



Weekly Seminar

Ion Adsorption at Charged Aqueous Interfaces

Doseok Kim

Sogang University

Time: 4:00pm, April 20, 2015 (Wednesday)

时间: 2016年4月20日 (周三) 下午4:00

Venue: Room w563, Physics building, Peking University

地点: 北京大学物理楼, 西563会议室

Abstract

Ion adsorption at aqueous interfaces is crucial in many environmental and biological processes. In spite of this importance, experimental investigation has been challenging due to the requirement on surface sensitivity and selectivity. I will introduce how interfacial water and ion adsorption can be probed by using nonlinear optical and X-ray spectroscopy. Two different model membranes consisting of choline and amine groups were chosen to make positively charged boundaries at the air/water interface. We monitored interfacial water structure upon adsorption of halide anions (Cl⁻ and I⁻). Both choline and amine groups are expected to give positive potential on air/water interface, however the adsorption of ions and water structure were very different between the two surfaces.

About the speaker

Doseok Kim received his B.A. degree in Physics from Seoul National University in 1988, and got Ph.D. degree in Physics, University of California at Berkeley in 1997. He had been doing postdoc in Lawrence Berkeley National Laboratory from 1997 to 1998. Since 1998, he has been a professor in Dept. Physics at Sogang University.