



Date of birth: 07/06/1991 | **Nationality:** German, Italian | **Gender:** Female | (+49) 03403461812 |

[Serenaabel91@gmail.com](mailto:Serenaabel91@gmail.com) | [serena.abel@awi.de](mailto:serena.abel@awi.de) | Gätkestraße 510 H, 27498, Helgoland, Germany

## ● WORK EXPERIENCE

01/10/2018 – 31/12/2021 – Frankfurt am Main , Germany

**RESEARCH ASSISTANT** – SENCKENBERG GESELLSCHAFT FÜR NATURFORSCHUNG

Abteilung: Marine Zoologie

Section Crustacea

Supervisor: Prof. Dr. Angelika Brandt

Project: Deep-MiPoll

**The role of hadal zones in the long-term fate of marine microplastics: Identification of microplastics in the deep sea of the Kuril-Kamchatka Trench (KKT), Northwest Pacific.**

objectives: Identification and characterization of Plastic in sediment samples collected in the KKT:

- First evaluation of MP presence in sediment samples collected during the Krambio II expedition in 2016 with RV Sonne. MP extraction and purification via density separation and oxidative reaction (Fenton treatment). Systematic identification of MP via Micro Fourier Transform Infrared spectroscopy, followed by a fully automated analysis. In toto analysis guaranteed a substantial reduction of under and overestimations of MP, deriving from aliquot-based extrapolations.
- Effects of the KKT depositional system on microplastic distribution in the sediment column. MP extraction from sediment core layers from the KKT, by developing a size conform extraction method based on density separation and overflow, in order to guarantee a fast and precise process, considering the MP size target and sample size.
- Presence and characterization of anthropogenic litter at the KKT seafloor. Samples, collected via Agassiz trawl and epibenthic sled, underwent a visual sorting process and spectroscopic analysis via ATR.

01/10/2018 – 31/12/2021 – Helgoland , Germany

**GUEST RESEARCHER** – ALFRED WEGNER INSTITUT (AWI)

Sea Shelf System Ecology

Supervisor: Dr. Gunnar Gerds Dr. Sebastian Primke.

Activities: laboratory activities and data evaluation related to the Deep-MiPoll project.

Sample preparation and data evaluation related to the Anthropocene GSSP-project, in collaboration with Leibniz-Institut für Ostseeforschung Warnemünde .

02/2018 – 08/2018 – Paris, France

**ICCAT OBSERVER FOR BFT** – CONFREPECHE

onboard the vessel the main duties were:

- Evaluation of the compliance with the Recommendations and provide a means of independently estimating the mass balance of fish caught and delivered to farms and subsequently removed during harvesting.
- Observation and report of fishing and transfer operations and the compliance of the vessels involved.
- Verification and signing of ICCAT transfer declaration.
- Sampling of BFT tissue, water samples, and sediment samples below the BTF cages for Quality controls.

07/2016 – 01/2018 – Riccione , Italy

**BIOLOGIST** – FONDAZIONE CETACEA

Fondazione Cetacea, centre for Sea Turtles and cetaceans Research and Hospital, Onlus, Riccione (Italy).

Main duties and responsibilities:

- rehabilitation of endemic marine turtles (sp. *C. caretta*)
- Identification of anthropogenic effect on the natural habitat, including fishing activities, oil spills and bycatch in the Adriatic Sea.
- Collaborating with Reef check Italy and the University of Bologna we started a sensibilization campaign of the community through open days at local high schools focused on marine resource management.

- Talks at conferences and symposiums, on ecological restoration and anthropogenic impact of Adriatic fish stock and preservation of coastal erosion via noninvasive reef barriers.

## ● EDUCATION AND TRAINING

---

10/2018 – CURRENT – Frankfurt am Main, Germany  
**PH.D STUDENT** – Goethe University

---

### Field(s) of study

- 15) Faculty of science

15/10/2014 – 27/02/2017 – DISVA, Ancona, Italy  
**M.SC. IN MARINE BIOLOGY** – University Politecnica Delle Marche

---

**Thesis:** Occurrence and characterisation of microplastics in marine organisms from the Adriatic coast (EPHEMARE PROJECT). Supervisors Dr. S Gorbi Dr. GC Avio

110/110

10/2010 – 06/2014 – DISVA, Ancona, Italy  
**B.SC. IN BIOLOGY** – University Politecnica Delle Marche

---

**Thesis:** Characterization and cartography of some Mediterranean soft-bottom benthic communities of the Gallinara Island (Italy). Supervisors Dr. C Cerrano Dr. S Puce Dr. D Pica

