



# NIOZ New Fleet Update

Zeynep ERDEM – National Marine Facilities NIOZ

June 2023

ERVO meeting, Stockholm



# Dutch research fleet



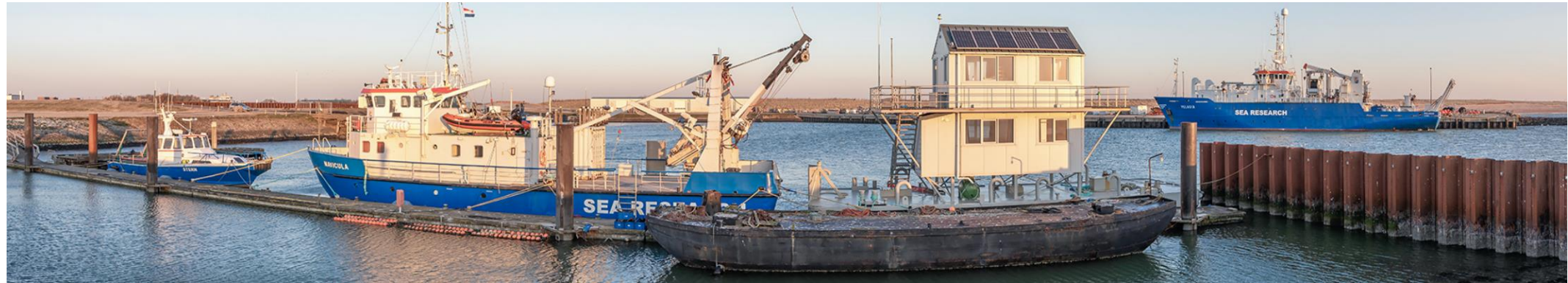
# Dutch research fleet



*RV Stern*

*RV Navicula*

*RV Pelagia*



*RV Adriaen Coenen*



*RV Wim Wolff*



*RV Anna Weber van Bosse*

# New research fleet

*RV Stern* was replaced by *RV Adriaen Coenen* in the summer of 2022.



*RV Navicula* will be replaced by *RV Wim Wolff* in fall 2023.



*RV Pelagia* will be replaced by *RV Anna Weber van Bosse* in 2025.



# RV Stern



Length: 14.6m  
Speed: 15 knts  
Age: 46 years

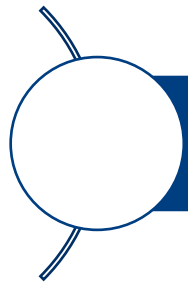
# RV Adriaen Coenen



*In use since August 2022*



Length: 19m  
Speed: 21 knts



# RV Adriaen Coenen



Building process at  
Next Generation  
Shipyards in  
Lauwersoog,  
The Netherlands



# RV Adriaen Coenen



## Technical information

- Engines: Scania (Stage V)
- Water jets: Hamilton
- Energy during cruising: HVO diesel engines
- Anchored/grounded: solar panels and battery pack
  
