

CHRONICLES

DESERVED REWARD

The Presidium of the Academy of Sciences of the USSR and the Presidium of the Central Board of the D. I. Mendeleev All-Union Chemical Society have awarded the D. I. Mendeleev Gold Medal for 1971 to S. Yu. Yunusov, corresponding member of the Academy of Sciences of the USSR, Academician of the Academy of Sciences of the Uzbek SSR and of the German Academy of Natural Sciences, Hero of Socialist Labor, for investigations in the field of alkaloid chemistry.

This medal crowns distinguished work in chemistry and chemical technology.

Having begun the study of alkaloids of the plants of Central Asia in 1933 under the direction of the well-known Russian chemist Academician A. P. Orekhov, S. Yu. Yunusov has devoted himself wholly to the continuation and development of these investigations.

Under his direction, in 1943 a laboratory was created in the Institute of Chemistry of the Academy of Sciences of the Uzbek SSR where the study of alkaloids and their interrelationship with other classes of plant substances in each organ of the plant in dependence on the period of vegetation and the growth site was begun which made it possible to determine the laws of the dynamics of the accumulation, the mechanism of the formation, and the role of alkaloids in the vital activity of plants. These laws have enabled the search for alkaloid-bearing plants to become more purposeful, with excellent results. Alkaloids have become more accessible.

Since 1956, S. Yu. Yunusov has continuously directed the Institute of the Chemistry of Plant Substances of the Academy of Sciences of the Uzbek SSR, created on the basis of the laboratory for alkaloid chemistry, where 14 workers with the degree of doctor and 72 candidates of science are working at the present time and where glycosides, lipids, plant proteins, phosphorus-containing organic compounds, lignins, lactones, acids, coumarins, flavonoids, carbohydrates and substances fulfilling the role of plant regulators are being studied on the same principles as alkaloids. As the staff is increased, new classes of plant substances are being included in the sphere of study. Another distinguishing feature of the Institute is the inclusion of a complex of specialists in its work: chemists, physicists, pharmacologists, chemotherapists, phytotoxicologists, botanists, and technologists, which enables investigations to be performed on a modern level with the lowest possible expenditure and enables them to obtain results of theoretical and practical importance.

About 4000 species of plants, more than half of which proved to be alkaloid-bearing, have been investigated with the direct participation and direction of S. Y. Yunusov. New sources for the preparation of more than 100 alkaloids of practical importance have been found. The number of alkaloids isolated is 255 including 140 new ones, and the structure of 134 alkaloids has been established, the absolute configurations having been shown for many of them. At the same time, the mechanisms of many reactions have been studied, and a number of regularities in the structure of alkaloids have been elucidated.

As new medicinal substances, 22 alkaloids have been or are being introduced into industry. The technologies of the production of all of them have been developed.

S. Yu. Yunusov has published more than 400 scientific papers and the handbook "Alkaloids." He has devoted much attention to the training of staff, including that for other republics; among his pupils there are 55 candidates of science, nine of whom have already defended doctoral dissertations.

S. Yu. Yunusov has been the chief editor of the journal "Khimiya Prirodnikh Soedinenii" ["Chemistry of Natural Compounds"] since its foundation.

Editorial Board

Translated from *Khimiya Prirodnikh Soedinenii*, No. 3, pp. 388-389, May-June, 1971.

© 1973 Consultants Bureau, a division of Plenum Publishing Corporation, 227 West 17th Street, New York, N. Y. 10011. All rights reserved. This article cannot be reproduced for any purpose whatsoever without permission of the publisher. A copy of this article is available from the publisher for \$15.00.