



Newsletter for Docs in Marine Sciences

No. 8 // July 2017

Dear all,

The conference-season started: the Helmholtz NextGen already had a great conference for doctoral candidates in Kiel, the next one, YouMaRes, especially for young researchers comes up in September, also in Kiel. Also see what amazing things your peers have been doing in the last months!

Enjoy the Newsletter!

Best regards,

Wiebke (ISOS), the ISOS Reps and the DokTeam



mailing list "phd-news":

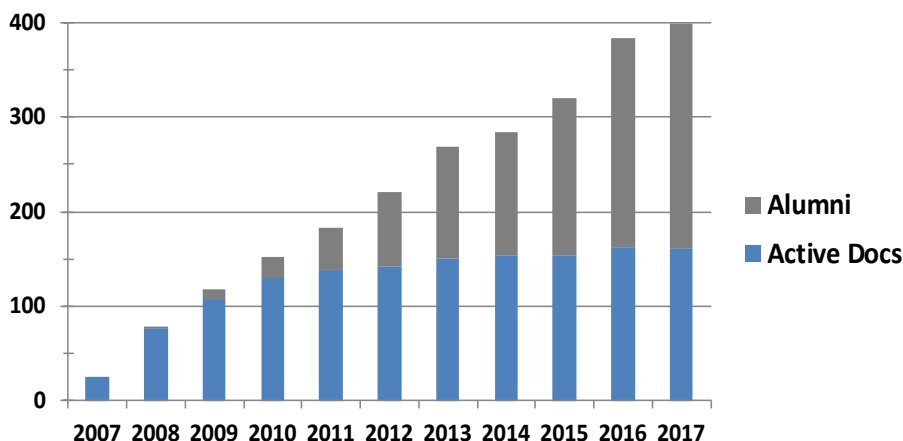
information of general interest for the Doc community (e.g. job advertisements, summer schools and conferences) are shared.

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10 Years ISOS



data as of July 2017



Upcoming disputations:
Good luck!



Sinnika Lennartz (28.07.17; GEOMAR - Chemical Oceanography)

Skadi Lange (12.09.17; GEOMAR - Biogeochemistry)

New Alumni: Congratulations!

Karlos Kochhann (CAU - Geoscience)

David-Willem Poggemann (GEOMAR - Geoscience)

Julia Schwab (CAU - Geoscience)

Paul Stange (GEOMAR - Biological Oceanography)

Chi Guan (GEOMAR - Marine Ecology)

Nadine Schattel (GEOMAR - Geoscience)

Christina Bonanati (GEOMAR - Geoscience)

Dominik Palgan (GEOMAR - Geoscience)

Ulrike Lomnitz (GEOMAR - Geoscience)

Wei Li (CAU- Geoscience)

// Have you met:



Jiajun Wu

Jiajun already did his Master studies in Kiel and now works in the group of Prof. Andreas Oschlies. In his doctorate, he investigates earth system and climate change issues via various model methods.

Besides research, Jiajun is really into basketball, photography and craft beer home-brewing.

jwu@geomar.de



Guido Bonthond

Guido has always been attracted to places at the sea, so coming to Kiel for his doctorate was a good choice. He works at GEOMAR in the group of PD Dr. Florian Weinberger on microbial holobiant members – at the moment he is most excited about the experiment he is currently planning.

In his freetime he likes football, SCUBA diving and enjoys a good novel.

gbonthond@geomar.de



Joshua Kiesel

Getting to know interesting people who are fascinated by the same topics and his research field excites Joshua most in his doctorate on saltmarshes in the group of Prof. Vafeidis (Kiel University). Coming to Kiel was a logical consequence since the sea is the centre of Joshua's life: here he takes a rest from the daily struggle, he pursues his hobbies (e.g. surfing) and it is where he works.

kiesel@geographhie.uni-kiel.de



Tim Willems

Tim started his doctoral studies in May in the group of Prof. Sebastian Krastel and Dr. Klaus Schwarzer at Kiel University. He works on coastel development and dynamics of sediment and finds it very exciting to discover the processes on and underneath the seabed.

Besides research, Tim is interested in Djing (mostly electronic music), Skate, Snowboard and surfing – one reason to come to Kiel.

