

# RCEM2021 – RIVER, COASTAL, AND ESTUARINE MORPHODYNAMICS

Tuesday 30 November 2021

## session 1 – System response to anthropogenic impact and climate change

- 16:00 CET opening, call for proposals for RCEM2023 Meeting
- 16:05 keynote presentation by Ellen Wohl  
Geomorphic influences on river corridor resilience to disturbances
- 16:35 keynote presentation – discussion
- 16:50 talk1 – Chenge An  
Poyang and Dongting Lakes, Yangtze River: tributary lakes blocked by main-stem aggradation
- 17:05 talk2 – Jana Cox  
Early narrowing and deepening of the Rhine–Meuse estuary causes long term sediment deprivation
- 17:20 breakout rooms for posters and coffee (see below)
- 17:50 talk3 – Alvise Finotello  
Landform diversity loss enhanced by flood-regulation in shallow tidal embayments
- 18:05 talk4 – Jinyang Wang  
Response of net water transport in a channel network to dredging, training wall construction, and sea level rise
- 18:20 talk5 – Cristina Rachelly  
The impact of bed-load supply on channel stability
- 18:35 talk6 – Megan Williams  
Changing estuarine morphodynamics under mega-drought, climate change, and water overexploitation in a Central Chilean estuary
- 18:50 closure

17:25 – 17:50 posters

- room 1 Yongpeng Lin  
Morphodynamics of bedrock-alluvial rivers subject to landslide dam outburst floods
- room 2 Steven Weisscher  
Controlled floodbasins: driving land-level rise along estuaries
- room 3 Mohammad Kifayath Chowdhury  
Bifurcation Morphodynamics in an Engineered River
- room 4 Matthew Czapiga  
River Response to Sediment Nourishments in Eroding Engineered Rivers
- room 5 Janneke Krabbendam  
Morphodynamic response of tidal sand waves to sand extraction
- room 6 Clàudia Ylla Arbós  
Modeling response of the Lower Rhine River to climate change and human intervention
- room 7 Kattia Rubi Arnez Ferrel  
Numerical simulations of meander migration in a river of the Bolivian Amazon: the Ichilo River

17:25 – 17:50 thematic coffee

- room 8 coffee and scientific graphics
- room 9 coffee and outreach
- room 10 coffee with other young scientists

Thursday 2 December 2021

## session 2 – Ecomorphodynamics

- 9:00 CET opening, call for proposals for RCEM2023 Meeting
- 9:05 keynote presentation by Thorsten Balke  
Are intertidal wetland plants biogeomorphic opportunists or engineers?
- 9:35 keynote presentation – discussion
- 9:50 talk1 – Jonathan Garber  
Geomorphology versus plant: Examining the role that rheophytes play in constructing fluvial landforms
- 10:05 talk2 – Liang Geng  
Intertwined eco-morphodynamic evolution of salt marshes and emerging tidal channel networks
- 10:20 breakout rooms for posters and coffee (see below)
- 10:50 talk3 – Elena Bastianon  
Implementation of a simplified bio-morphodynamic numerical model for biofilm
- 11:05 talk4 – Paolo Perona  
Wood Logs biomechanics and the return period of riverbed vegetation uprooting by flow
- 11:20 talk5 – Costanza Carbonari  
Stability analysis of submerged vegetation patterns in rivers
- 11:35 talk6 – Muriel Brückner  
The contribution and response of macrobenthic organisms to estuarine morphological change under sea level rise
- 11:50 Closure

10:25 – 10:50 posters

- room 1 Alice Puppin  
Spatial and vertical patterns of Soil Organic Matter in the salt marshes of the Venice Lagoon (Italy)
- room 2 Lett Wai Nwe  
Influence of salinity intrusion and suspended sediment concentration (SSC) on temporal distribution of diatoms (phytoplankton) in the Chikugo River estuary
- room 3 Alessandro Sgarabotto  
Effects of vegetation, sediment supply and sea level rise on the morphodynamic evolution of a straight tidal channel
- room 4 Michele Combatti  
Morphological change of alternate bars following vegetation establishment in the regulated Isère river (SE France)
- room 5 Francesco Caponi  
BASEveg: a freeware numerical model integrating vegetation dynamics and river morphology
- room 6 TaeUn Kang  
Numerical experiment on driftwood generation modelling and tsunami flow using 2D flood model coupled with driftwood dynamics model

10:25 – 10:50 thematic coffee

- room 7 coffee and scientific graphics
- room 8 coffee and outreach
- room 9 coffee with other young scientists

Thursday 9 December 2021

## session 3 – Morphodynamics and sediment transport

- 16:00 CET opening, call for proposals for RCEM2023 Meeting
- 16:05 keynote presentation by Enrica Viparelli  
Bankfull geometry of self-formed, single thread, sand bed rivers
- 16:35 keynote presentation – discussion
- 16:50 talk1 – Stan Thorez  
Field characterization of the negatively buoyant inflow of the Rhône River into Lake Geneva
- 17:05 talk2 – Lindsay Capito  
Particle path length estimation with tools from signal processing
- 17:20 breakout rooms for posters and coffee (see below)
- 17:50 talk3 – Vinay Chembolu  
Flow Structure and Morphological Dynamics of a Large Braided River
- 18:05 talk4 – Cristian Escauriaza  
Simulations of Antidunes in Supercritical Flow
- 18:20 talk5 – Davide Tognin  
Storm-driven sedimentation signs salt-marsh morphology
- 18:35 talk6 – Francesca Bassani  
Unexpected short-term behavior of meandering rivers under flow variability
- 18:50 closure

17:25 – 17:50 posters

- room 1 Nay Oo Hlaing  
Seasonal variations of salinity intrusion and mixing conditions at Tanintharyi River Estuary, Myanmar
- room 2 Mamy Rija Andriamboavonjy  
Spiral flow near bed along uniformly curved channels
- room 3 Martin Hasenhündl  
A Matlab script for the morphometric analysis of subaerial and subaquatic rivers, channels and canyons
- room 4 Niccolò Ragno  
Contrasting response of delta networks to tidal action: a theoretical study
- room 5 Raúl Sosa Pérez  
Suspended sediment transport affection to the von Karman constant
- room 6 Blanca Marin-Esteve  
Characterization of velocity profile distributions in steep channel flows under low relative submergence conditions
- room 7 Chien-Yung Tseng  
Laboratory Study on Sediment Suspension and Bed Morphodynamics in Vegetated Fluvial Systems
- room 8 Shelby Ahrendt  
River morphodynamics and flood risk in Western Washington State, US
- room 9 Marco Redolfi  
Why do free alternate bars form in rivers?
- room 10 Rinse de Swart  
Observed alongshore sandbar and shoreline variability at an open, fetch-limited beach
- room 11 Abdel Nnafie  
Long-term morphodynamics of a coupled shelf-shoreline system forced by waves and tides, a model approach

17:25 – 17:50 thematic coffee

- room 12 coffee and scientific graphics
- room 13 coffee and outreach
- room 14 coffee with other young scientists