Cluster structure in urea aqueous solution and it’s effect on DNA denature\textsuperscript{1} 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.

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