James Lorrain Smith (1862–1931)

President of the Ulster Medical Society

John Scott Haldane wrote in Smith's obituary in the Biochemical Journal in 1931:¹

"In 1894 he was appointed Lecturer in Pathology at Queen's College, Belfast, and Professor in 1901.

It was here that he and Haldane carried out the experiments, first on man, and then on animals, from which they concluded that active secretion of oxygen inwards occurs in the lungs, though it was not known to them at the time that the secretion only occurs in response to the stimulus of want of oxygen in the tissues. They also worked out a method for determining in man the total volume and oxygen-capacity of the blood, this method depending on their discovery that the oxygen-capacity and colouringpower of the blood run parallel. With the new method Lorrain Smith investigated various abnormal conditions of the blood, and found that in the so-called anaemia of chlorosis the volume of the blood is in fact greatly increased, but correspondingly diluted as regards haemoglobin, so that the total haemoglobin in the body is unaltered. Other forms of anaemia were found to be true anaemias, with great diminution of the total haemoglobin; while cases with a high percentage of haemoglobin in the blood were found to have also a high blood-volume. Another of his discoveries about the same time was that oxygen at high partial pressures (even less than one atmosphere) produces pneumonia.

In 1904 he was appointed Professor of Pathology at Manchester and in 1912 to the Chair at Edinburgh."

Smith seems have been elected president for the session 1904–05 but the move to Manchester must have prevented him from taking up his duties as in November of that year Dr William Calwell gave the presidential address. Calwell had another term as president in his own right in the following session.



1904 (part)

¹ Biochemical Journal, 1931; 25(6): 1849–1850