The Physics Division has recently commenced the examination of the properties of gases of importance to chemical and mechanical engineers. Very accurate experimental work is necessary firmly to establish the theoretical methods used to study these properties, particularly at high pressures and temperatures, and this led to the introduction of a development programme in the field of high-pressure physics. As part of this programme the Laboratory has undertaken to establish standards of measurement for high pressure hitherto unavailable in Britain. Research is in progress to determine the narrow-beam and broad-beam absorption data for high-energy X-rays. A Van de Graaff generator producing X-rays at a potential of 2 MV. is used, and data are being determined for lead, concrete and barium concrete. The Division continues its highly accurate determinations of the heats of combustion of pure organic substances in co-operation with the Chemical Research Laboratory, which is also at Teddington.

OBITUARIES

Sir John Blake

THE death of Sir John L. Blake, Comptroller-General of Patents, Designs and Trade Marks, occurred with tragic suddenness on May 18 in Paris, where he was taking part in an International Conference on Copyright, organized by Unesco.

Sir John Blake was born in Watford in January 1898. He was educated at Watford Grammar School and then entered University College, London, as a student of physics and mathematics. During the First World War he served in the Royal Navy and in the Royal Naval Air Service and was present at the raid on Zeebrugge. After demobilization he returned to University College and graduated B.Sc. with first-class honours in 1920. In 1922 he was awarded the degree of M.Sc.

He entered the Patent Office as an assistant examiner in August 1920 and became an examiner in 1925. In 1937 he was awarded a Commonwealth Fund Fellowship which entitled him to undertake a year's study in the United States. He spent most of this time in the United States Patent Office and acquired a considerable knowledge of American patent law and practice which was an asset to him in after years.

During the Second World War he served as a principal in the Ministry of War Transport and was mainly concerned with convoy arrangements and the allocation of merchant ships to ports of discharge in the United Kingdom. He returned to the Patent Office at the beginning of 1944 on being promoted to the rank of superintending examiner. In that year also he was called to the Bar at Gray's Inn. He was appointed to be an assistant comptroller in June 1946 and he became comptroller in February 1949, when Sir Harold Saunders vacated that post on being appointed to the Monopolies and Restrictive Practices Commission.

In 1949 a Bill to amend the Patent and Designs Act, embodying most of the recommendations in the final report of the Swan Committee which had been appointed by the Board of Trade in 1944, was in course of preparation. Sir John Blake's initial task as comptroller was to assist in the drafting of the Bill and in discussing the varied questions which arose during its passage through Parliament. The

Bill was presented in the House of Lords in May 1949 and received the Royal Assent in July. It was followed by two consolidation acts, the Patents Act, 1949, and the Registered Designs Act, 1949, both of which became operative on January 1, 1950.

Soon afterwards Sir John was faced with the task of acquainting himself with another part of the activity of the Patent Office of which he had little or no previous experience, namely, the intricate matter of copyright. He applied himself to this task with characteristic zest and intensity, and within a very short time he became an acknowledged authority on the subject. He was a member of the Copyright Committee appointed by the Board of Trade in 1951 under the chairmanship first of the Marquess of Reading and afterwards of Sir Henry Gregory. The Committee presented its very comprehensive report in July 1952.

He represented Great Britain at a number of international conferences both in Europe and the United States, on patents, copyright and related matters, and earned the admiration and respect of the representatives of other countries by reason of his profound knowledge of the subjects under discussion, his unfailing tact and courtesy and his ability to reconcile the views of others with his own.

He was awarded a knighthood in the New Year Honours in 1952, and later in the same year he received an additional distinction by being elected to a fellowship of University College, London. His death is a sad loss not only to the Patent Office but also to the professional and other bodies outside the Office with whom his work brought him into contact.

J. N. BROWN

Prof. Paul Selényi

DR. PAUL SELÉNYI, a well-known Hungarian experimental physicist, died suddenly at the age of sixty-eight at Budapest on March 21, after a year of protracted ill-health. He was a pupil of Lorand Eötvös in Budapest and was devoted to his memory throughout his life; he completed a biography of Eötvös shortly before his death.

Selényi's most fundamental contribution to physics dates back before the First World War. By an ingenious method, using a fluorescent coating on a total reflecting prism, he demonstrated the coherence of light rays emitted in nearly opposite directions from this fluorescent light source. His experiment evoked immediate appreciation and remains one of the fundamental experiments of wave optics.

The first anti-Semitic wave in Hungary in the early 'twenties cut across his scientific career. He was forced into second-rate industrial work; he suffered financial hardship and lost his first wife. However, he soon joined the leading industrial research laboratory of the country, then newly founded, that of the Tungram electric lamp factory, under the leadership of the late Prof. I. Pfeifer. Here he had ample opportunity to show his extraordinary skill in experimental physics. There was scarcely a problem of vacuum technique, lamp technology or photometry he did not help to solve. He always preferred simple experimental arrangements to elaborate apparatus, and he never gave up scientific research. Photocells and barrier-layer cells were among his favourite apparatus. For many years before and during the Second World War he worked on an invention of his, named electrography, which could have served as a basis for picture transmission

and perhaps even television. A grid-biased stream of negative gas ions was made to write invisible negative tracks on an insulator and was developed with fine powder, in analogy to the well-known Lichtenberg figures. The cathode ray tube gave a different turn to television; but perhaps Selényi's contribution will come into its own one day, especially for projection before a big auditorium. He lost his post under the Nazi regime; but he continued to work very successfully on selenium rectifiers.

