

of a liquid as the temperature at which cohesion and heat of vaporisation vanish, and the liquid vaporises irrespective of pressure and volume anticipated Andrews' conception of the critical point. He also directed a number of investigations on the densities of solutions, particularly mixtures of alcohol and water, sulphuric acid and water, and of salt solutions. He gave a good deal of attention to the subject of the elasticity of gases, and to the nature and origin of petroleum.

After his Periodic Law, however, he is best known for his famous *Principles of Chemistry* which has gone through many editions in various languages. In English there are three editions of which the last (1905) is from the seventh and best complete Russian edition (1903). The book is remarkable not only for its text which deals with inorganic chemistry, but also for the voluminous notes which testify to the enquiring spirit of the writer and the restless activity of his mind. As a teacher these same qualities of originality and freshness made him one of the greatest of his time. He had a talent for arousing a desire for knowledge, and students from all faculties of the University thronged his lectures.

We know more of the Periodic Table than ever Mendelèeff knew. We look to greater knowledge to a table which will express the purely unclear properties of atoms. In 2034 when once again returns the centenary of the birth of this great chemist, knowledge of the periodic table will be assuredly deeper and more profound than the knowledge we possess to-day. But

time will not dim nor the advance of knowledge obscure the memory of one, who in the early days of modern chemistry, by sheer native genius and application, laid the foundations of possibly the most important generalisation known to chemical science.

Ernst Haeckel (1834-1919).

Zoologists will also remember that this year marks the centenary of another great figure, Ernst Haeckel. Born at Potsdam he was educated in various universities, and one of the three degrees of doctorates that he held was that of Law (an honorary degree) in addition to his qualifications in Philosophy and Medicine. In 1854 he came under the influence of J. Müller in Berlin. Müller left a remarkable impression on Haeckel and in 1858 he commenced to practise medicine like his contemporary Gegenbaur. Soon after the death of Müller which came as a shock to young Haeckel, the latter commenced the study of Radiolaria of the Italian coast and later returned to Berlin. It was about this time that Haeckel came into contact with the famous and perhaps the then revolutionary book, the "Origin of Species" by Darwin. He says 'It profoundly moved me at the first reading.' On the other hand, the other German Biologists were opposed to this trend of thought and regarded the book as 'absolute nonsense'. Haeckel therefore happened to be the pioneer in ushering Darwinian ideas in Germany.

NEWS

MAGNETIC MAPPING OF BRAIN

SHE Corporation introduced the first commercial instruments using Josephson junction technology in the form of a Superconducting Quantum Interference Device, commonly known as SQUID. The SQUID is effectively a low-noise amplifier used to detect exceedingly small magnetic fields, electric voltages, and other physical quantities that can be measured by electrical or magnetic means. As an amplifier the SQUID is more than one million times as sensitive as even the best transistor amplifiers. One of the more recent and

commercially promising applications for SQUID magnetic detectors is in the general field of biomagnetism. Recent advances by SHE scientists and customers have permitted magnetic mapping of specific processes within the human brain with a clarity and a spatial resolution that are unattainable by any other noninvasive means.

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