

## Sorption and bioavailability of organic chemicals: mechanisms and applications in innovative remediation

**CHAIRS:** Jose-Julio Ortega-Calvo, John R. Parsons



Tuesday 13<sup>th</sup> May 2014, 13:55 – 16:00, room: Boston 1

Following the tradition of the sorption/bioavailability sessions held at Milan, Berlin and Glasgow, and as a preparation of the future SETAC Special Science Symposium to be organized in the fall of 2014 in Brussels, the aim of this session is to provide an stimulating scenario for discussing the latest developments in the key physicochemical and biological mechanisms governing bioavailability of organic chemicals; how they can be applied in risk assessment, and be controlled in innovative remediation treatments. Contributions are welcome, for example, on recent work on the sorption and bioavailability of ionic, polar and nonpolar organic chemicals, on laboratory and field studies addressing soil and sediment remediation through strong sorbents such as activated carbon, or new developments in the interactions between sorption and biodegradation processes. Presentations describing the effect of dissolved organic carbon and nanomaterials on toxicity and biodegradation are also encouraged, as well as on new developments in the methods to determine bioavailability, and on the interconnections between bioremediation and risks associated to pollutants and metabolites.

Keywords: sorption, bioavailability, organic, biodegradation, risk assessment, remediation

**SESSION TYPE:** Platform and Poster