Selényi's only son, a gifted chemist, was deported by the Nazis, and failed to return; his adopted son, a son of his deceased brother, suffered the same tragic fate. Selényi never recovered from these blows,

though he was eventually re-installed as professor in his old University Institute, was elected corresponding member of the Hungarian Academy of Science and was accorded the esteem he so fully deserved.

He was of an extremely kind, sensitive nature, a born teacher; and all who had the privilege of being his pupils and friends are deprived by his death of a man whose friendship, character and advice never failed us. He loved to read poetry and wrote some verses in his spare time; he was a skilled amateur in pencil-drawing and water-colour. Our sympathy goes out to his wife and companion, Dr. Selényi-Greiner, who survives him.

FRANCIS KÓRÓSY

NEWS and VIEWS

Physics at Bristol : Dr. F. C. Frank, F.R.S.

THE University of Bristol has appointed Dr. F. C. Frank to a third chair of physics in addition to that already held by Prof. C. F. Powell and that to which Prof. M. H. L. Pryce will take up his appointment on August 1. Dr. Frank, whose present position is that of reader in physics in the University of Bristol, took his first degree in physical chemistry at Oxford. His subsequent experience of research was at that University, at Berlin under J. W. P. Debye, and at Cambridge under Sir Eric Rideal; during the Second World War he was deputy to R. V. Jones at the Air Ministry. In 1946 Dr. Frank joined the H. H. Wills Physical Laboratory, Bristol, as a research Fellow in theoretical physics, his work being mainly on dislocations, plastic flow of solids and on crystal growth. In 1949 he formulated the now well-known spiral theory of crystal growth, and then undertook the direction of a group of experimental workers whose investigations were suggested by the theory, and which have in many ways confirmed and extended it. The importance of this work has been recognized by his recent election to the fellowship of the Royal Society.

Textile Technology at Leeds : Dr. C. S. Whewell

THROUGH the generosity of the firm of Courtauld's, Ltd., and an anonymous industrial donor, the University of Leeds has been able to build a new building to be devoted to the study of rayon and synthetic fibres, which should be completed in a little more than a year's time. In the meantime, the University has instituted a chair of textile technology, in addition to the existing chair of textile industries (Prof. J. B. Speakman, head of the Department) and the research chair of wool textile engineering (Prof. A. H. Nissan), and the new occupant, who will take office in October, will be Dr. C. S. Whewell, at present reader in textile finishing in the University.

Dr. Whewell has spent almost his whole career in the University of Leeds except for a short period in 1936 as a research chemist to the Wool Industries Research Association. He graduated in chemistry in 1933, gaining his Ph.D. two years later, and has held a Clothworkers research fellowship. In 1937 he was awarded the Worshipful Company of Dyers' Research Medal. In the same year he began his teaching career in the University, being successively research assistant in textile chemistry, assistant lecturer in cloth finishing, lecturer in cloth finishing and textile chemistry, and finally in 1948 reader in textile finishing. Dr. Whewell has published numerous papers and articles on the chemical aspects of the finishing of all-wool

fabrics and fabrics containing mixtures of wool and man-made fibres, much of his work being carried out with outside organizations. In 1954 he was awarded the Institute Medal of the Textile Institute "for distinguished services to the textile industry in general, and to the Institute in particular".

Kelvin Medal Award : Dr. C. J. Mackenzie, C.M.G., F.R.S.

THE Kelvin Medal for 1953 has been presented to Dr. C. J. Mackenzie, president of Atomic Energy of Canada, Ltd., and former president of the National Research Council of Canada (see *Nature*, 169, 1037; 1952). The Medal was created to mark the great work done by the late Lord Kelvin and is awarded triennially as a mark of distinction to engineers and men of science whose work is of a kind with which the late Lord Kelvin was identified. The award is made by a committee consisting of the presidents of the Institutions of Civil Engineers, Mechanical Engineers, Electrical Engineers, Naval Architects, Mining and Metallurgy, Mining Engineers, Engineers and Shipbuilders in Scotland, and the Iron and Steel Institute.

Joint Science and Industry Committee

THE Royal Society of Arts, the British Association for the Advancement of Science and the Nuffield Foundation have established a joint Science and Industry Committee to investigate the possibility of speeding up the application to industry of the results of scientific research. From the 'Conditional Aid' funds the Board of Trade has made a grant to this Committee to help it to begin research into the whole problem. The British Association originally set up a committee to consider this matter, but after preliminary investigations, it was decided to seek the co-operation of other bodies in sponsoring a study of the many problems involved. The new joint committee is well aware that work is already going on in the universities and in industry; nevertheless, terms of reference, which have been accepted by the Board of Trade, are comprehensive. They include the making of a systematic and scientific appraisal of the whole problem, surveying the research already under way elsewhere in order to see what further study is needed; the identification of those factors which determine, in different industries and in different types of firms, the speed of application of new scientific and technical knowledge; the examination of their relative importance, their interrelations, and their correlation with the characteristics of the firm