- Energy back up by small generator

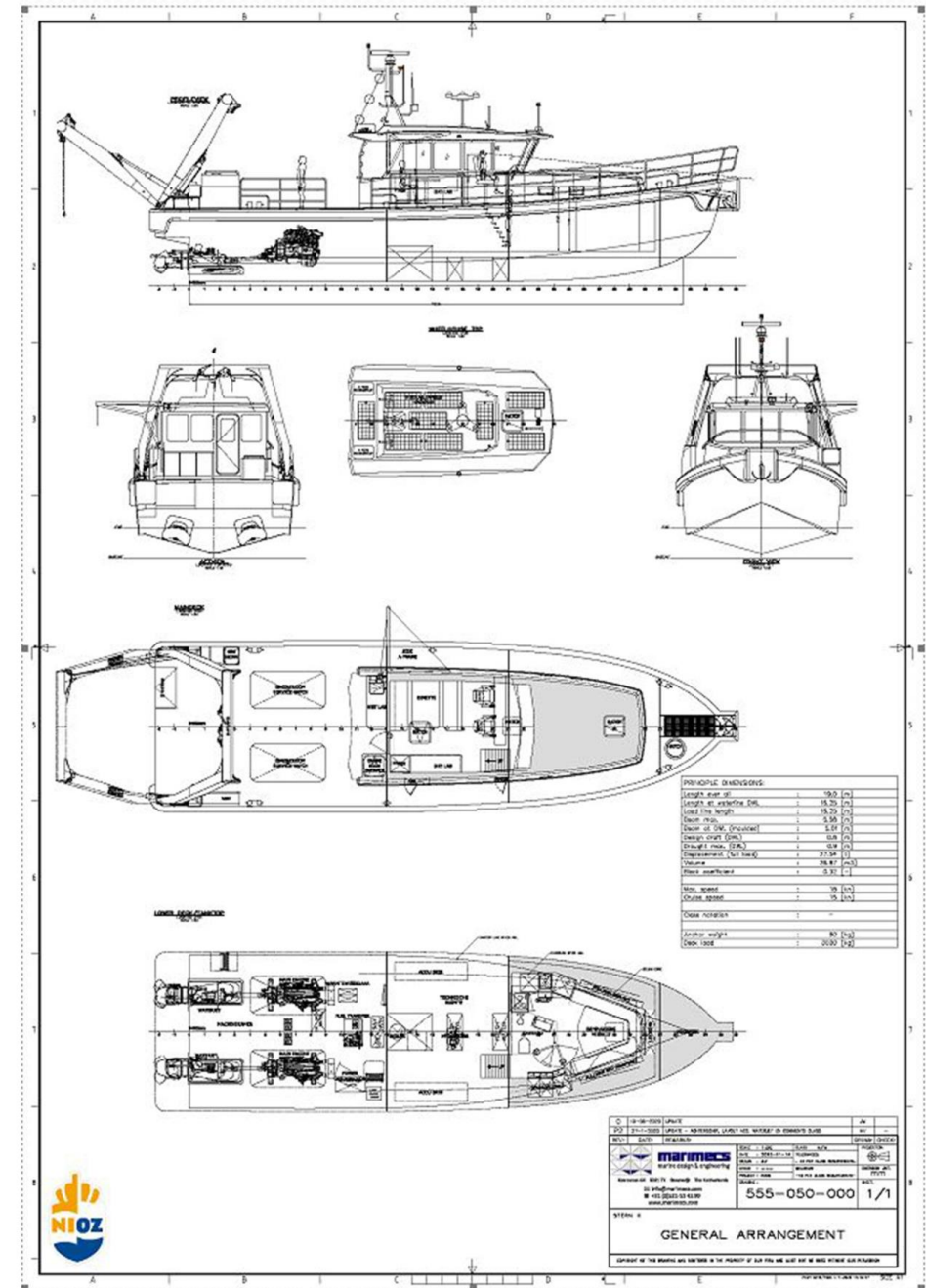




# RV Adriaen Coenen

## Specifications

- Length overall: 19 m
- Beam: 5 m
- Draught: 0,8 m
- Material: Aluminium
- Speed: 20 knts
- Crew: 2
- Passengers: 12
- Features: A-frame, side frame, ADCP & Multibeam deployment, wet lab, dry lab, towing arrangement





# RV Navicula

- A 40-year-old, 23m vessel
- Beam: 7m
- Draft: 1m
- Speed: 7 knts
- operates in **the Wadden Sea, Zeeland Delta, and near-coastal North Sea.**
- 3 crew + up to 8 scientists



# RV Wim Wolff



The *RV Wim Wolff* is designed with a shallow draught of 1m, specifically for overnight trips for research in coastal NL; the Wadden Sea, and Zeeland Delta.

