

body of mathematicians representing all countries of the civilised world. Much of the success attending its labours must be attributed to the zeal and energy of the secretary, whose last letter to me, written just a fortnight before his death, anticipated a new departure which would increase the efficiency of the association.

Throughout his life Dr. Macfarlane was keenly interested in educational methods, and at the time of his death was Chairman of the Board of Education in Chatham, Ontario.

C. G. KNOTT.

#### DR. JULIUS LEWKOWITSCH.

WE regret to announce that Dr. Julius Lewkowitsch, the well-known authority on fats and oils, died at Chamonix on September 16, after a short illness. He was born at Ostrovo, in Prussian Silesia in 1857, and had a brilliant university career at Breslau. After graduating as doctor of philosophy at Breslau, Lewkowitsch devoted himself to an academic career; he carried out a considerable quantity of original investigation under Prof. Victor von Richter at Breslau, and subsequently took a position under Prof. Hans Landolt in the chemical laboratory of the Berlin Agricultural High School. At a later date he became assistant to Prof. Victor von Meyer in the University of Heidelberg.

Lewkowitsch's first published work consisted in the study of the action of nitric acid on fatty acids, but he soon applied himself to experimental work on stereochemistry, which was at that time a new and undeveloped subject, and was far from assuming the commanding position which it now holds. He was the first to develop the method given by Pasteur for the resolution of externally compensated substances by the action of living organisms, and in 1882 and 1883 prepared the optically active modifications of tartaric, lactic, glyceric, and mandelic acids from the corresponding racemic substances by the action of *penicillium glaucum*, *aspergillus mucor*, yeasts, and a schizomycetes. At a later date he attacked the problem presented by the optical inactivity of benzene derivatives, and made many experimental attempts to obtain such substances in optically active modifications.

The brilliance of Lewkowitsch's early experimental work indicates that, had he continued to devote himself to pure science, he would rapidly have achieved a foremost place as a teacher and investigator. About twenty-five years ago, however, he came to this country, became naturalised, and, abandoning his aspirations towards a purely scientific career, entered upon what proved to be his life-work, the development of the industrial technology of fats and oils. At the time of his death he was the first living authority on the vegetable and animal fats and oils; a large number of processes which are widely employed in the utilisation and valuation of these important raw materials were devised by him. His treatise on the "Chemical Technology and Analysis of Oils and Fats" is now in its fifth English edition, and

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has been published also in French and German; his "Laboratory Companion to Fats and Oils Industries" has a wide sphere of usefulness in English and in its German translation. Lewkowitsch wrote the article on oils and fats in the "Encyclopædia Britannica" and the articles on oils in the last and the current editions of Thorpe's "Dictionary of Applied Chemistry"; his writings on his own subject have set a standard of precise treatment which has been accepted and adopted in later works by others upon this great branch of chemical industry.

Dr. Lewkowitsch served in many capacities upon the Councils of the Chemical Society, the Society of Chemical Industry, the Institute of Chemistry, and the Society of Public Analysts; at the time of his death he was the honorary foreign secretary of the Society of Chemical Industry, and had held the chairmanship of the London Section of the society. In 1909 he received the Lavoisier medal as conféréncier of the Société chimique de France; as a Cantor lecturer of the Royal Society of Arts he delivered a course of lectures on fats and oils which, in their published form, are of considerable value, and exhibit the great mastery which he had acquired over our language.

Lewkowitsch was a keen mountaineer; few men possessed so intimate and complete a knowledge as he had gained of the French and Swiss Alps, in sight of which he passed away. He married in 1902, and his widow, with a son and daughter, survives him.

W. J. P.

#### NOTES.

DR. ROUX, director of the Paris Pasteur Institute, has been made a grand officer of the Legion of Honour.

THE death occurred on September 15, at the age of fifty-nine, of Dr. Louis Merck, senior partner of the firm of E. Merck, Darmstadt.

It is stated in *The Lancet* that Mr. W. F. Fiske has been asked by the Tropical Diseases Committee of the Royal Society to investigate the life-history of the tsetse flies in Uganda.

THE *Chemist and Druggist* for September 20 contains the reproduction of a photograph of the bronze statue of Dr. Ludwig Mond, which was unveiled by Sir John Brunner, Bart., on September 13, and was alluded to in our issue of September 11 (p. 48).

THE death is reported, in his sixty-eighth year, of Prof. Lucien A. Wait. On graduating at Harvard in 1870 he was appointed assistant professor of mathematics at Cornell University. In 1877 he became associate professor, and in 1890 full professor. From 1895 to 1910 he was head of the department of mathematics.

ACCORDING to *Science*, a national museum is to be established in the city of Santo Domingo for the purpose of retaining and preserving in the country objects and relics of historical character connected with the discovery and development of the country.