

Abstract for an Invited Paper
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Molecular Studies of Bulk Water and Hydration Water at Interfaces

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My talk describes an experimental and theory/simulation study of water studied as bulk, solution, and under spatial confinement. Using x-ray scattering, quasi-elastic neutron scattering, and/or atomistic and coarse-grained chemical models combined with simulation, we address fundamental questions about the origin of water's thermodynamic and dynamic anomalies, the microscopic features of the potential energy landscape that define the origin of these anomalies, and how these are altered at model biological interfaces.