

of learned societies. He has greatly enlarged the knowledge of antiquities and their real relationships, not only by original research, but by his willing advice and ready information to inquirers, whether in London or the provinces. He has bequeathed all his most valuable collections to the British Museum. He was elected to the Royal Society in 1854. For many years an active and valued Fellow of the Society of Antiquaries, he was elected Director of the Society in 1858; subsequently for some years he was Vice-President, and eventually became President in 1892. T. R. J.

SAMUEL ALLPORT, F.G.S.

BORN JANUARY 23, 1816.

DIED JULY 7, 1897.

By the death of Mr. Samuel Allport we have lost one of the pioneers in microscopic petrology. He was born at Birmingham on January 23, 1816, being descended from an old Staffordshire family, and was educated at King Edward's School in that town. For some years he was in the office of Rabone Brothers, and then went to Bahia in South America as business manager for another firm. There he married a Spanish lady, but had the misfortune to lose his wife within a year. On his return to England, after an absence of eight years, he took a share in a business on Snow Hill, and devoted all his spare time to scientific work. He had already become an ardent geologist, and his first paper, published in the Quarterly Journal of the Geological Society for the year 1860, was on the discovery of some fossil remains near Bahia (vol. xvi, p. 263). But he was quick to perceive the importance of studying the structure of rocks by the method which a few years before had been initiated by Dr. Clifton Sorby. He prepared his own specimens, and acquired such skill that in the writer's opinion, though he may have been equalled, he has never been surpassed in this craft by any English worker. In course of time he formed a large collection of both rock-specimens and microscopic slides, to the study of which he devoted himself with great energy. The business in which he was a partner unfortunately was not prosperous, and had to be abandoned about 1880, when he was appointed librarian to the Mason College. Though circumstances had compelled him to sell his collection some little time before to the British Museum, he set to work energetically to form another, and continued at his favourite study. But now health began to fail; any continuous mental exertion brought on distressing attacks of vertigo, and in 1887 he was obliged to retire from his post at the Mason College. After this, though he was still able to continue his geological reading, and to work quietly with his microscope, he was unfit to bear the strain of writing a paper. His last effort, a valuable report on the effect of Contact Metamorphism exhibited by the Silurian Rocks near the town of New Galloway (Proc. Roy. Soc., xlv, 193), could not have appeared without collaboration. Increasing ill-health and grave anxieties unhappily cast a shadow over Allport's later years, but all was endured with quiet patience and gentle fortitude. Some three years ago he quitted Birmingham for Cheltenham, where

he died after a very short illness on July 7, his mind happily remaining unclouded till near the end.

Allport was not a voluminous writer. He published rather less than twenty papers in all, most of which appeared in this Magazine, or in the Quarterly Journal of the Geological Society. In the former those on the South Staffordshire Basalts (1869), the Wolf Rock Phonolite (1871), and the Pitchstones of Arran (1872) may be specially mentioned; in the latter the highly important papers on the British Carboniferous Dolerites (1874), on the Metamorphic Rocks surrounding the Land's End Granite (1876), on devitrified Pitchstones and Perlites from Shropshire (1877), and on the Diorites from the Warwickshire Coalfield (1879). He became a Fellow of the Geological Society in 1869, was awarded the Wollaston Fund in 1879, and received the Lyell Medal in 1887.

We cannot measure the value of Allport's work by its quantity. His extreme care as an observer, alike in the field and with the microscope, his wide range of knowledge, for he was far more than a petrologist, his strictly inductive habit of mind, give to that work exceptional solidity and permanent value. Though he was compelled to feel his way, as a man in an unknown forest, he was one of the safest of guides. To such a patient, accurate observer and sound, cautious reasoner, flashy hypotheses presented no charms, and Samuel Allport did much to liberate petrology from such errors as making geological age a factor of importance in the classification of igneous rocks. Amiable, courteous, and openhanded, he was beloved by those who had the good fortune to know him. Absolutely free from all petty jealousies, he was the most generous of helpers to all younger men who were attracted to his favourite study. Whatever he knew was at the service of others, and no man owes him a deeper debt of gratitude than the writer of this tribute to his memory.

T. G. B.

#### PROFESSOR S. A. B. LUNDGREN.

BORN FEBRUARY 19, 1843.

DIED JANUARY 7, 1897.

THE death of Professor Lundgren has removed from Sweden a valued worker in the field of geological science, and in him the University of Lund has lost one of its most energetic and able lecturers.

Sven Anders Bernhard Lundgren was born at Malmö in Scania on the 19th of February, 1843. He seems to have passed the early days of his life in his native town, but became a student at the University of Lund in the autumn of 1860.

He worked diligently at all the subjects then considered essential for the degree in Philosophy, but at an early stage in his career he showed a marked preference for natural science. He especially distinguished himself in zoology and botany, and was a very fair chemist.

Geology was not at that time recognized as a distinct subject in the examinations of the University; nevertheless, Lundgren attended some lectures on that subject given by N. P. Angelin. He took his