tim.willems@ifg.uni-kiel.de



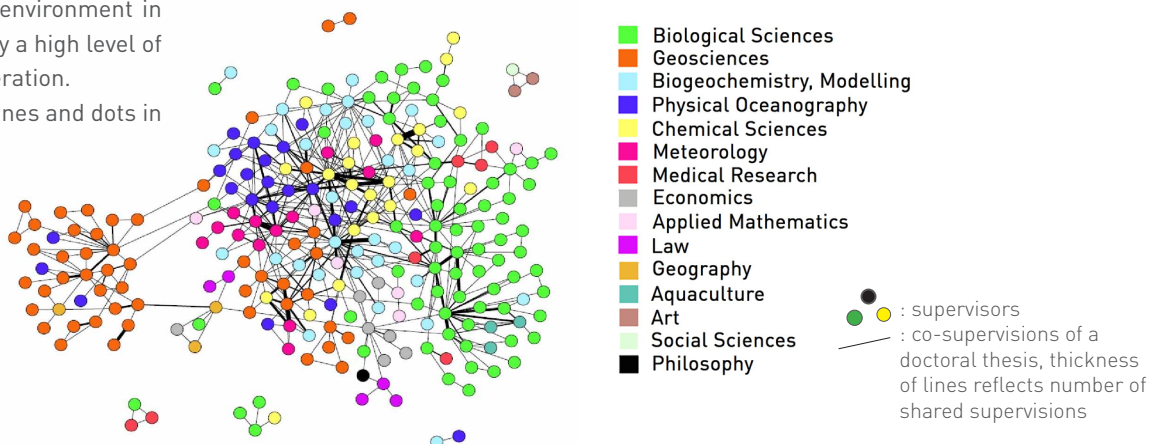
Caroline Utermann

Since Caroline was fourteen years old, she wanted to become a marine scientist, to work at GEOMAR and to live as close as possible to the (Baltic) Sea. All became true and she does her doctorate in the working group of Prof Deniz Tasdemir on the invasive character of *Ciona intestinalis*. She enjoys having her own research project with a lot of "scientific freedom" in planning and conduction of experiments. She also loves reading books, sewing and enjoying nature.

cuttermann@geomar.de

// Marine Interdisciplinary Network

The marine research environment in Kiel is characterised by a high level of interdisciplinary cooperation. Can you identify your lines and dots in the Network Graph?



Graph of co-supervisions of 250 supervisors (active ISOS candidates and alumni). The graph layout is determined by the Force Atlas algorithm, a force-directed algorithm which encourages closely related nodes to be plotted near each other.

// Doc Representatives in Marine Sciences

Within Marine Sciences you as a doctoral candidate are represented by so called "Doc representatives": within the ISOS community you can contact four reps, within GEOMAR you are represented by the DokTeam. They closely collaborate and at least one doctorate candidate is active in both teams.

The Doc Reps organise social events and represent the doctorate community in different committees. Contact them for more information!

ISOS representatives

(contact: phd_reps@isos.uni-kiel.de)



Kerstin
CAU
Geoscience



Meike
GEOMAR
Magmatic and
Hydrothermal
Systems



Katriina
GEOMAR
Geoscience



Eva
GEOMAR
Microbiology

By receiving input, feedback and ideas from the you, we (together with you) have the direct opportunity to shape ISOS and their offers.

Besides that, the rep-team takes part in

- ISOS steering committee meetings, where we discuss the direction ISOS is heading for
- Future Ocean executive board meetings, where we even have a vote!
- and we work close with the GEOMAR DokTeam.

GEOMAR DokTeam

(contact: dokteam@geomar.de)



Jacky
Paleo-
oceanography



Meike
Magmatic and
Hydrothermal
Systems



Lisa
Magmatic and
Hydrothermal
Systems



Christian
Meteorology



Luisa
Marine Ecology



Kristin
Physical
Oceanography

We are the DokTeam and represent about 200 doctoral researchers at GEOMAR.

We are your contact to the GEOMAR directorate and administration but we also have contacts to the other 18 Helmholtz associated centres across Germany. We organise social events so you can meet other Docs and enjoy your time in Kiel. Our work is for you, so that you profit from the doctoral community as much as possible.

// GEOMAR

New Face at GEOMAR directorate

In June, Dr. Sonja Reich joined the directorate of the GEOMAR to substitute for Dr. Astrid Klingen, who started her maternity leave July 1st. Sonja Reich studied geology/paleontology at the CAU Kiel and completed her doctorate in Marine Paleobiology in Utrecht, the Netherlands. Now she will deal with science coordination and support of junior scientists (doctoral candidates and postdocs) and therefore will be your contact person in the directorate of the GEOMAR.

Contact Sonja via sreich@geomar.de



Astrid Klingen and Sonja Reich
© Jan Steffen; GEOMAR Helmholtz-Zentrum für Ozeanforschung
Kiel

// Doc activities

The United Nations' Ocean Conference

contact: *Martina Stiasny, doctoral researcher*
 (mstiasny@geomar.de)

Martina Stiasny attended the Ocean Conference at the United Nations in New York City representing the research project BIOAcid and spoke about her research on acidification effects on fish and fisheries. She is a doctoral candidate in the working groups of Prof. Thorsten Reusch and Prof. Martin Quaas, and works on climate change effects on Atlantic cod fisheries.

I have to admit that, when I was asked to attend the conference and speak on behalf of ocean acidification and BIOAcid, I was not only super thrilled, but also slightly intimidated by the prospect. It caused a couple of sleepless nights until I had my speech written. However, as soon as I arrived at the UN in Manhattan, I got swept away by the excitement of the buzzing Headquarters filled with about 6000 delegates, all prepared to speak out and fight for the protection of the ocean.

