

occupied until he was recalled to succeed Olszewski in Cracow in 1919.

Here he was faced with the difficult task of rehabilitating a department which had been devastated during the First World War. In 1923-24 he was dean of the faculty of arts, and in 1926 he was made director of the Pharmaceutical Department in the University of Cracow; his work in the latter capacity resulted, in 1947, in the elevation of this Department to the dignity of a faculty. Meanwhile, at the outbreak of the Second World War, he was doomed to undergo the terrible experience of imprisonment in the concentration camp at Sachsenhausen, following the arrest of himself and many others on November 6, 1939. In this camp a score or so of his colleagues perished, among them his brother Stanislaw, who held a chair in the faculty of law. Although Estreicher survived, he never regained his normal health. When he returned to Cracow upon his liberation the University had ceased to function, and for a time he was obliged to eke out a meagre living as a proof-reader. With the re-opening of the University he resumed his chair; but his health deteriorated so gravely that he soon felt called upon to resign.

Estreicher was vice-president of the Committee of the Polish Pharmacopœia and an active member of the Committee of Pharmaceutical Science of the Polish Academy of Arts and Sciences. He was also a leading organizer of the garden of medicinal plants in Cracow. His researches dealt particularly with

the behaviour of gases at very low temperatures. On this theme he published many original papers in German, Polish and British scientific journals. In 1905 he translated into German Travers's well-known work on the experimental study of gases, and in 1915 he published his own book entitled "Kalorimetrie der niedrigen Temperaturen". For the "Polish Biographical Dictionary" he wrote authoritative notices of Kostanecki, Wróblewski and Olszewski, three Polish men of science of the first rank.

First and foremost a chemist, Estreicher was a man of great erudition and varied interests. He was an accomplished classical scholar, a fluent linguist, and a lover of music and the fine arts. Himself an artist of merit, he assembled a fine collection of modern Polish paintings. His writings included essays on the Polish language and literature, and he published also an interesting monograph on the 'Jagiellonian Globe', a valued relic dating from 1510 and preserved in the Jagiellonian Library at Cracow. He cherished a life-long ambition to write a history of Polish chemistry; but although he collected much material and had the ideal equipment for this task he was never able to find time for it. Towards the end of his life he lost both sight and hearing; but as his letters (often dictated in German) testified, he kept to the end his marvellous memory and his clear and alert mind. This remarkable man of science might well have taken for his motto: *Homo sum: humani nihil a me alienum puto.* JOHN READ

NEWS and VIEWS

Electrical Engineering in the Manchester College of Technology : Prof. J. Hollingworth

PROF. JOHN HOLLINGWORTH, who retires from the chair of electrical engineering in the Faculty of Technology in the University of Manchester at the end of August, was educated at Bradfield College, Peterhouse (University of Cambridge), and the Central Technical College (University of London). During the next nine years he was in turn demonstrator at the Central Technical College, lecturer at the College of Technology, Manchester, and held a commission in the Royal Air Force. He was appointed scientific assistant at the National Physical Laboratory, a position which he held for eleven years. During this period he published a number of papers on the propagation of radio waves and allied subjects. In 1932 he was appointed professor of electrical engineering in the College of Technology, Manchester, and under his direction the department has developed in many directions, notably in the teaching of electronics, servo-mechanisms and high-voltage engineering.

Dr. Eric Bradshaw, M.B.E.

DR. ERIC BRADSHAW, who succeeds Prof. Hollingworth on September 1, was born in 1909 and was educated at the King's School, Grantham, and at the Faculty of Technology, University of Manchester, where he graduated in 1930, taking his master's degree a year later. After a course at the works of the British Thomson-Houston Co., Ltd., Rugby, he joined the staff of the Royal Technical College, Glasgow, where he remained until 1944, during which period he took his Ph.D. degree. He was then appointed special

lecturer in high-voltage engineering at the College of Technology, Manchester. He is joint author of a number of papers in the fields of high-voltage measurement and electric power-supply. Dr. Bradshaw has served on several committees of the Institution of Electrical Engineers and is now vice-chairman elect of the North-West Centre of the Institution. He has for some years been tutor and lecturer at the Ministry of Education Engineering Summer Schools. He founded and is now editor of the *Bulletin of Electrical Engineering Education*.

Radio-Frequency Allocations in Europe: Conference in Stockholm

THREE of the study groups of the International Radio Consultative Committee met in Stockholm during May 15-27; and these were followed by a European Broadcasting Conference during May 28-June 30. This Conference had been called to consider the assignment of very high frequencies (ultra-short wave-lengths) for sound and television broadcasting in Europe. The work of the Committee was of a technical nature, designed to establish the basis upon which a scheme of frequency-sharing could be devised. For this purpose, one of the study groups presented wave-propagation curves showing the field-strength likely to be obtained from transmitting stations at distances well beyond their normal service area. Another group had studied the discrimination which it is desirable to attain in order to avoid interference between television stations operating in the same frequency-channel. By a combination of these results, the geographical separation desirable between stations sharing the same frequency-band could be established. The Stockholm broadcasting conference