František Kozmál, Corresponding Member of the Slovak Academy of Sciences, is Dead

After some time of illness Prof. Ing. F. Kozmál, DrSc., has died in Bratislava on the 16th of July this year. He was corresponding member of the Slovak Academy of Sciences, head of the Department of Chemical Technology of Wood, Cellulose, and Paper at the Slovak Technical University in Bratislava, late Dean of the Faculty of Chemical Technology at this University. In the time of nationalization of the industry he was director general of the Czechoslovak Works of Paper and Cellulose in Prague. He has received the National Distinction for the Merits in Development and Reconstruction, the Medal of the Slovak National Rising, and the Medal for the Merit, conferred on him at the occasion of the 25th Anniversary of the Foundation of the Slovak Technical University in Bratislava.



He was born in 1901, November 15th at Chtelnica. His Slovak conscious family contributed a great deal to the formation of his firm, unflinehing character. His national consciousness had become evident in the difficult conditions of study at the famous gymnasium at Trnava. He was graduated in honours at the Faculty of Chemistry at the Czech Technical University in Brno and after a short time of activity as assistant lecturer at Prof. Novák he proved himself in the industry; first in the dry distillation of wood and then in the beginning production of viscose fibres. But he soon saw the necessity to utilize wood, the most important inland raw material of Slovakia, and so he entirely applied himself to the production of cellulose and paper.

In the Cellulose Plant of Žilina he thoroughly learned the operation of the basic process and became soon chief of the cellulose plant in the Paper Mills of Harmanec, where he took considerable part in introducing the production of refined cellulose for chemical processing. In producing this raw material for explosives and for replacing the imported linters used as filter in gas masks he deserved well of strengthening the state defence, in those conditions of endangering the Republic in 1935—1938.

F. Kozmál achieved great experience in introducing pre-bleaching of cellulose with gaseous chlorine, and he used them after having been appointed chief of the cellulose plant in the Slovak Paper Mills at Ružomberok, to introduce an up-to-date bleaching equipment imported from Sweden. He also found the modification of alkaline extraction after pre-bleaching, improving the quality of the cellulose, so that this could be successfully processed in the production of viscose fibres just being introduced in Svit. The reconstruction of the draining installations took considerable part in this improvement. During the war Prof. F. Kozmál introduced many progressive modes to utilize the hard wood, as poplar, alder, and hornbeam for the production of shortfibre-celluloses suitable as admixture in the production of graphical paper. In 1940 F. Kozmál became technical manager of the Slovak Paper Mills and it was he who deserved of introducing the production of sulfațe cellulose. Short time after the Chemical Faculty had been founded

F. Kozmál was invited to lecture on the technology of wood and synthetic fibres at the Institute that he created and led with great self-sacrifice besides his engagement in the industry.

František Kozmál took part in the struggle for independence in World War II from its beginning, and at the outbreak of the Rising he worked at the construction of fortifications against the marching German troops from Ružomberok to Banská Bystrica. After the Rising was broken down he sheltered himself for some time to get at last in prison in the concentration camp at Nováky, where he was kept until the liberation of the Republic by the Red Army.

Being one of the leading personalities in the industry, Director F. Kozmál made himself useful immediately after the liberation. After a short time of activity as one of the national administrators of the Vistra Works in Bratislava, where he greatly deserved of rapid renewing of the operation after the intentional damaging of its equipment by the evacuating German Staff, he was appointed director general of the Czechoslovak Works of Paper and Cellulose, of the first authority in this important field of the nationalized industry. Due to his knowledge and organizing abilities he acquitted himself so successfully here that this industry achieved a leading position in the two year plan of renovation and remained under F. Kozmál's directorship until its reorganization on the basis of the new conception of central controlling in 1951.

F. Kozmál, since 1947 assistant professor at the Slovak Technical University, had now been entirely disengaged for the work at this School. As head of the Department of Chemical Technology of Wood and Synthetic Fibres, and in the years 1951—1955 Dean of the Faculty, he was caring for the education of the technical intelligentsia. His pedagogic activity was characterized by its relationship to practice and to creative transformation of his own experience and knowledge in engaging material for teaching students with interest, in the form of suggestive interpretation completed with many different aids, showing samples, projecting slides. He also supported the study itself with modern manuals of his own, quite in the beginning of his teaching activity and they were followed by his modern technological manufactory in two volumes The Production of Paper in the Theory and Practice (1958, 1966); volume one has also been translated into Russian.

His scientific work was directed to topical problems of the cellulose-paper production, as e.g. to characterization of properties of soft wood from Slovak production regions, to processing hard wood, especially of quick-growing woods, to improving the quality of cellulose with application of new stepwise processes, in combining cooking of wood with refining the cellulose; these two problems were the subject of his Doctor's Dissertation Thesis, pleaded in 1967.

In order to realize complex utilization of the wood pulp Prof. F. Kozmál turned his attention to a new kind of thermal processing of the wood waste after its crushing and being suspended in the fluidization reactor. His endeavour led to technical realization of its conception and to granting the respective patent. This method is of great interest of leading plants for wood processing all over the world.

- Prof. F. Kozmál published more than fifty original scientific treatises, more than one hundred special publications and expert investigations.
- Prof. F. Kozmál was an outstanding leader of scientific research teams both at our University and also during his directorship at the Institute of Wood, Cellulose and Synthetic Fibres of the Slovak Academy of Sciences, and as member of the Scientific Council at the Research Institute of Paper and Cellulose in Bratislava. He showed initiative in selecting tasks, wide field of interest, knowledge of the subject, especially

with respect to the application and social need, and mainly, he showed confidence in the abilities of his co-workers and a great deal of optimism in expecting the success. The consequence was that Prof. F. Kozmál was able to awake real interest in the problems under investigation and create with devotion the conditions necessary for their solution. Prof. F. Kozmál's scientific activity was appreciated also abroad, and he often was invited to attend international events as a lecturer and well-known leader of Czechoslovak Delegations. His Department saw visitors often from far-away countries coming for consultations and contacting for cooperation.

Prof. F. Kozmál has obtained for his scientific, pedagogic and organizational activity many honourable recognitions, national distinction, honorary membership of the Czechoslovak Chemical Society.

His sudden decease in full work caused that Prof. F. Kozmál could not realize all his plans, but he has left behind himself a bequest, his work, remaining through his publications in living memory of his co-workers and of his friends. All who knew Prof. F. Kozmál, corresponding member of the Slovak Academy of Sciences will keep him unforgotten in remembrance as scientist, enthusiastic, devoted and affectionate teacher and noble-minded man.

J. Hostomský