

## WOLDEMAR VON SCHRÖDER.

HEIDELBERG has had to mourn the loss in rapid succession of three of its most distinguished professors—Victor Meyer, Erwin Rohde and, on January 28 of this year, Woldemar von Schröder.

Schröder was born at Dorpat in 1850, where his father was director of the Gymnasium. On his mother's side he inherited a taste for literature and poetry, but on entering the University at Dorpat, in 1868, he devoted himself to the natural sciences, possibly influenced thereto by his uncle, von Schrenk (of St. Petersburg), who was celebrated for his journeys and researches in Siberia. At first he studied chiefly chemistry and physics under Karl Schmidt and Arthur von Oettingen, and trained himself under Lemberg to that high pitch of analytical skill which he manifested in all his later work. After a break in his studies, due to persistent pains in the head and trouble with his eyes, he again returned to work; now, however, turning his attention rather into a biological direction. In 1878 he left Dorpat with the degree of Master of Chemistry, and went to Leipzig, where he was at once attracted by the striking originality and personality of Karl Ludwig, and in his laboratory saw for the first time the perfection of physiological experimenting. But Schröder was one of the few who were not content to learn by merely assisting Ludwig in personally carrying out all the experiments, and he struck out into paths of his own. Skilled as a chemist, he soon became an expert operator, and succeeded for the first time in successfully extirpating the kidney in birds, and thus settling a most important question as to the seat of formation of uric acid. In 1879 he became assistant to Schmiedeberg in Strassburg, and here it was that he carried out the great research with which his name will for all time be connected in the annals of physiology. Very little was at that time known as to the mode and seat of formation of urea, and Schröder threw a flood of light into the darkness. Having by extirpation of the kidneys, and artificial circulation through the excised organs, proved that urea is not formed by them, he next carried on an artificial circulation of blood containing ammonium carbonate through the muscles, and found that in them also no synthetic formation of urea takes place. He now turned to the liver and, again making use of artificial circulation, proved without any possibility of doubt the power of this organ to actively synthesise urea from ammonium carbonate and from certain substances present in the blood from an animal in full digestion. This was a great work, for not only did it reveal clearly a striking instance of synthetic activity in the animal organism, and thus place our belief in the fundamental similarity of plants and animal protoplasm on a firm basis, but it fixed definitely one seat of formation of urea in the animal body. In recognition of this work he received the degree of Doctor from the Natural Science Faculty of Tübingen in 1882, and similarly, and in the same year, he was made a Doctor at Strassburg, where he became Privat-docent in 1883. For this he wrote his inaugural dissertation on the alkaloids of opium, and thus diverged into that branch of science, pharmacology, which was henceforth to be the business of his life. During the next few years his chief works were on the physiological action of caffeine and of theobromine as related to caffeine, while at the same time he converted theobromine into a more soluble and assimilable compound, making it thus available for medicinal purposes. In 1890 Schröder was called to Heidelberg as Professor of Pharmacology, and he it was who really founded the existing Pharmacological Institute, turning the older accommodation to the best account, utilising or enlarging every corner of it, and completely remodelling and organising the teaching. Here he worked until his

death, stimulating his pupils by his personal example and collaboration, brightening their labours by his sympathetic and genial ways, and impressing on all the right spirit of scientific life.

## THE KEKULÉ MEMORIAL.

THE death of August Kekulé on February 13, 1897, terminated a career rich in scientific achievement. In him we have lost an investigator who has exerted a profound influence on the development of chemistry.

The theory of valency and of the linking of atoms, and our present views as to the structure of carbon compounds, have acquired their definite form and clearness by the labours of Kekulé. His theory of benzene derivatives, in particular, has given the most powerful impulse to investigation in the domain of pure chemistry; while no scientific theory has done more to promote the development of chemistry as a branch of industry. While Kekulé is eminent by his scientific achievements, he is not less so by reason of the effects produced by his teaching. The publication of his "Lehrbuch der Organischen Chemie" marked an epoch in the history of chemistry. This treatise has done more to familiarise chemists with modern views than any other work of the kind.

The greater number of German professors of chemistry, and many of those in other countries, have either studied under Kekulé or under those who were his pupils: and gratitude calls for the erection of some permanent memorial of his striking personality.

Such a memorial would be a statue in bronze of the founder of structural chemistry, which would be fitly placed in front of the Chemical Institute at Bonn—in the place where for thirty years he lived and taught and worked.

All friends, admirers and pupils of Kekulé are accordingly invited to contribute to this object. Subscriptions, which will be forwarded to the Central Committee at Bonn, will be received by Dr. Hugo Müller, 13 Park Square East, Regent's Park, N.W.

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| JAMES DEWAR.     | HUGO MÜLLER.     |
| G. CAREY FOSTER. | FRANCIS R. JAPP. |
| T. E. THORPE.    | RAPHAEL MELDOLA. |

## NOTES.

ACTING under the rule which empowers the annual election by the Committee of nine persons "of distinguished eminence in science, literature, the arts, or for public services," the Committee have just elected Viscount Dillon (president of the Society of Antiquaries), Mr. R. T. Glazebrook, F.R.S., and Sir George Scott Robertson into the Club.

THE meeting for the discussion of the scientific advantages of an Antarctic expedition takes place at the Royal Society this afternoon. We purpose giving a full account of the meeting in next week's NATURE, accompanied by a map showing all known land south of latitude 45° S., with drift and pack ice limits, so far as known, and the positions and dates of the highest latitudes reached.

THE Berlin correspondent of the *Standard* reports that the German Antarctic Expedition Committee, which met at Leipzig on Saturday last, unanimously resolved, after a long discussion, to advocate the despatch of a ship towards the South Pole on or near the meridian of the island of Kerguelen. Oceanic, geodetic, and biological researches are to be made during the voyage, and, if possible, the expedition will winter in the Antarctic zone. In that case geological observations are to be made at a fixed station, and exploring journeys on the inland