

Profiles of speakers at Graduate Symposium 25 May 2018

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Dr. Maren Zark

Sanja Asendorf

Affiliation: Thermo Fisher Scientific, Bremen
Business: Laboratory Supply
Background: Environmental Sciences
Alumni of: GLOMAR / MARUM



Sanja graduated in Marine Environmental Sciences at the Carl von Ossietzky-University of Oldenburg, Germany in 2011. Her master project was about the geochemistry of Antarctic sediments and pore waters in regard to global climate changes within the past century. After another scientific project in Antarctica in the 2011/2012 season, Sanja started a PhD at MARUM (Center for Marine Environmental Sciences, Bremen, Germany) where she investigated human induced coastal changes within the past millennium. Because she realized that the work as a PhD student didn't suit her, she decided to quit after one year. This opened her the possibility to apply for a promising job position at Thermo Fisher Scientific, one of the world's biggest suppliers of laboratory applications. In April 2014, Sanja joined Thermo Fisher Scientific as an Application Specialist for ICP-OES. There she executes different tasks, for example supporting customers in their everyday questions regarding applications and software, preparing marketing material or giving customer presentations and trainings.

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Dr. Markus Brüning

Affiliation: M-UTEC Salt Technologies AG, Sondershausen
Business: Engineering, Geophysics
Background: Geophysics
Alumni of: MARUM / GLOMAR

University of Bremen

1999-2006

Diplom Geophysik

2006-2009 (-2012)

Dr. rer. nat. "Acoustic and visual imaging of active seafloor seepage in various deep-sea environments", GLOMAR

Patzold, Köbke und Partner Engineers

2009-2013

Exploration on sand and gravel

Cable route surveys Baltic and North Sea

UXO surveys
Methods similar to those used during PhD (Marine Geophysics)

K-UTEC Salt Technologies AG

2013 - now

Seismic monitoring at underground salt mining and at abandoned open cast coal mining
Small scale geophysical exploration: ground water, sand, cavities, ground reconnaissance
Well logging with radar
New methods for seismic monitoring, radar (well-logging and GPR), on-shore seismic

Dr. Luisa Cristini

Affiliation: Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI)
Business: Science Project Management
Background: Phy-sics
Alumni of: AWI / GLOMAR



Luisa Cristini is a climate scientist and project manager currently working at the Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI). Originally from Italy, she studied physics at the University of Padua in Italy where she graduated in 2006 with a thesis in coastal oceanography. Afterwards she moved to Germany where she worked on her Ph.D. in climate sciences at AWI. She received her doctoral degree from the University of Bremen in spring 2010 and started a post-doc at the Max Planck Institute in Hamburg soon after. In early 2011, she moved to Honolulu, Hawaii, and became involved in several activities first within the NOAA Seagrant College Program and then at

the College of Social Sciences, both at the University of Hawaii at Manoa. In summer 2013, she moved to the UK to work as project manager at the National Oceanography Centre in Southampton where she managed an EU-funded international project and was involved in several other projects and activities including the role of Early Career Scientists Coordinator within the Challenger Society. While in the UK, Luisa also received the Project Management Professional certification (PMP) awarded by the Project Management Institute (PMI), the world's largest association of professional project managers.

Dr. Tim Eberlein

Affiliation: Realschule Cuxhaven
Business: Secondary School
Background: Biology
Alumni of: AWI / POLMAR



Dr. Tim Eberlein works as a school teacher at the *Realschule Cuxhaven*. There, he teaches biology, chemistry, and sometimes also physics and mathematics. Furthermore, he runs a project group with pupils on keeping fish, insects and reptiles. Tim started his studies in biology in Bochum in 2006 and graduated 2011 with a MSc. Afterwards, he moved to Bremerhaven for a PhD position at the Alfred Wegener Institute for Polar and Marine Research. At the same time, he successfully applied at the POLMAR Graduate School. Tim finished his PhD in 2017. At that time, he worked already for two years as a teacher.

