

## [총회초청]

### Ion Scattering Studies of the Oxidation of Metals and Semiconductors

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The study of oxidation kinetics and mechanisms has a lot of practical relevance. With the emergence of very high resolution ion scattering spectroscopy, it is now possible to do quantitatively depth profiling with monolayer resolution, a capability that make it possible to study oxidation mechanisms both at the surface and at the oxide/substrate interface. To elucidate the dynamics of these processes, we have used sequential oxidation in O-16 and O-18.

In this talk, I will discuss oxidation mechanisms in both a semiconductor (Si) and a metal (Ni). For Si, we show that the conventional oxidation models need to be modified in the sub 5 nm regime, while for Ni our results points out the importance of O dissolution in the bulk.