

obtained from "Direktion der Kgl. Ung. Geologischen Anstalt, Budapest VII, Stefánia-út 14."

It was reported recently in the daily press that the late Count Vigyazo had bequeathed his estate, valued at more than two million pounds, to the Academy of Sciences at Budapest. The secretary of the Academy, in reply to an inquiry, informs us that the value of the bequest has not as yet been fully assessed, and that it is uncertain when the Academy will be able to enter into possession in view of the fact that several legal actions are still undecided, and the Count's title to certain parts of his possessions is being contested. The revenue of the estate would be used by the Academy exclusively for scientific and national purposes.

THE entire issue of *Die Naturwissenschaften* for June 1 is devoted to a summary of the results of a dozen recent researches carried out in the Kaiser Wilhelm Institute—in experimental embryology, on the cerebral cortex, and on various physical and chemical problems—and to records of the principal activities of the Kaiser Wilhelm Gesellschaft from April 1927 to March 1928, including the reports of the various Institutes. The reports afford striking evidence of the scientific energy and enterprise of the Institutes.

VOLUME 20 of the Collected Researches of the National Physical Laboratory has 444 pages, and includes 30 memoirs published in the years 1920–1927 dealing with questions of an optical character. Of these memoirs, Mr. T. Smith, the head of the Optical Division, is responsible for 13, which deal with the properties and defects of the component parts of optical instruments. Mr. Guild is responsible for 8, mainly concerned with colour measurement, and Dr. Walsh for 4 dealing with problems of photometry. A short abstract precedes each memoir, so that the reader may quickly make himself acquainted with its object

and results. Any reader who does so must be impressed with the great value to the various branches of the optical industry of the work which has been done at the Laboratory during the period covered by the volume.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant bacteriologist at the University of Durham College of Medicine, Newcastle-upon-Tyne—The Registrar, University of Durham College of Medicine, Newcastle-upon-Tyne (Sept. 22). An agricultural economist at the North of Scotland College of Agriculture—The Secretary, North of Scotland College of Agriculture, 41½ Union Street, Aberdeen (Sept. 22). A part-time woman demonstrator in chemistry in the Household and Social Science Department of King's College for Women—The Secretary, King's College for Women, Campden Hill Road, W.8 (Sept. 25). An assistant conservator of forests under the Department of Agriculture and Forests of the Sudan Government—The Controller, Sudan Government London Office, Wellington House, Buckingham Gate, S.W.1 (Oct. 6). Male assistant superintendent of traffic (Class II.) in the London Telephone Service, and male assistant traffic superintendent in the Provinces, G.P.O.—The Secretary, Civil Service Commission, Burlington Gardens, W.1 (Oct. 25). A head mastership of the King Edward the Sixth High School for Boys, Birmingham—The Secretary, King Edward's School, Birmingham. Evening lecturers in structural engineering and graphics, structural steelwork design, and reinforced concrete design, respectively, at the Borough Polytechnic Institute—The Principal, Borough Polytechnic Institute, Borough Road, S.E.1. An assistant wireless engineer for the Public Works Department of the Government of Hong-Kong—The Crown Agents for the Colonies, 4 Millbank, S.W.1 (quoting M/943).

Our Astronomical Column.

METEORS AND METEORITES.—The *Nineteenth Century* for September contains an interesting article by Mr. A. R. Hinks on meteors and meteorites, suggested, as he says, by Prof. Olivier's recent book on the subject. The book regards large and small meteors as members of the same class, but Mr. Hinks gives reasons for his dissent from this view. He recalls with approval Sir Robert Ball's suggestion that the larger meteors may have been expelled from terrestrial volcanoes in long past ages. Their orbits would continue to lie near that of the earth, so that an eventual return to it would not be improbable. He also regards as inconceivable the idea that meteors of the complicated 'plum-pudding' structure could have originated either in the sun or in interplanetary space; they must have been formed on some planetary body, and the earth is the most obvious suggestion. His argument might also be used to support Proctor's view that the comets of short period had been expelled from Jupiter and the other giant planets.

Mr. Hinks turns to the masses of iron which are classed as meteoric but were not seen to fall; he notes that five-sixths of them were found in America and Australia, whereas the recorded falls are in a majority in the old world. He explains this by supposing that most of these masses have never left the earth, but were, like the others, the products of volcanic activity.

Their distribution may either indicate greater volcanic activity in certain regions in early times, or climatic conditions more suitable for the preservation of the meteors. The article also deals with cometary physics, and points out the inadequacy of mutual friction of particles to supply the violent expulsive force that was demonstrated to exist in the envelopes of Morehouse's comet; no solution of the difficulty is arrived at.

THE ORBIT OF ZETA HERCULIS.—This star has been a favourite object for double star observers owing to its short period and the brightness of both components. It has now completed three revolutions since discovery, and materials exist for a very accurate orbit. It is discussed very fully by E. Silbernegel in *Astr. Nach.* 5578. He studies the systematic errors of the observers. His final period is 34.417 years, the eccentricity being 0.455 and the semi-major axis 1.349". There is some evidence of a progressive movement of the node of 1° in 10 years. Adopting a parallax of 0.100", the masses of the components are 1.35 and 0.73 of the sun's mass. The diameter of the principal star is given as 2½ times the sun's, its density one-tenth of the sun's. Some people have suspected an invisible companion from supposed irregularities in the motion; the author does not think that the evidence requires this.