field of motions and nature of meteoric particles in the earth's atmospheres, and especially for his derivation of the variations of air temperature with altitude based on his studies of meteors and for his investigation of other phenomena of the upper atmosphere, the results of which correspond closely to the values obtained up to heights of 65 km. by V2 rockets. Dr. Whipple has calculated the orbits of several important meteor streams, and is well known for his work on the Taurid meteors and for his analysis of velocities and orbits which led to the identification of the Taurid stream with Encke's Comet. He has put forward a new comet model which has for one of its results the association of comets and meteor streams physically as well as genetically.

Technical Chemistry in Glasgow:
Prof. W. M. Cumming, O.B.E.

PROF. W. M. CLEMING resigned from the chair of technical chemistry in the Royal Technical College, Glasgow, in August last, to take up the post of technical director of the British Dyewood Co., Ltd. Dr. Curanting graduated in chemistry at the University of Glasgow in 1914, and entered the employment of the British Dyestuffs Corporation, where he was engaged in the manufacture of explosives during the First World War and later on dye intermediates. He returned to Glasgow as lecturer in organic chemistry at the Royal Technical College in 1920, and proceeded to the degree of D.Sc. of the University of Glasgow in 1924. In 1934, following on the death of Prof. Thos. Gray, Dr. Cumming was elected to the Young memorial chair of technical chemistry. He developed rapidly the chemical engineering aspects of the Department and, under his control, a large amount of chemical plant equipment was installed. When war broke out in 1939, he collaborated with the Ministry of Supply in developing the South West Scotland Branch of the Research Department which functioned under his control until 1946. He was also senior gas advisor for Scotland under the Ministry of Home Security, and acted in this capacity until the general stand-down of Home Defence in 1945. For these war-time services he was awarded the O.B.E. in 1946. On the death of Prof. Wilson, he was elected director of the School of Chemistry of the Royal Technical College. Prof. Cumming has been active in the affairs of the Scottish Council on Industry and Development, and chairman of several committees. He was also concerned with the establishment of the Engineering Centre in Glasgow. He has been a member of the Council of the Royal Institute of Chemistry, and of the Institution of Chemical Engineers, and is chairman of the Glasgow Section of the Society of Chemical Industry.

5 Dr. P. D. Ritchie

Dr. P. D. RITCHIE, of the Birmingham Central Technical College, has been appointed to succeed Prof. W. M. Lumming in the Young chair of technical charactery, and he takes up his duties in January. Recently, Dr. Ritchie has been especially interested in plastics and is the author of "Chemistry of Plastics and High Polymers"; nevertheless, his experience has been very varied. His thesis for the Ph.D. degree at the University of St. Andrews in 1932 was based on stereochemical problems in his work with Prof. Alex. McKenzie. During two years with the Explosives Group of the I.C.I., he studied the pyrolytic synthesis of ethenoid monomers. As

head of the Scientific Department of the Courtauld Institute of Art, he worked on the constitution of ancient glass and ceramics; and as chief and advisory chemist to A. Reyrolle and Co., of Hebburn-on-Tyne, he secured patents on gaseous and high-polymer insulating media. After two years as head of the Chemistry Department of Leeds College of Technology, he was appointed head of the Chemistry Department of the Birmingham Central Technical College as successor to Dr. J. A. Newton Friend. In Birmingham he has rendered valuable service in the development of the Plastics Laboratories, and in the scheme for merging the fuel, plastics and other technological subjects for the formation of a Department of Chemical Engineering. He strongly advocated the appointment of research assistants, and this has recently been adopted. During his term of office a strengthening of the bond between industry and the Chemistry Department of the Birmingham Central Technical College has been very evident.

Institution of Mining Engineers: Mr. A. M. Bryan

THE Council of the Institution of Mining Engineers has elected Ar. A. M. Bryan as president for the year 1950-51, in succession to Prof. J. A. S. Ritson. The president-elect will take office at the annual general meeting of the Institution, which is to be held in London on February 2, 1950. Mr. Bryan obtained his early practical mining training and experience in the Lanarkshire Coalfield, Scotland. He received his academic training in the University of Glasgow, where he obtained the degree of B.Sc. (Mining), with special distinction. In 1920 he was appointed a government junior inspector of mines in the Northern Division and was promoted to the rank of senior inspector in 1926. In 1932 he became professor of mining in the University and the Royal Technical College, Glasgow. In 1939, Mr. Bryan returned to Government service, to assist the war effort, as deputy-director of mining supplies, a post which he relinquished in 1940 to join the Shotts Iron Co. as general manager. Two years later he became managing director of the Company. During the War he was chairman of the Coal Industry Joint Fuel Efficiency Committee. He was also a group pro-duction director, under the Ministry of Fuel and Power (Scottish Region), during 1944-45. In April 1947 he was appointed chief inspector of mines. Mr. Bryan has taken a keen interest not only in the science and practice of mining, but also in matters relating to the education, training, health and safety of persons employed in coal mines, and has made numerous contributions to the literature on these subjects.

British Association: Birmingham Meeting

NEXT year the British Association for the Advancement of Science will meet in Birmingham (August 30-September 6). The Council has completed appointments to the various offices in the Association. These include: President, Sir Harold Hartley; General Treasurer, Mr. M. G. Bennett; General Secretaries, Dr. Edward Hindle and Sir Richard Southwell; Presidents of Sections, Prof. E. H. Neville (Physics and Mathematics), Prof. E. L. Hirst (Chemistry), Dr. W. Campbell Smith (Geology), Dr. V. B. Wigglesworth (Zoology), Prof. S. W. Wooldridge (Geography), Prof. G. C. Allen (Economics), Prof. Andrew Robertson (Engineering), Dr. R. N. Salaman (Anthropology and Archæology), Prof. R. J. Brocklehurst (Physiology), Dr. J. C. Flugel (Psycho-