



Dear colleagues and friends,

We kindly invite you to submit an abstract to the session:

Session T11-SS01: Sedimentary evolution of estuaries and coastal plains: subsidence, sediment loss and aquifer hazards (Meeting Theme T11: Applied Sedimentology)

<https://www.iasprague2021.com/t11-applied-sedimentology/>

to be held at the 35th IAS Meeting of Sedimentology in Prague (Czech Republic) from the 21st to 25th of June 2021. In view of the COVID-19 pandemic, the meeting will be held virtually

Description. *Estuaries and the related coastal plains are delicate sedimentary settings which evolve under the effect of different hydrodynamic ranges and sediment load from rivers, in turn controlled by relative sea level rise.*

The regime of accelerating sea-level rise forecasted by the IPCC (2013) suggests that many coastal plains and related marshes and/or tidal flats may soon cross a threshold and become threatened by geological hazards such as aquifer salinization, inundation of low lands, coastal erosion, increased vulnerability to flooding and storm surges.

On the other hand, subsidence rates, which reflect regional and local tectonic effects, can be greatly enhanced by consolidation of the Holocene sedimentary strata due to creep, thus resulting in an additional vertical movement at ground surface.

Moreover, many coastal areas are also suffering from a sediment loss of billions m³/a due to anthropic extraction from river basins. The consequence of such a deficit in the sediment budget is the progressive destruction of salt marshes and tidal flats, coupled with coastal erosion.

This session aims to explore the causes and consequences of coastal hazard, along with subsidence, coastal erosion and aquifer salinization, by taking into account the variety of independent drivers and focusing on the role of the hydrodynamics processes, the sedimentary architecture and the related geotechnical characteristics of estuarine and coastal settings.

We encourage studies addressing a wide range of spatial and temporal scales and applying state of the art methodologies. Interdisciplinary studies are strongly encouraged as they provide the basis for a sustainable management.

The abstract submission deadline is 15th of February 2021.

Please consider submitting an abstract, and contribute to the success of this interdisciplinary session.

Feel free to forward to your teams/colleagues who might be interested to any aspect of this general theme.

We apologize for cross-posting.

We are looking forward to seeing you in Prague!

Best regards,

Daniela Ruberti (Campania University "L. Vanvitelli", IT) - daniela.ruberti@unicampania.it

Sergio Cappucci (ENEA, Italy) - sergio.cappucci@enea.it

Aihua Wang, (Nanjing Geological Survey Center of China Geological Survey Bureau)

Aijun Wang, (Third Institute of Oceanography, Ministry of Natural Resources of China) - wangaijun@tio.org.cn

Marco Sacchi (CNR, IT) - marco.sacchi@cnr.it

Orsolya Sztanó (Eötvös Loránd University, Budapest, HU) - osztano@caesar.elte.hu