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ON THE 90th ANNIVERSARY OF PROFESSOR D. Sc. DIMCHO ILIEV DIMITROV

RECTOR OF THE HIGHER INSTITUTE OF CHEMICAL TECHNOLOGY DURING 1970 - 1978

Professor D.Sc. Dimcho Iliev Dimitrov was born in 1920 in the town of Dupnitza in the family of tobacco-processing workers. Prof. Dimitrov got his primary and preparatory school education in his native town and the gymnasium course - in the towns of Veliko Turnovo and Dupnitza. He got his higher education in Chemistry at the Physico-Mathematical Faculty of Sofia University in 1945.

On the 24th of April 1946 Dimcho Dimitrov was appointed an assistant professor in Organic Chemistry at the newly found Industrial Chemistry Division of the State Polytechnics in Sofia. Later he moved to the Department of Chemical Technology and from there to the Department "Fundamentals of Chemical Technology" of the Higher Institute of Chemical Technology (HICT, now University of Chemical Technology and Metallurgy). He worked there until 1985 as a lecturer, professor and Head of the Department. During this period of time he had specialized for two years in Czechoslovakia and the Soviet Union, for two different periods of time he had worked for the Ministry of People's Education alongside with his activities at the Institute, for six years he was appointed a Vice-Rector and was elected twice for Rector of the Institute for the period from 1970 to 1978. He retired in 1985. Since then he devoted his time to studying some economy problems of vital importance for the last 150-200 years history.

Dimcho Dimitrov is among the first (N. Kolarov, V. Kabaivanov, A. Fabrikant, D. Djoglev, etc.) who laid the material basis of the Higher Institute of Chemical Technology (HICT) and organized the first laboratory courses not only in Inorganic and Organic Chemistry but also those at the technological departments of the Institute.

It should be noted that prof. Dimitrov had the chance to be in a key position during four or five periods, decisive for the development of HICT. The first one was connected with the reform of the higher technical education carried out in 1953-1954 when three different higher education institutions arose from the former State Polytechnics. As a councilor at the Committee of Science, Art and Culture Dimcho Dimitrov worked for the foundation of HICT as one of these three higher institutes. Then he worked for the organization of the two basic departments – those of Organic and Inorganic Technology as well as for the specializations within them. D. Dimitrov and his colleagues particularly strongly emphasized the distinction between the education in Chemical Technology and that in Chemistry. This was of particular importance in connection with the existing opposition towards the preparation of specialists in industrial chemistry.

As there was not enough space for HICT development in the centre of Sofia, D. Dimitrov worked actively and consistently in favour of its relocation in 1956 to the former border troops barracks in the periphery district of Darvenitza, struggling against the counter reaction.

Problems of importance for HICT development found their solution during the second reorganization of the higher technical education (1959-1962), when D. Dimitrov worked as Head of the Higher Technical Education Department of the Ministry of People's Education (these activities he ran in parallel with his academic work at the Institute). This was the time when the basic educational specialties were founded. Later on new specialties came into being. They corresponded to the chemical and metallurgical industrial branches structure. The Metallurgy Specialty was preserved in HICT curricula due to a great extent to the efforts of D. Dimitrov who managed to impose Mendeleev's opinion that metallurgy is inseparable from chemistry.

The initiative to organize symposia of the Departments on Fundamentals of Chemical Technology of the Higher Institutes and Universities from the former socialist countries came from Professor Dimitrov. Problems concerning the programs of the various courses and the teaching methods used were discussed there accounting for the effect of the developing cybernetics and informatics.

The teaching activity of Professor Dimitrov was characterized by the fact that he was among the very few lecturers who taught the discipline "Fundamentals of Chemical Technology" not as an Industrial Chemistry, but as a Technological course. The initial period of these endeavors was outlined in his textbook on "Fundamentals of Chemical Technology".

Professor Dimitrov started his research carrier with a very successful for that time publication on the composition of the essential oil Ilang-Ilang. The work on it was carried out during his specialization in Czechoslovakia. The knowledge on the modern methods of natural products analysis he later applied in Bulgaria to the study of oil's and oil products' composition. But the main trend in the research activities of Professor Dimcho Dimitrov was connected with thorough investigations on the radical-chain processes of oxidation of hydrocarbons and petroleum fractions. The accent was on the mechanism of these processes and the application of the oil fractions oxidation products.

Very intensive were the studies of Professor Dimitrov and his collaborators in the field of liquid-phase oxidation of hydrocarbons. The most valuable contributions were connected with the hydrocarbons oxidation in presence of boric esters. The results obtained provided to develop a method for selective production of hydroxyl-derivatives. It was applied to the oxidation of a number of individual paraffin-, cycloalkanes-, olefin- and aromatic hydrocarbons in presence of different trialkoxyboric compounds. A number of research projects were related to the liquid-phase oxidation in presence of metals and metal alloys, which were of both fundamental and of practical importance. They contributed to the proper selection of construction materials used in different technological fields.

Another group of studies was aimed at the solution of practical problems connected with the production of flotation agents, agricultural stimulators, and surfactants.

Towards the end of his research carrier Professor Dimcho Dimitrov was focused on developing methods of technological systems description to provide the choice of optimum factors for their control.

Almost all investigations mentioned so far Professor Dimcho Dimitrov carried out with the active collaboration of his assistant-professors and Ph. D. students.

Recently he was awarded a medal of the University of Chemical Technology and Metallurgy, Sofia.

On the 90th anniversary we wish to Professor Dimitrov good health, long life and happiness!