Dr. Grit Freiwald

Affiliation: IAV GmbH, Gifhorn
Business: (Automobile) Industry / Research and Development
Background: Mathematics / Modelling
Alumni of: AWI / POLMAR



Dr. Grit Freiwald studied mathematics and physics at the Technical University of her home town Berlin. Afterwards, from 2009 to 2012, she was working on a PhD project in physical oceanography at the AWI in Bremerhaven. Her work at the AWI focused on the integration of measurement data of very different types (satellite, in-situ) into various physical numerical ocean models of the North Atlantic and the Southern Ocean. During this time, Grit also spent three months at the CSIRO in Hobart, Tasmania, enabled by a POLMAR stipend.

After continuing work on the same topic for six more months in a Postdoc position at the AWI, Grit changed to IAV GmbH in Gifhorn, situated in the south of Lower Saxony. Here, she develops functions and software for the engine control unit in hybrid vehicles. The tasks in this field are very diversified and challenging, and Grit could already file two patents for her

developments. Grit also is an active member of the DPG (Deutsche Physikalische Gesellschaft) where she acts as a mentor and supports events.

Dr. Paola R. Gomez Pereira

Affiliation: GlaxoSmithKline, Wey-bridge, UK
Business: Consumer Healthcare
Background: Marine Microbiology
Alumni of: MPI / MarMic



Dr. Paola R. Gomez Pereira works at GSK Consumer Healthcare (Weybridge, UK) for the Oral Health category as a clinical research and development lead on innovation projects. She supports the delivery of clinical development excellence by providing scientific and medical expertise on specific innovation project strategies, where she is accountable for the design, execution and reporting of clinical studies. Her role provides cross-functional support to global strategies on clinical research, business development and R&D strategies. GSK is a fast-moving consumer healthcare company with very short innovation cycles from idea to market for £1bn brands such as Sensodyne. This demands a very fast paced approach for decision making in clinical strategies, execution and dissemination of scientifically robust clinical trials. Paola graduated from the Max Planck Research School of Marine Microbiology (Bremen, Germany) in 2010. During her PhD, she investigated genomic traits of uncultivated bacterial groups using next generation sequencing technologies and fluorescence *in situ* hybridization.

After completing her PhD, Paola did a post doc at the National Oceanography Centre (Southampton, UK), where she planned and executed research in the area of microbial ecology using radiotracers and flow cytometer techniques. During her post doc, Paola decided to continue her career outside academia and she secured a role at Philips Research (Cambridge, UK), working in oral microbiology. As a Senior Scientist she delivered major breakthrough innovations in a very short time in the oral health field, which are driving business growth. She participated in identifying consumer needs, conducted laboratory and clinical research, established key opinion leaders network and supported

marketing introduction of oral health innovations. Particularly she led the planning, design and analysis of clinical trials with external academic partners and clinical research organizations, which constituted a fundamental part of the technologies' proof of principle.

Dr. Stefan Häusler

Affiliation: Lonza AG, Visp, Switzerland
Business: Microbiological Quality Control
Background: Marine Microbiology



Dr. Stefan Häusler started studying biology in the bachelor's program at the University of Heidelberg in 2005. In his Bachelor thesis, he investigated the respiratory behaviour of a gutless marine oligochaete on the Island of Elba, Italy. This is also where he worked afterwards as a SCUBA diving instructor before entering the MarMic program at the MPI for Marine Microbiology in 2008. Specializing in the research of microbial mats in sulphide rich environments using molecular techniques and microsensors, he finished his master thesis in 2010, where he has investigated microbial communities in the Frasassi Cave System, Italy. After another break of

working as a diving instructor on Elba, he got the opportunity to do a PhD at the MPI describing a newly discovered microbial consortia system around underwater springs in the Dead Sea, Israel.

Although the ground-based research and the associated field trips were very exciting, he decided to quit his university career after he finished his PhD in 2014. Following an eight month journey down the Pan-American Highway and sometime of job application writing, he started working in 2015 as a scientist in the Microbiological Quality Control Department at Lonza. Lonza is a custom manufacturing organization producing active pharmaceutical ingredients (APIs) for major pharma companies (e.g. Bayer, Novartis, and Roche). The production site where he works is located in the middle of the Alps in Visp, Switzerland with about 2800 employees.

