of the new institute a greater number of pupils and collaborators benefitted from KROGH's inspiring leadership. The work of the laboratory was continued in the same spirit and on the same variety of fields as hitherto. The physiology of severe muscular exercise was a main-subject in the work of KROGH's laboratory during a number of years following the transfer of the laboratory to the new building. In this work KROGH took an active part. He also brought his vast experience to bear upon problems within applied physiology (tests for pilots, house-heating problems). At the same time he continued his studies on the functions of capillaries and took up new subjects such as the composition of plankton, dissolved substances as food for aquatic organisms, and the organic metabolism of sea-water. KROGH's personal research work became gradually more focussed on zoophysiology proper, that is on investigations on the physiology of animals, not merely as a means of elucidating human physiology but rather as an object of its own. The osmoregulation of aquatic animals became his main-subject. A considerable part of KROGH's papers from his later years may be placed under the heading: the active and passive exchange of inorganic ions through the surface of living cells and living membranes generally.

These studies of general significance were carried out on a great variety of experimental objects and under rather extensive use of the isotope technique.

After having retired from his chair, KROGH continued his scientific work with unabated vigour. In his private house, built shortly before he retired, KROGH had a spacious and well-equipped laboratory fitted up. Here KROGH during his last years was engaged in investigations on a large scale on the physiology of the loctus, inaugurated at the instance of the British Government.

KROGH's death will be mourned throughout the scientific world. His life will for ever remain an inspiration for those who earnestly devote their lives to science.

EINAR LUNDSGAARD

## Congresses

### SWEDEN

### XVIII International Physiological Congress

The XVIII International Physiological Congress will be held at Copenhagen the 15th to 18th of August, 1950.

Preliminary program and registration forms will be sent out and will from the 1st of January, 1950, be obtainable from local societies of Physiology, Biochemistry, and Pharmacology, or from the bureau of the congress:

*Zoofysiologisk Laboratorium,*
*32 Juliane Mariesvej,*
*Copenhagen Ø.*

### NETHERLANDS

### IX International Congress of Entomology

The IX International Congress of Entomology will be held at August 17th–24th, 1951, in Amsterdam (Netherlands). Entomologists wishing to receive in due course programs and application forms are requested to communicate already now with the Secretariat, c.o. Physiologisch Laboratorium, 136 Rapenburgerstraat, Amsterdam.

Further communications will follow.

### Expédition scientifique en Afrique équatoriale orientale

A partir du 10 janvier la Direction des Laboratoires Biologiques S.A. de Djeddah (Saud-Arabie) organisera de nouveau une expédition scientifique en Afrique équatoriale orientale avec la route suivante:

*Diredaua/Hadama/Allata/Gardulla/Debra Marcos/Gondar*

Les guides en chef seront les MM. M. KAMAL, F. J. OYGUR et M. FUAD. Toute personne qui s'y intéresse s'adresse à la Direction des Laboratoires biologiques S.A., Djeddah (Saud-Arabie).

## PRAEMIA

### Tine Tammes Prizes for 1950 and 1952

The Directors of the Tine Tammes Prizes, Professors Drs. W. A. GODDIJN, R. PRAKKEN, and M. J. SIRKS, announce:—

*One Prize for the year 1950* of 500 guilders Dutch currency (about 46 pounds sterling) for a study on the cytogenetics of a group of phanerogamous species;

*One Prize for the year 1952* of 500 guilders Dutch currency for a study on genes and their chemical activity.

*Conditions:*—Manuscripts with illustrations a.o. ready for press, should reach Professor SIRKS before December 1st, 1950, respectively 1952. The Prize paper will be published in the periodical Genetica before July 1st, 1951, respectively 1953. Other papers which do not win the prize may be accepted by the editors of Genetica for publication in the same number of this periodical. Authors will receive one hundred and fifty reprints free of charge.

*Address:* Professor Dr. M. J. SIRKS, Genetisch Instituut, Huis de Wolf, Haren (Gron.) Netherlands.