



Contribution ID: 106

Type: **Invited/plenary talk**

PLENARY: Aqueous solution-vapor interfaces investigated with ambient pressure X-ray photoelectron spectroscopy (Chair Luca Artiglia)

Tuesday, 6 December 2022 13:30 (50 minutes)

Aqueous solution-vapor interfaces govern important phenomena in the environment and atmosphere, including the uptake and release of trace gases by aerosols and carbon dioxide sequestration by the oceans. A detailed understanding of these processes requires the investigation of liquid-vapor interfaces with chemical sensitivity and interface specificity under ambient conditions, i.e., temperatures above 270 K and water vapor pressures in the millibar to tens of millibar pressure range. It is thus appropriate that these interfaces were the first to be investigated using ambient pressure XPS by the Siegbahn group 50 years ago. This talk will discuss opportunities and challenges for investigations of liquid-vapor interfaces using X-ray photoelectron spectroscopy and describe some recent experiments that have focused on the propensity of certain ions and the role of surfactants at the liquid/vapor interface.

if "Other", please specify:

I apply for a travel grant

No

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Track Classification: Environmental chemistry