Implications of steric effects in an electrolyte solution in a nanoslit

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The steric effect of the electrolyte solution in a nanoslit is analyzed theoretically. Ions of same size are undertaken to study this effect. The overlapping phenomenon of the EDL is considered while derivation of the electric potential distribution. Ionic concentration and osmotic pressure distribution are estimated using the electric potential distribution. Analytical and numerical results obtained are compared to that of an electrolyte without steric effects.