being built by Thecla Bodewes Shipyards (TBSY) in Harlingen, The Netherlands

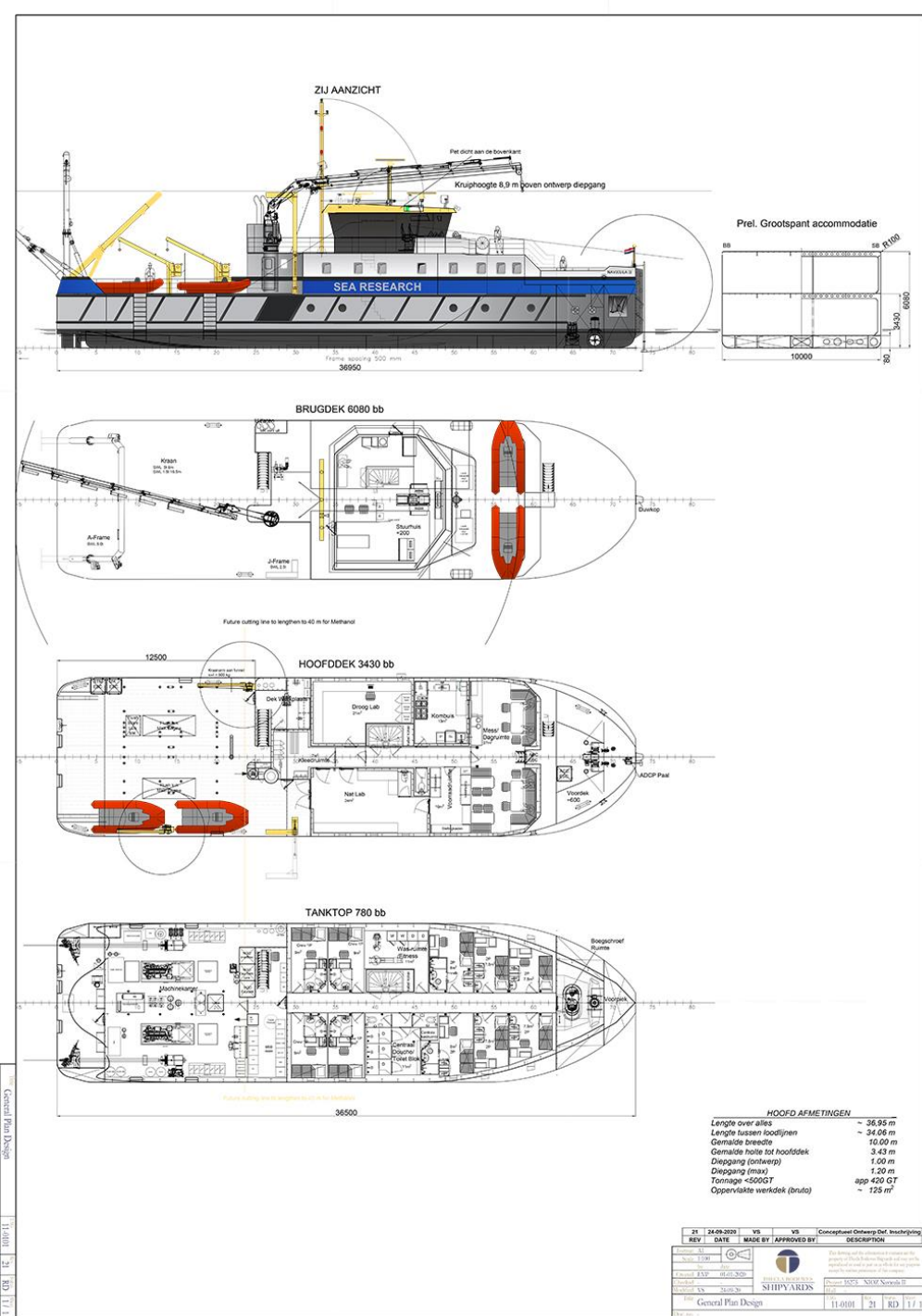
The expected delivery is in the **November of 2023.**



# RV Wim Wolff

## Specifications

- Length overall: 36 m
- Beam: 10 m
- Draught design: 1 m
- Draught max.: 1.20m
- Gross Tonnage approx.: 420GT
- Working deck area approx.: ~125m<sup>2</sup>
- Speed: 12 knts
- 4 crew + 12 passengers
- dry and wet lab
- 2 container space on the working deck

