The structure of aqueous guanidinium chloride solutions.

The combination of neutron diffraction with isotopic substitution (NDIS) experiments and molecular dynamics (MD) simulations were carried out to study the structure of aqueous guanidinium chloride solutions. The results show that guanidinium chloride has a strong affinity for water, which is due to its ability to simultaneously interact favorably with both water and hydrophobic side chains of proteins.