

Abstract Submitted  
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**Cluster structure in urea aqueous solution and it's effect on DNA denature**<sup>1</sup> HE CHENG, Dr.,Prof., CHARLES C. HAN, BOUALEM HAMMOUDA  
— The existence of large cluster structure in urea aqueous solution is proved by Small Angle Neutron Scattering (SANS). Our results indicate that urea is a water-structure-breaker, and large urea cluster will be formed when it's concentration is higher than 20 w%. This cluster is very stable, and almost do not change with temperature. The helix-to-coil denaturation transition of DNA was studied with various urea concentrations, to testify the solvent structure influence on this process.

<sup>1</sup>Joint Laboratory of Polymer Science and Materials, ICCAS, Beijing, China

Charles C Han

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