His group is responsible for all microbiological testing during the production of the APIs, which are mainly manufactured by microbial fermentation. They are six scientists and each of them is responsible for different products, supporting the whole production cycle in terms of microbiological expertise. This includes for instance, managing of all microbiological and related analytics performed by the lab technicians, review of results, investigations of deviations and risk assessments in case of microbial contaminations. Furthermore, a big part is the design of experiments for investigations or specific studies, communication with customers and authorities, writing of analytical or validation reports as well as development of new analytical techniques.

Franziska Hellmich

Affiliation: MENCK GmbH, Kaltenkirchen
Business: NGO
Background: Biology
Alumni of: MarMic, MARUM



Franziska studied geology with focus on the field of applied geology (engineering geology, geotechnics and hydrology) at the Christian-Albrechts-University of Kiel and graduated in 2010. After her graduation, she began working for the AGUA GmbH, a small consultancy in Kiel, dealing with foundation soil analyses for civil engineering projects and with contamination of soil and groundwater.

In 2012, she decided to return to university and became a PhD student at the INTERCOAST graduate programme at the Marine Geotechnics Group at MARUM, Bremen. For her PhD project, she used the MARUM owned dynamic cone penetration lances to investigate the seafloor stability of various environments such as the nearshore

zone, offshore slopes and port basins. As the INTERCOAST graduate programme is a collaboration with the University of Waikato, she also spent three months in Hamilton, New Zealand as a guest scientist.

Since 2016, Franziska is working as a Geotechnical Engineer for the MENCK GmbH, one of the world's leading offshore pile driving specialist. The company offers hydraulic pile driving equipment and solutions as well as project management and after-sales service programmes for offshore oil & gas, renewable energies and civil engineering projects. Franziska's main tasks are to evaluate the most suitable equipment for a project and to support the team and customer whenever geotechnical questions arise.

After a year and a half of double stress of working in industry and trying to finish her PhD thesis, she decided to quit her PhD and to concentrate on her career at her current employer.

Dr. Tim Kalvelage

Affiliation: Spektrum der Wissenschaft, Springer Nature, Heidelberg
Business: Science Journalism
Background: Marie Microbiology
Alumni of: MPI / MarMic



Dr. Tim Kalvelage studied biochemistry at the University of Kiel as well as marine sciences at the Geomar and the MPI for Marine Microbiology. He received his Ph.D. from the University of Bremen in 2012 for research on nitrogen cycling in tropical oxygen minimum zones. In 2013, he moved across the Atlantic for a postdoc in Halifax, Canada, where he continued working on nutrient transformations in the oceans. About one and a half years later, he returned to Europe for a postdoc at the ETH in Zurich to explore microbial processes in lakes and rivers. Driven by the urge to communicate environmental sciences to a wider non-expert audience, Tim started writing for a campus magazine during his time in Switzerland. In 2016, he signed up for a course on “science editorial office” at

the mibeg-Institute Medien in Cologne to gain additional journalism experience. He eventually decided to leave research and took a job as editor for the popular-science magazine “Spektrum der Wissenschaft” in Heidelberg. Since autumn 2017, he is covering chemistry and geoscience for the magazine.

Dr. Peter Müller

Affiliation: Berufsverband Deutscher Geowissenschaftler e.V. - BDG, Bonn
Business: NGO
Background: Geosciences
Alumni of: ZMT / GLO-MAR



Peter Müller studied geosciences (BSc) at the University of Hannover between 2006 and 2010 focusing on structural geology and sedimentology and at the University of Bremen (MSc) between 2010 and 2012 focusing on sedimentology and isotope geochemistry. In his MSc thesis, Peter worked on the paleoclimate information from stable isotope signatures of fish otoliths. After working as a research associate for one year at the Leibniz Centre for Tropical Marine Research in Bremen, he started a PhD project in 2014 at ZMT/Uni Bremen focusing on geochemical records in marine carbonates to reconstruct paleoclimate conditions of NW Africa. After defending his PhD thesis in spring 2017, he started working as Project Officer of the European Federation of Geologists in

Brussels, Belgium. In this position, Peter was working on the coordination of Horizon2020 research projects of EFG and the management of the 26 national associations of the EFG within the different project consortia. Since May 2018, Peter is working for the German Professional Association of Geoscientists (Berufsverband Deutscher Geowissenschaftler e. V. – BDG). He will be the Executive Director of BDG after November 2018. Throughout his university studies in Bremen and later his PhD Project, Peter was actively involved in organizing the German Student Council Conference (Bundesfachschaftentagung) in 2012 in Bremen and the Student Representative (2011-2015) in the BDG

Council. Since 2011 he is a member of the BDG committee for Universities and Research Institutes and since 2015 member of the EFG Panel of Experts “Education”. During his time at ZMT, Peter was one of the PhD Student representatives of ZMT.

