

Online Conference on

Marginal Seas – Past and Future

16-17 December 2020

All times in Central European Time (CET)

December 16, 2020

13:00 **Opening and Introduction**

13:00 **Technical Instruction**
Marcus Reckermann

13:05 **Welcome addresses**
Chair: Jan Harff

Prof. Waldemar Surosz Chairman of the Polish Scientific Committee on
Oceanic Research Polish Academy of Sciences,
patron

Prof. Andrzej Skrendo Vice-Rector for Science of the University of
Szczecin, host

Dr. Marcus Reckermann International Baltic Earth Secretariat,
Helmholtz-Zentrum Geesthacht, main co-
organizer

13:15 Introduction to the conference
Jan Harff

Scientific Sessions

(1) Geo-, Eco- and Climate System (Peter Clift, Markus Meier)

Chair: Peter Clift

13:20 **Postglacial changes in relative sea level: a comparative study for the Baltic
Sea and the South China Sea**
Andreas Groh and Jan Harff

13:40 **Challenges in modelling of the Last Glacial Cycle and their implications for
marginal seas**
Eduardo Zorita

- 14:00 **Comparison study on climate changes based on temperature between Guangdong-Hong Kong-Macao Greater Bay and European area**
Bing Wang
- 14:20 **Paleoenvironmental changes of marginal seas during the Last Glacial Cycle**
Helge Arz, Antje Wegwerth, Olaf Dellwig, Jérôme Kaiser, Markus Czymzik, Norbert Nowakzyk and Frank Lamy
- 14:40 **Coastal seas and hypoxia**
Markus Meier
- 15:00 **Marginal Seas' Ecosystem's dynamics**
Corinna Schrum
- 15:20 Break**
- Chair: Markus Meier
- 15:40 **Natural and anthropogenic impacts on ecosystems of marginal seas: reconstruction and assessment tools**
Teresa Radziejewska and Andrzej Witkowski
- 16:00 **Paleo-ecology related to the Last Glacial Cycle**
Jinpeng Zhang and Chixin Chen
- 16:20 **Sea-level change during the Last Glacial Cycle**
Karl Stattegger
- 16:40 **Climatic, sea level and anthropogenic controls on fluvial sediment transport in East Asia**
Peter D. Clift
- 17:00 **Model approaches for alongshore sediment transport - a case study of the sandy Baltic coast for the period of 1948-2015**
Wenyan Zhang
- 17:20 **Geology and coastal processes of Eurasian Arctic Marginal Seas**
Daria Ryabchuk, Evgeniy Petrov, Vladimir Zhamoida and Pavel Rekant
- 17:40 **Discussion**
Moderation: Markus Meier
- 18:00 End of day 1**

December 17, 2020

(2) Marginal Seas and Society (Jan-Marcin Węśławski, Hans von Storch)

Chair: Jan-Marcin Węśławski

12:00 **The significance of sea-level change and ancient submerged landscapes in human dispersal: A geoarchaeological perspective**
Geoff Bailey and Hayley Cawthra

12:20 **Marginal sea ecosystem services under threats: case studies of anthropogenic fingerprint in marine ecosystems in proximity to Megacities**
Joanna J. Waniek, Emilie Strady, Kerstin Schiele and Friederike Kunz

12:40 **Biogeochemistry-ecosystem-human interactions in the Chinese marginal seas**
Sumei Liu

13:00 **Perceptions of an endangered Baltic Sea**
Hans von Storch

13:20 **How to develop coastal sea system understanding connecting natural and human sciences?**
Anders Omstedt

Chair: Hans von Storch

13:40 **Multiple drivers of Earth system changes in marginal seas: the example of the Baltic Sea region**
Marcus Reckermann et al. (24 co-authors)

14:00 **Impacts of changing society and climate on nutrient loading to the Baltic Sea**
Sampo Pihlainen, Marianne Zandersen, Kari Hyytiäinen, Hans Estrup Andersen, Alena Bartosova, Bo Gustafsson, Mohamed Jabloun, Michelle McCrackin, H.E. Markus Meier, Jørgen E. Olesen, Sofia Saraiva, Dennis Swaney and Hans Thodsen

14:20 **The role of culture, tradition and indigenous knowledge in coastal management**
Kevin Parnell

14:40 **What is more important - education, tradition or public media for our opinion about Baltic Sea?**
Jan Marcin Węśławski, Joanna Piwowarczyk and Katarzyna Boni

15:00 break

(3) Scaling / Mapping / Data –Management (Federica Foglini, Jan Harff)

Chair: Jan Harff

- 15:20 **Ocean Sediment Data, Integrated, Local to Global, for Modelling the Marginal Seas (dbSEABED Project)**
Chris Jenkins
- 15:40 **Spatial data integration and harmonization in the Adriatic Sea – how to make data FAIR (Findable, Accessible Interoperable and Researchable) for habitat and geological mapping**
Federica Foglini and Valentina Grande
- Chair: Federica Foglini
- 16:00 **EMODnet: Mapping the European shelf geology**
Kristine Asch and the EMODnet Geology participants
- 16:20 **Marine benthic habitat mapping - A case study from the Salish Sea**
H. Gary Greene
- 16:40 **Remote sensing in monitoring and management of the coastal zone - the southern Baltic Sea example**
Joanna Dudzinska-Nowak and Wenyan Zhang
- 17:00 **Discussion**
Moderation: Jan Harff
- 18:00 **End of day 2 and farewell**

Conference website:

<https://baltic.earth/EMS2/>