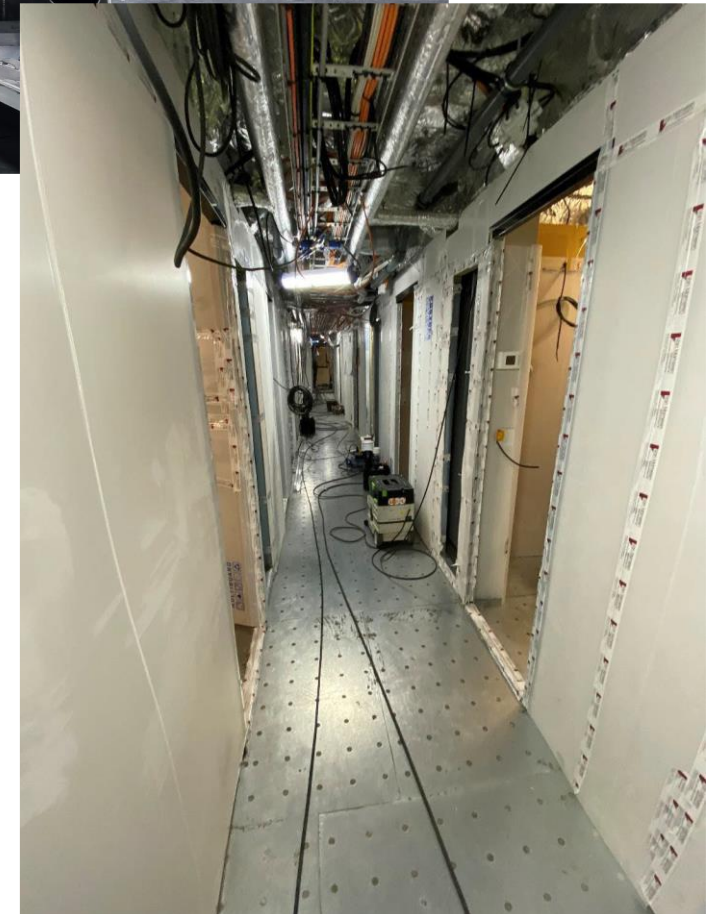


# RV Wim Wolff

Update from May 2023:



# RV Wim Wolff



Building process photos  
taken from newsletters  
©FH

# RV Wim Wolff



On 16 January 2023 the hull of *RV Wim Wolff* was launched for transport from Dijkstra Metaalbewerking to Thecla Bodewes Shipyards in Harlingen for the finishing phase.



For more information, please visit:  
<http://www.NewResearchFleet.nl>



# RV Pelagia



Length: 66m  
Speed: 10 knts  
Age: 32 years  
Berths: 25

12 scientists + 2 tech support +  
11 crew (single berth).

Container capacity :  
3 + 1 - on D-deck aft  
1 - in hold on D-deck  
4 - in hold on tanktop