Dr. Eva Philipp

Affiliation: Vattenfall Europe Windkraft GmbH
Business: Onshore & Offshore Wind Environmental Strategy / Project Management
Background Business: Marine Biology
Business: AWI



Dr. Eva Philipp is Head of the Environmental & Sustainability Unit in the Business Area Wind in Vattenfall, which supports the renewable energy projects in operational environmental and sustainability tasks as well as gives strategic direction in these areas.

Eva Philipp is a marine biologist and has worked in science for > ten years before joining Vattenfall Offshore Wind in 2012. She has marine working experience in a variety of environments including the North and Baltic Sea, Irish Sea, Australia, Arctic and Antarctic Ocean where she worked on land stations

as well on research vessels. In her present role she and her team is focussing on Onshore-, Offshore wind, Solar- and Battery-storage projects in Sweden, Netherlands, Denmark, Germany, UK and France.

Dr. Benedict Preu

Affiliation: ATLAS Elektronik GmbH, Bremen
Business: Engineering
Background: Marine Geosciences
Alumni of: MARUM / GLOMAR



In 2003, I started my geoscientific career by participating in the B.Sc. and M.Sc. Geosciences program of the University of Bremen focussing on marine geosciences and geophysics from early on. As well, during this time I studied one semester abroad at the University of Bergen, Norway, and had the chance to participate in several major and minor research cruises. As a post-graduate, the 'Marine Technology and Environmental Research' group of the University of Bremen offered myself a PhD position in the framework of the MARUM research core area "Sediment Dynamics".

After graduating early 2012, I continued to work in the program as a research assistant for one year. In 2013, I left Germany to work as a development geophysicist and subject matter expert in 'Geophysical and Geological Operations' with Chevron North Sea Limited in Aberdeen, Scotland. After 3 years, I returned to Germany to take a position as head of the 'Marine Survey' department at Patzold, Köbke Engineers GmbH & Co. KG in Buchholz in der Nordheide, Germany. Since August 2017, I work with Atlas Elektronik GmbH in Bremen as a development engineer.

Dr. Claudia Propp

Affiliation: Federal Maritime and Hydrographic Agency (BSH), Hamburg
Business: Project coordinator / Environmental assessment expert
Background: Geography / Geology / Ecology
Alumni of: ZMT / GLO-MAR



University of Greifswald
2000 – 2006
Diploma Geography

Leibniz Centre for Tropical Marine Research/ GLOMAR
2006 – 2011

Dr.rer.nat. “Sources and fate of particulate organic matter in the sediments of the Brantas estuary, Java, Indonesia”

Federal Maritime and Hydrographic Agency

2012 – now

Project Coordination – Full coverage sediment mapping in the German Exclusive Economic Zone
Geological Environmental Impact Assessment – Offshore Wind Industry.

Dr. Oliver Ritzmann

Affiliation: Wintershall, Barnstorf
Business: Exploration Management / Project Management
Background: Geophysics
Alumni of: AWI



Dr. Oliver Ritzmann joined Wintershall in 2012 as a geophysicist and is currently working as Exploration Manager for Wintershall's southern German assets. Wintershall is a subsidiary of BASF's and Germany's largest crude oil and natural gas producer. With a background in Geology and a study at University of Bonn, he joined Alfred-Wegener-Institute for Polar and Marine Research (AWI) for his Diploma Thesis in seismic data interpretation of East

Antarctica's continental margin. It was followed up by three years of doctoral research focusing on the crustal architecture of the Svalbard Archipelago and Eurasia Basin. His research time at AWI was accompanied by several cruises with RV Polarstern providing basic insights into operational geophysics and geology. After finishing the PhD-Thesis he went to Bergen and Oslo Universities for a five-year period of post-doctoral research. During his stay in Norway he participated in a series of oil & gas industry-funded projects about the Norwegian Continental Margin and the Barents Sea, both key regions for Norway's position as an oil & gas producing country. Oliver Ritzmann joined the industry in 2008 at E.ON Ruhrgas E&P. Starting as a seismic interpreter and geophysicist, he worked mainly for on- and offshore Northern African, Russian and Norwegian hydrocarbon exploration projects. For Wintershall in Germany he is currently managing geological and geophysical projects for oil and gas field developments and production.

