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سمینار هفتگی ماده چگال نرم

## عنوان سمینار

# Structural and Electrical Properties of Confined Water

ارائه دهنده

**Iman Ahmadabadi**

نام دانشگاه و دانشکده

**Department of Physics, Sharif University of Technology**

## چکیده

The confined water between graphene sheets have different structural properties because of strong surface effects between water and graphene, these effects could change drastically dielectric constant and charge distribution of water in comparison to bulk water. We have presented classical simulations for demonstrating the effect of surface on water and its dielectric constant via linear response and fluctuation-dissipation theory. These extreme confinements exist in nature for example water between brain synapses. Analyses of dielectric constant data suggest that the perpendicular component of dielectric constant increases and lateral component of it decreases while the distance between graphene sheets increases. The recent experimental data are compatible with these trends too.

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