cipal guests were Professors Clarke and van't Hoff, Professor A. E. Armstrong, Mr. Brereton Baker, Professor P. F. Frankland, Mr. Vernon Harcourt, Dr. Harden, Sir James Hoy, Professor Kipping, Dr. W. H. Perkin, Sr., Sir William Ramsay, Professor Emerson Reynolds, Sir Henry Roscoe, Professor Smithells, Dr. Scott, Professor Thorpe and Professor Tilden.

In proposing the toast of the evening, the 'Wilde' medallist—Professor Clarke—and the Dalton medallist—Professor Osborne Reynolds—Sir Henry Roscoe said that Dalton's atomic theory and Joule's discovery of the mechanical equivalent of heat reflected more distinction on Manchester than the city's association with the cotton industry or with the Ship Canal.

On Wednesday morning a special meeting of the Owens College Chemical Society was held to offer an address to the great Dutch chemist, J. H. van't Hoff, now professor at the Berlin University. Professor Dixon was in the chair. The address was presented by Mr. Norman Smith, a former student under Professor van't Hoff. The professor, who was enthusiastically received, said the question was often asked, nowadays, whether the atomic theory had not outlived its utility. His reply was that, in dealing with natural phenomena, with states of unstable equilibrium, the atomic theory was indispensable for essential explanations. He had come to regard the conception of the carbon atom as the center of a tetrahedron as childish, but it contained the germ of a profound truth, the solution of which must be left to the future. He suggested that valency was due to an equilibrium. The four mutually repellent 'electric atoms' of Helmholtz were kept in equilibrium by their attraction for the carbon atom at the center.

Later in the morning Earl Spencer, Chancellor of the Victoria University, conferred the honorary degree of Doctor of Science on Professor Clarke and Professor van't Hoff, who were presented by Professor Dixon. After the conclusion of the ceremony Professor van't Hoff laid the first stone of the proposed extension of the Owens College Chemical Laboratories, and was presented, as a memento of the occasion, with a silver trowel by the College Chemical Society. The celebrations were concluded by a soirée held at the Owens College on Thursday night, when Dr. Harden gave an interesting account of John Dalton, and many Dalton relics were exhibited by the Manchester Literary and Philosophical Society, Professor H. B. Dixon, Mr. Theodore Neild, Mr. G. W. Graham and Mr. G. S. Woolley.

TRIGONOMETRIC SURVEY OF BRAZIL.

THE Brazilian government has provided for the mapping of its territory on a scientific basis. Last year the congress appropriated the necessary funds for commencing the work, and a commission of which Colonel Francisco de Abreu Lima is President, was to leave Rio early in May for the state of Rio Grande do Sul to make a reconnaissance of the first zone to be triangulated.

The scheme as far as at present outlined, includes the measurement of bases at Porto Alegre and Uruguayana, and the connection of these two cities by triangulation. This will give an arc of about six and one quarter degrees of longitude in about latitude 30° south.

The Superintendent of the U. S. Coast and Geodetic Survey has been requested by the commission to supervise the preparation of the necessary tapes and accessories for the measurement of the bases.

SCIENTIFIC NOTES AND NEWS.

DR. W J MCGEE has been appointed chairman of the committee of the International Geographical Congress of 1904, succeeding General A. W. Greely, who has resigned owing to ill health and the pressure of official duties.

THE University of Marburg has conferred its honorary doctorate on Mr. Geo. F. Kunz, of New York City.

M. HENRI BECQUEREL, Paris, and Professor A. Righi, Bologna, have been elected honorary fellows of the Physical Society of London.

DR. MAX NOETHER, professor of mathematics at Erlangen, has been elected a foreign member of the Academy of Sciences at Buda Pesth.