## ● LANGUAGE SKILLS

---

Mother tongue(s): **ITALIAN** | **GERMAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C1	C1	C1	C1	C1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## ● DIGITAL SKILLS

---

Microsoft Office | Origin (Origin Pro 8) | SiMPle | PRIMER 7 | FTIR (Bruker, OPUS) | Q-Gis | Endnote X9

## ● PUBLICATIONS

---

### Systematic identification of microplastics in abyssal and hadal sediments of the Kuril Kamchatka trench

---

DOI: 10.1016/j.envpol.2020.116095  
 2020

### Effects of the UV filter, oxybenzone, adsorbed to microplastics in the clam *Scrobicularia plana*

---

DOI: 10.1016/j.scitotenv.2020.139102  
 2020  
 Co-author

## **Distribution and characterization of microplastic particles and textile microfibers in Adriatic food webs: General insights for biomonitoring strategies**

---

DOI: 10.1016/j.envpol.2019.113766  
2019  
Co-author

## **Ecotoxicological Effects of Chemical Contaminants Adsorbed to Microplastics in the Clam *Scrobicularia plana***

---

DOI: 10.3389/fmars.2018.00143  
2018  
Co-author

## ● **CONFERENCES AND SEMINARS**

---

23/11/2020 – 27/11/2020 – Lanzarote  
**MICRO2020**

---

FATE AND MICROPLASTIC : KNOWLEDGE AND RESPONSABILITIES

11/02/2019 – 15/02/2019 – Helgoland  
**POGO Microplastic course**

---

From the surface to the sediment - Microplastics distribution in marine environments

12/09/2021 – 17/09/2021 – Brest, France  
**16 DSBS21**

---

Plastic pollution in the abyssal and hadal sediments of the Kuril Kamchatka trench.

14/07/2021 – online  
**OPEN Sea**

---

Different Seas, same plague: plastic Pollution

## ● **EXPERIENCE**

---

04/2017 – 11/2017  
**Research assistant**

---

Universidade do Algarve Centre for Marine and Environmental Research (CIMA), Portugal, Faro  
Topic: Ecotoxicological effects of microplastics in aquatic organisms.  
Program: Assess the toxicity of different types of microplastics in the marine bacterium *Vibrio fisheri*, using the MICROTOX bioassay;  
Assess the effects of microplastics using a battery of biomarkers (antioxidant enzymes activities, oxidative damage, neurotoxicity, etc) in different tissues of the clam *Scrobicularia plana*.  
Supervisors: Prof. Dr MJ Bebianno Dr. N Mestre

06/2016 – 10/2016  
**Trainee- Reef check Italy**

---

Monitoring of sessile species at the Sardinian coast in collaboration with Diving center costa Paradiso, University Politecnica of Marche and Reef check Italy.

**Trainee- Fondazione Cetacea**

---

Fondazione Cetacea, centre for Sea Turtles and cetaceans Research and Hospital, Onlus, Riccione (Italy).

Main duties and responsibilities: rehabilitation of endemic marine turtles (sp. *C. caretta*)

Identification of anthropogenic effect on the natural habitat, including fishing activities, oil spills and bycatch in the Adriatic Sea.

In collaboration with Reef check Onlus Italy and the University of Bologna sensibilization campaign of the community through Open days at local high schools focused on marine resource management

Talks at conferences and symposiums, on ecological restoration and anthropogenic impact of Adriatic fish stock and preservation of coastal erosion via noninvasive reef barriers.

● **DIVING LICENCE- LIFEGUARD PATENT**

---

2013 – CURRENT

**Lifeguard patent: Sea / Indoor / Pool (MIP ) (Ref. EMI-825/2013-62 ).**

---

Qualification as assistant lifeguard open sea and swimming pool  
include EmergencyFirstResponder

2014 – CURRENT

**Diving licence- ADVANCED PADI**

---

● **PEER- REVIEWING- TRAINING EXPERIENCE**

---

**Peer- reviewing**

---

I have been a peer-reviewer for Environmental Pollution, Microplastics and Nanoplastics, Marine Pollution Bulletin and Science of the total environment

**Training experience**

---

2018-2021 I have been supervising Ph.D. student colleagues at their first year in laboratory activities and their approach to scientific thinking as well as master students to finalize their thesis. 2014-2018 I have been supervising B.Sc students during their trainee at the sea turtle hospital required for their final thesis