

One Hundred Years of Ghosh's Strong Electrolyte Theory

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Abstract

Abnormal behaviour of strong electrolytes was a hot research topic around the turn of twentieth century. In 1918, J. C. Ghosh published a series of articles dealing with this abnormal behaviour and suggested a cube root law for data correlation. The publications were both praised and criticised. Debye and Huckel published in 1923 their well-known theory of strong electrolytes, the square root law, which completely overshadowed Ghosh's theory. By the middle of twentieth century, however, Ghosh's theory became prominent again, particularly for concentrated electrolyte solutions, in the light of pseudo-lattice theory of strong electrolytes. In this article, we discuss some features and historical developments of Ghosh's theory to commemorate its centenary year.