

of collaboration as might be practicable to strengthen the programmes of the two organisations within the limits of their joint concern; the Executive Committee of the Council has appointed a committee to consult with representatives of the new Organisation, and it is hoped that much may arise from their discussion to the mutual advantages of both bodies. The clause introducing this resolution may well be taken as defining the task now facing the International Council of Scientific Unions:

"Il est urgent de reconstituer et de développer les moyens permettant aux savants de tous les pays d'échanger des renseignements et de travailler en commun au développement de la science et à son utilisation au service de l'humanité".

OBITUARIES

Andrei Petrovich Semenov-Tian-Shanski

THE whole development of insect taxonomy and biogeography in Russia during the last half-century has been most closely connected with the name of A. P. Semenov-Tian-Shanski, whose death from pneumonia during the blockade of Leningrad in 1942 has now been reported.

Andrei Petrovich was born on June 9, 1866, the son of the famous geographer, Peter Semenov, who was later granted the addition Tian-Shanski to his name as a tribute to his exploration of the Central Asian ranges. The father's love of Nature and serious interest in its study were inherited by the son, who published his first scientific paper while still a student at the University of St. Petersburg, from which he graduated in 1889. This paper was the forerunner of a long series (more than 250) of works on entomology, many of them monographic in character. The official career of Andrei Petrovich was brief, as he was on the scientific staff of the Zoological Museum of the Academy of Sciences only for a short period (1890-96) and then again some years before his death. As he had, however, considerable private means, he was able to devote himself entirely to his scientific work.

Semenov's main interest was the taxonomy of the Colcoptera, but no less outstanding were his contributions to the systematics of the Hymenoptera (particularly Chrysididae and Siricidae) and the Dermaptera. His renown as a taxonomist was not due merely to the large number of descriptions (some eight hundred new species, about a hundred new genera and one new family), but also to their unique precision, combined with a profound critical appreciation of the value of morphological characters, which he never studied on a 'type' but always on a large series of specimens. Theoretical problems of taxonomy attracted him strongly, and in 1910 he produced a paper on the limits of species and of lower taxonomic categories, where morphological, phylogenetic and biogeographical criteria were used to define the categories and to represent them as phases of a dynamic system of organisms in process of evolution.

Biogeographical and evolutionary aspects always loomed largely in Semenov's taxonomic work, and many of his masterful monographs have a much wider interest than for specialists in the particular group. His contributions to the zoogeography of Central Asia are particularly noteworthy, and his crowning

achievement was a zoogeographical map of the Palearctic Region published in 1936.

As a president of the Russian Entomological Society for most of his life; joint founder of the *Revue Russe d'Entomologie*; initiator and most active member of the Biogeographical Commission of the Russian Geographical Society; and one of the most prolific writers on entomology, Semenov had a profound influence on the development of Russian entomology. A large number of insect taxonomists and biogeographers now working are proud to call themselves his pupils, though he never taught except by example and by incisive criticism of published papers in his many reviews. He was also a most conscientious correspondent, and I was one of the many who derived great benefit from his thorough, and often very outspoken, discussions of scientific problems submitted to him.

Most entomologists tend to be one-sided specialists, but A. P. Semenov, with his aristocratic, highly cultured background, was anything but narrow in his interests. Protection of Nature; organization of museums; geographical exploration; game laws—such was the range covered by his writings in the technical and general Press. A problem that particularly attracted his attention was that of the Russian Navy, and he was even elected in 1914 the president of the Russian Naval League. His most serious hobby, however, was the study of the classics, and he specialized in verse translations of Horace. His knowledge of classical languages found its use in diagnoses of insects, which are written not in the usual 'entomological Latin', but in a Latin which is beyond most entomologists. In the later years of his life, when he had almost lost his sight, he concentrated on the theory of verse, and wrote a book on Pushkin's life and poetry.

Although he travelled abroad only once, when young, Semenov-Tian-Shanski was probably the best-known Russian entomologist in every country of the world. He was an honorary fellow of the Royal Entomological Society of London and of the Prague Entomological Society; life-member of the Société Entomologique de France; and of course honorary member of a score of Russian entomological and natural history societies.

Vast private entomological collections (more than 700,000 specimens, including hundreds of types), library and archives were all presented by Semenov during his life to the Academy of Sciences.

B. P. UVAROV.

Mr. Alfred Lucas, O.B.E.

THE death of Mr. Alfred Lucas at Luxor on December 10, at the age of seventy-six, marks the close of many years of useful service to chemistry and archaeology. His scientific career began with the analysis of foods and drugs at the Government Laboratory, London; but persistent ill-health forced him, after several years, to withdraw to the warmer climate of Egypt. Recovered somewhat, he joined the Egyptian Government service and in time became responsible for the Survey Department Laboratory which, under his able direction, developed beyond recognition. From a concern devoted primarily to the analysis of minerals, it became the Chemical Department of the Ministry of Finance, embodying the Assay Office and the petroleum refinery at Suez. By the routine testing of materials in this laboratory, considerable economies were