# RV Pelagia



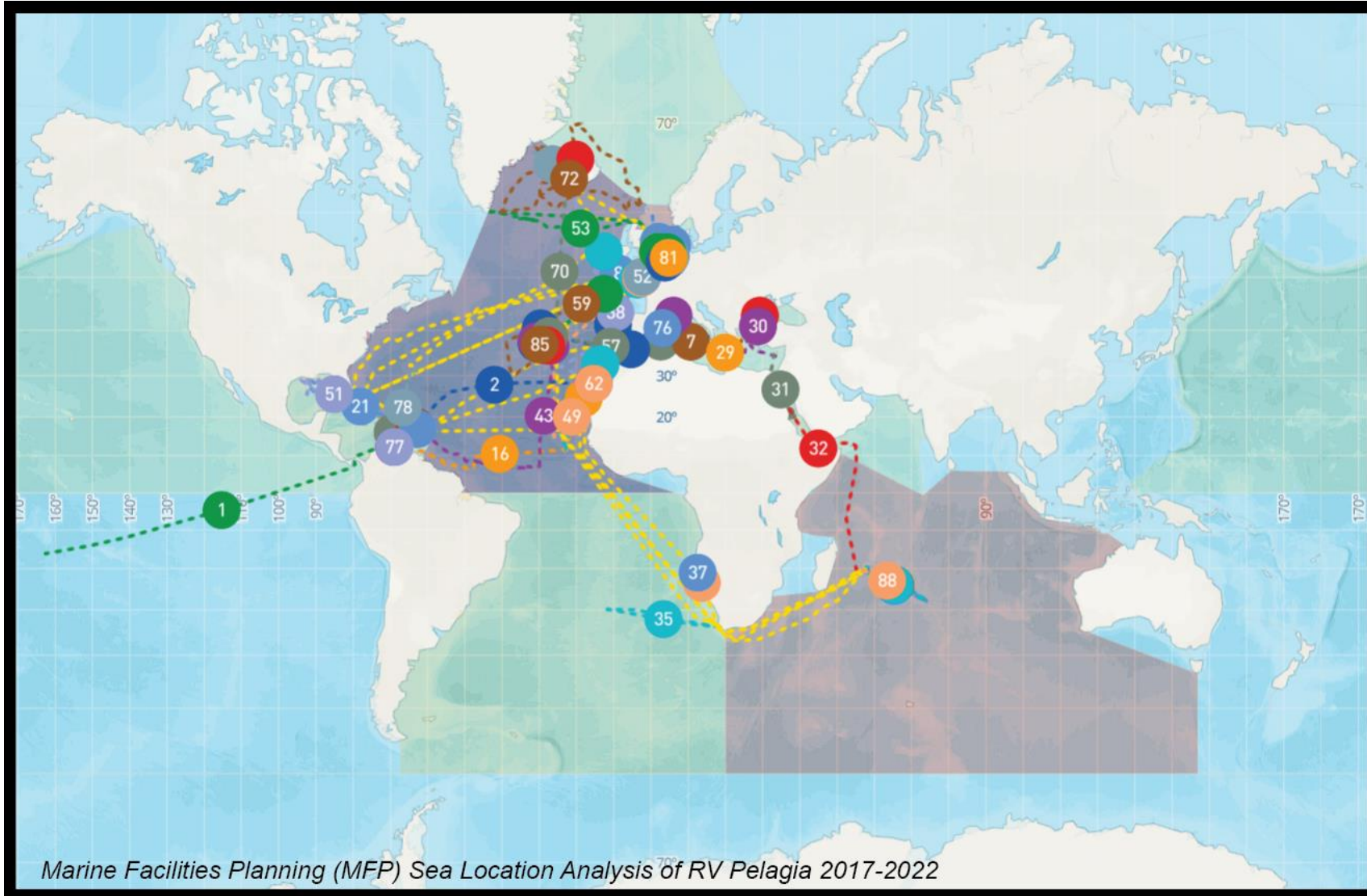
## Specifications

- Length overall: 66.05m
- Beam: 12.80m
- Draught: 4.20m
- Cruising speed / Maximum speed: 9knts / 11knts
- Diesel
- Fuel consumption at cruising speed: ~4.5 m<sup>3</sup> per day
- No DP



# RV Pelagia

operating year-round in all oceans and seas except for the polar regions.



# RV Anna Weber van Bosse



The *RV Anna Weber-van Bosse* will be built by **Astilleros Armon A.S.** in Vigo, Spain.

Delivery is scheduled for the **3rd quarter of 2025.**

More information [here](#)



# RV Anna Weber van Bosse



## Specifications

- Length overall 79.98m
- Breadth molded 17.00m
- Depth to main deck 8.70m
- Summer draught 5.00m
- Scantling draught 5.50m
- Accommodation 46  
(16 crew and 30 scientists)

# RV Anna Weber van Bosse



- Ice-class 1C
- Longer periods at sea with more people onboard
- Capable handling equipment; AUV, MEBO, ROCKDRILL
- Piston cores up to 30m
- Main-, dry-, wet- and geolab
- Room for 12 laboratory containers (max 17)
- Dynamic Positioning (DP2)
- Methanol ready
- Aim for 'zero emission' after 10 years refit



- You can follow the construction by subscribing to the newsletter or via social media @ResearchFleetNL.
- On Youtube: Newresearchfleet



**Nieuwbouw RV *Anna Weber-van Bosse***

A 3D digital rendering of a research vessel. The hull is blue with "SEA RESEARCH" written on the side. The superstructure is white with a yellow bridge. The name "ANNA WEBER-VAN BOSSE" is visible on the side of the superstructure. The vessel is shown from a three-quarter perspective against a grey background.

**Voortgangsrapportage #3: Mei 2023**

@ResearchFleetNL



# Questions?



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**Postdoct:** In NIOZ, the Netherlands.  
Paleoceanography

**Ph.D.:** University of Kiel, Germany.  
GEOMAR, Kiel, Germany.  
Paleoceanography, (micro)paleontology

**M.Sc. and B.Sc.:** Istanbul Technical University  
(ITU), Turkey.  
Geology, Marine Geology and Climate Science



Credit: W. Jan Hooijmans

## Expeditions

- 2020 Dutch *R/V Pelagia*, 64PE467 GoM2020, Gulf of Mexico
- 2019 Dutch *R/V Pelagia*, 64PE450 Namibia expedition
- 2019 Dutch *R/V Pelagia*, 64PE449 FUNAMOX Expedition,
- 2018 Dutch *R/V Pelagia*, NICO Expedition Leg 7, Gulf of Mexico, co-chief scientist
- 2013 German *R/V Meteor* Leg 94, Caribbean Sea
- 2010 & 2011 *ICDP: PALEOVAN* Field work (Lake Van, Turkey) & Laboratory (Bremen, Germany)
- 2010 Italian *R/V Urania*, Sea of Marmara
- 2010 German *R/V M.S. Merian* Leg15/1, Bosphorus Outlet Area Black Sea (HYPOX)
- 2010 Turkish *R/V Yunus* EC ESONET Sea of Marmara
- 2009 Turkish *R/V Arar*, Bosphorus Outlet Area Black Sea, (HYPOX)

