FIFTH INTERNATIONAL CONGRESS ON STEROID HORMONES

N. K. Abubakirov

The congress was held from October 29 to November 4, 1978, in New Delhi, capital of India. Scientific forums of this type are held by the International Organization Committee (President L. Martini, Italy) every four years. The preceding, fourth, International Congress was held in 1974 in Mexico. The organizers of the fifth Congress were the Indian Endocrinological Society and the All-India Institute of Medical Sciences.

The Soviet delegation to the Fifth International Congress on Steroid Hormones included Corresponding Member of the Academy of Sciences of the USSR I. V. Torgov (Head of the Delegation), S. N. Ananchenko, T. I. Barkova, (all from the M. M. Shemyakin Institute of Bioorganic Chemistry, Academy of Sciences of the USSR), A. V. Kamernitskii (N. D. Zelinskii Institute of Organic Chemistry, Academy of Sciences of the USSR), N. K. Abubakirov (Institute of the Chemistry of Plant Substances, Academy of the Uzbek SSR), and K. A. Koshchenko (Institute of the Biochemistry and Physiology of Microorganisms, Academy of Sciences of the USSR, Pushchino, Moscow oblast). A small group of tourists from the Soviet Union (leader of the group — N. E. Voishvillo) was also present. In addition to the official delegation, participants in the Congress from the USSR included V. A. Rogozhin (Director of the Leningrad Scientific-Research Institute of Physical Culture and Member of the Medical Commission of the International Olympic Committee) and A. Viru (Department of the Physiology of Sport of Tartu State University). They participated in the work of the Congress within the framework of preparation for Olympiad-80 in Moscow.

A total of about 800 persons from 44 countries of the world took part in the Congress. The Indian Government devoted great attention to the Congress — the President of the Republic gave a speech of welcome at its opening.

The scientific program of the conference was broad and diverse. About 570 papers were delivered in the form of plenary lectures, contributions to the symposium, and short communications. Round-table discussions were also planned.

The work of the Congress covered various aspects of the study of steroid hormones. It is sufficient to state that 16 sections, largely working simultaneously, were created for hearing the free (short) communications. Subjects discussed at the section meetings were the chemistry of steroids, analytical methods for their determination, and their biosynthesis and metabolism, questions of the interactions of steroids with proteins, pharmacology, the mechanism of the action and clinical aspects of the use of steroid hormones for various purposes, steroids as contraceptives, the role of steroids in the biology of reproduction, the neuroendocrine function of steroids, aging and steroids, nutrition and steroids, and a number of other closely related questions.

Abstracts of the brief communications have been published in the form of a special issue of the Journal of Steroid Biochemistry (Volume 9, No. 9, September, 1978). The scientific program of the Congress was opened by the plenary lecture of Prof. E. Diczfalusy (Sweden): "Gregory Pincus and steroid contraceptives: a new step in the history of mankind." His lecture was devoted to the history of the creation and further improvement of oral contraceptives. This problem is of prime importance in a number of developing countries of Asia and Africa and it is therefore not surprising that the discussion of questions connected with the possible regulation of the size of the family with the aid of steroid hormones was given no little value at the Congress. Among other plenary lectures, the attention of chemists was attracted by that of R. Breslow (U.S.A.) on "The use of a matrix in the synthesis of steroids."

Four lectures were heard at a symposium on "Advances in the chemistry of steroids." Of these the most interesting was that of U. Eder (West Berlin) on "The total synthesis of natural and unnatural steroid hormones," in which methods for the synthesis of estrone, 8α-H derivatives of estrone, and 7α- and 7β-methyl estrones and of a 19-dinorsteroid and of some racemic C-norhomosteroids with the aid of a single "building block," including steroid rings

Translated from Khimiya Prirodnykh Soedinenii, No. 2, pp. 245-246, March-April, 1979.

 0009-3130/79/1502-0216$07.50

C and D were discussed, and a lecture by G. H. Phillips (United Kingdom) on the synthesis of some water-soluble steroids and the dependence of the anesthetic properties of the compounds obtained on their structure.

Members of the Soviet delegation gave several lectures. In the "Steroid-protein interaction" section, a communication of "The influence of structural and steric changes in the molecule of estradiol on the migration of the estrogen-receptor complex from the cytoplasm into the cell nucleus of the rabbit uterus" was given by G. A. Chernyaev (a member of the tourist group) in the name of a group of authors including T. I. Barkov, S. N. Ananchenko, and I. B. Sorokin. In the "Metabolism" section, K. A. Koshhenko delivered a lecture on the subject: "Features of the transformation of steroid compounds by microorganisms when deposited on polyacrylamide gel." Two other lectures were delivered in the chemical section: by I. S. Levina (tourist group) on the pentaranes — a new class of active gestagens — (coauthors A. V. Kamernitskii and G. E. Kulikova) and by the author of the present note on the determination of the structures of new phytoecdysones (coauthors M. B. Gorovits and B. Z. Usmanov). Friendly relationships exist between the Soviet and the Indian scientists working in the field of bioorganic chemistry: combined symposia on the chemistry of natural compounds are held regularly, every two years, alternately in the Soviet Union and in India. The last, fifth, Indo-Soviet symposium was held in May, 1978, in Erevan. The Soviet delegation met some of the participants of the symposia again in India.

Congresses of this type permit investigators with different points of view to approach and evaluate more profoundly the modern problems and tasks facing a concrete area of understanding and to determine the level of scientific work existing at a given moment, and the contacts of specialists with different interests promote the mutual enrichment on thoughts and ideas.