Dr. Gaby Schilling

Affiliation: KEPOS, Heppenheim
Business: Career Coaching
Background: Chemistry



Dr. Gaby Schilling studied Chemistry and did her doctoral studies in solid-state chemistry. For more than 17 years she held various leading positions in an internationally operating DAX 30 company in Germany and the US and was heading teams of experts and managers in research, product development and product safety. She has thus gained profound first-hand experience in all phases of collaboration with employees – from recruitment over career development and promotion to change of career. Qualifications to business coach and team coach complement her practical experience. Since 2012, Gaby Schilling has been working as a coach and consultant for natural scientists in leadership positions. She also

runs workshops and trains groups whereby the main focus is on the transition from science into industry and taking over leadership tasks.

Dr. Mareike Volkenandt

Affiliation:	IBL Umweltplanung GmbH, Oldenburg
Business:	Environmental consultancy agency
Background:	Marine Biology
Alumni of:	University of Oldenburg



Dr. Mareike Volkenandt is a marine biologist working for IBL Umweltplanung, an environmental consultancy agency in the North of Germany, specialised in environmental planning, environmental monitoring and project support. Born in the South of Germany, Mareike was soon attracted to the marine ecosystem. Hence she got a Bachelor degree in Biology of the University of Oldenburg. Then she participated in an Erasmus Mundus Master for Marine Biodiversity and Conservation at the University of Bremen and the University of Oviedo in Spain. She used semester breaks and gap periods to work and volunteer in different national and international marine laboratories. In 2015 she finished her PhD, which was as well part of an international Erasmus Mundus Graduate School “Mares - Marine Ecosystem Health and Conservation” at the Galway-Mayo Institute of Technology (Ireland) and the Université Pierre et Marie Curie in Paris/Banyuls sur mer (France). After her PhD, she worked for the University of Oldenburg with focus on scientific management and the coordination and further development of marine science master programmes. Mareike Volkenandt is now working for an environmental consultancy agency, analysing and modelling monitoring data of harbour porpoises in the German bight for offshore wind farm projects.

Dr. Maren Zark

Affiliation:	Landeskriminalamt Bremen (state office of criminal investigation)
Business:	Chemical assessment of drugs and unknown substances
Background:	Marine Geochemistry
Alumni of:	ICBM



Dr. Zark is a chemist working at the state office of criminal investigations in Bremen, Germany. She studied Chemistry at the University of Oldenburg and finished her Master degree in 2011. Early on during her Bachelors she became interested in the field of analytical chemistry and geochemistry. She gained international experience by stays abroad in Prague via DAAD/IAESTE in 2008 and at the University of Wyoming, USA, in 2010. In Wyoming she joined the Analytical Chemistry group and first became interested in advanced applications of Mass Spectrometry. In 2012 she started a PhD in the ICBM-MPI Bridging group for Geochemistry at ICBM, Oldenburg within a large interdisciplinary project on the effects of ocean acidification. Her main tasks were mass spectrometric analyses using an ultra high resolution FT-ICR mass spectrometer. She further had the opportunity to join several research expeditions, including a ship cruise on board of RV „Polarstern“ and a six months sampling campaign in Sweden. After graduating, a proposal for a two-year postdoc within the same project was granted and Dr. Zark stayed at ICBM. Towards the end of the project, at the age of 29, she started looking for new challenges in both, academia and industry. In fall 2017 she joined Intertek, an international company in the field of quality control services. Intertek Food Services runs a testing facility in Bremen, where Dr. Zark became laboratory supervisor in the field of authenticity control of honey via LC/IRMS. Only few months later, in February 2018, she joined the chemistry lab of the state office of criminal investigations in Bremen. She holds a full-time permanent position and her tasks include mainly the chemical assessment of drugs and unknown substances.