

Ocean Floor Symposium 2025

“Organic matter transportation, transformation, and preservation: From the ocean surface to the ocean floor”

September 08-11, 2025 at
Center for Deep-Sea Research/ MARUM, University of Bremen

Monday, September 08th

17:00 – 19:00 Registration and Ice Breaker

Tuesday, September 09th

08:45 Welcome by Kai-Uwe Hinrichs, MARUM-Director

Theme 1: Transformation in the water column: Opening the black box of POM and DOM (Chairs: Chris Fitzgerald, Michael Seidel, Jana Massing)

09:00 – 09:45 Cristina Romera Castillo
“Sources and transformations of natural and anthropogenic DOC throughout the oceanic water column”

09:45 – 10:30 Carol Arnosti
“Effects of Deep Ocean Pressure on Enzymatic Mechanisms of Organic Matter Degradation”

10:30 – 11:00 Coffee

11:00 – 11:45 Greta Reintjes
“Competitive Strategies in Oceanic Carbon Cycling: Selfish, Sharing, and Scavenging Bacteria”

11:45 – 12:30 Christian Tamburini
“Deep-sea prokaryotes (and others) and their role in the biological carbon pump”

12:30 – 13:30 Lunch

Theme 3: From process to projection: Modelling of carbon transformation and fluxes (Chairs: Hannah Marchant, Morten Iversen)

13:30 – 14:15 Sinikka Lennartz
“Beyond first order kinetics for the degradation of organic matter”

14:15 – 15:00 Judith Hauck
“Marine carbon and ecosystem feedbacks in the Earth System”

Posters (all Themes)

15:00 – 15:15 Poster pitches (w/o slides)

15:15 – 18:00 Posters (with coffee)

Wednesday, September 10th

Theme 2: Lateral transport: From shelf to deep sea (Chairs: Weimin Liu, Alice Lefebvre, Maria Toyos)

- 09:00 – 09:45 Wiebke Freund
 “Stoichiometry of Dissolved Organic Matter at the Land-Ocean Interface of the North Sea”
- 09:45 – 10:30 Furu Mienis
 “Submarine canyons: important pathways for organic matter from shelf to deep ocean”
- 10:30 – 11:00 Coffee
- 11:00 – 11:45 Sophie Hage
 “The overlooked role of submarine canyons in the transport of organic carbon from coasts to the deep-sea”
- 11:45 – 12:30 Christian Mohn
 “Fine-scale Hydrodynamic Forcing of Food Supply to Benthic Communities – Case Studies from Atlantic Seamounts and Cold-Water Coral Mounds”
- 12:30 – 13:30 Lunch
- 13:30 – 14:15 Natalie Hicks
 “Anthropogenic impacts on sedimentary ‘Blue Carbon’: current knowledge and research priorities”
- 14:15 – 15:00 Andreas Rogge
 “Down the slope with the dense water pump: dense shelf water subduction as lateral particle injection mechanism from productive Arctic shelves”
- 15:00 – 15:15 Coffee

Theme 3: From process to projection: Modelling of carbon transformation and fluxes (Chairs: Hannah Marchant, Morten Iversen)

- 15:15 – 16:00 Tatiana Ilyina
 “Modeling biogeochemical feedbacks in a changing climate”

Posters (all Themes)

- 16:00 – 18:00 Posters (with coffee)

- 19:00 – 22:00 **Conference Dinner**

Thursday, September 11th

Theme 3: From process to projection: Modelling of carbon transformation and fluxes (Chairs: Hannah Marchant, Morten Iversen)

09:15 – 09:45	Miriam Seifert <i>“Greener ocean? Interactions between ocean alkalinity enhancement and phytoplankton”</i>
09:45 – 10:30	Philip Boyd <i>“Towards an improved mechanistic model of microbial degradation of sinking marine particles”</i>
10:30 – 11:00	Coffee
11:00 – 11:45	Bo Liu <i>“Improving Earth System Models through simulating past climate-carbon cycle feedbacks”</i>
11:45 – 12:30	Stephanie Henson <i>“Future trends and climate feedbacks on the biological carbon pump”</i>
12:30 – 13:30	Adjourn and Lunch