

SESSION 1: Structure and function of intertidal mudflats

Intertidal mudflats have a worldwide distribution from the Arctic to the tropical zones. Despite the extreme variability of environmental parameters due to the tidal cycle, they are highly productive environments, which have been often overlooked. In Western Europe, they are often used for aquaculture purposes, particularly for the Pacific oyster *Crassostrea gigas*. With rising temperature, this species is now considered invasive, and high biomass of wild oyster reefs are found at the vicinity of mudflats. The impact of this invasion on the biota and biogeochemical fluxes is far from being elucidated. This session aims to analyze at various spatial scales the interactions between mudflat biotic structures (microphytobenthos, meiofauna, macrofauna, wading birds...) and biogeochemical processes in mudflats exploited by aquaculture. Speakers should keep in mind in their analysis the notions of risk and opportunities specific to this peculiar habitat.