Nevertheless, if you cannot get past the painful irony of a room full of delegates from nations, NGOs, IGOs and the scientific community discussing the problem of plastics in the oceans, while sipping iced lattes from a plastic Starbucks cup with a plastic straw (since the Café in the UN Headquarters actually serves Starbucks coffee), you would have been pulling your hair out for a week.

Additionally this week happened under the strange circumstances of the international community gathering for the first time to put the Ocean on the international political agenda, while President Trump decided to pull out of the Paris Agreement. The atmosphere at the conference was surprisingly

positive and optimistic and it appeared like there was widespread agreement on the fact that we have for certain reached the point of 'now or it might be too late'. But when Robert Mugabe makes a statement to support whatever might be necessary to reach the sustainability goal, but the president of the United States prefers to steer in the opposite direction, it certainly feels like the world has gone slightly mad.

I am nevertheless very proud to have had the chance to make my statement and to get the feedback from some delegations that this was the first time they truly understood and believed the threat that acidification might pose.

Of course nobody is pretending that the Ocean will be saved in a week, but hopefully we will look back one day and see this as a turning point. Sometimes all it takes is for the rudder to be turned just a few degrees... Seeing some of my own professional heroes, like Dr. Sylvia Earle, speak in the General Assembly Hall of the United Nations during the Celebrations for World Ocean Day was just an added bonus, but one that I will treasure for a long time.



MOOC One Planet - One Ocean

Our Massive Open Online Course on the Ocean attracted over 4000 participants in 2016! Students, educators, professionals and citizens... on demand we are re-broadcasting in a new, exciting format. The Kiel Marine Science Community is joining the global initiative to #SaveOurOcean! Enrolment is open until August 15th - sign up, browse, learn!



www.oceanmooc.org

Communication and Reach of Climate Science

contact: Rafael Abel, doctoral researcher
(rabel@geomar.de)

In June the first "Wissenschaftssalon", hosted by the PES Stiftung took place. Rafael was one of the participants and give you an insight into the meeting:

Communication and reach of climate science - this was one goal of the first 'Wissenschaftssalon' hosted by the PES Stiftung. On June 15th politicians, scientists, businessmen, students and pupils all around northern Germany met at the river Schlei to discuss the relationship between humanity and the ocean. Inspired by a talk from Prof. Mojib Latif a very lively discussion started with focus on the pollution induced by humans, what possible actions could be undertaken to reduce and reverse the pollution and most importantly how to encourage people to take action. One particular problem is of course the communication and how to reach people. The meeting is thought to lead into a working group that fosters the proposed ideas and will be further supported by the PES Stiftung.

In a nutshell, the meeting drew once again attention to the very crucial role of communication and reach of science - but also how difficult it sometimes can be.

NextGen@Helmholtz 2017

contact: Luisa Listmann, doctoral researcher (llistmann@geomar.de) / DokTeam GEOMAR

In the beginning of July around 120 young doctoral researches from all over Germany met at the GEOMAR for the 2nd NextGen conference. The doctoral researchers came from 17 of the 18 Helmholtz Centers to talk and communicate about their science, ideas and everyday PhD life during a three day interdisciplinary conference.

This year's focus was on science communication and the "how to": during a poster session workshop the participants learned how to give a good pitch talk for a poster. With the cooperation of Yoweedoo innovative ideas were developed concerning everyday life and communicating science - for example with an app for "Science seeing". ISOS helped us to bring on board great coaches to teach radio, video, theatre and graphic communication. It was great to see how in such a short time, nice and new ways of communicating science could be learned and for example video interviews or a radio show could be produced!

During an Alumni session eight scientists came and told the young doctoral researchers about their own career paths including being a professor, a journalist, postdoc or even a mussel farmer.

The scientific exchange was complemented by social exchange during our evenings: we were lucky that

Kiel showed its nice side weather wise and we could enjoy a delightful BBQ by Johns Burger (all cooks themselves are scientists) and a sunny event dinner on the steamboat "Freya".

All in all it was a great experience being part of the conference and especially the organizing team. It was a lot of fun to work with many committed doctoral researchers from the GEOMAR and the Helmholtz Juniors (Hejus) to make this event possible!



photo credit: Paulina Artinger

further reading:

<http://www.geomar.de/news/article/wenn-der-nachwuchs-ueber-zukunft-spricht/>

ISOS Miniproposal

Martin Hänsel just came back from his research stay in Barcelona where he worked on his Miniproposal "Assessing temperature versus ocean acidification dynamics in an integrated model of environmental quality and the global economy". Here he gives an insight into his research.

Assessing temperature versus ocean acidification dynamics in an integrated model of environmental quality and the global economy

*contact: Martin Hänsel, doctoral researcher
(haensel@economics.uni-kiel.de)*

During my time with Prof. Jeroen van den Bergh at the Institute of Environmental Science and Technology at the Universitat Autònoma de Barcelona the aim was to both study how to sensibly include economic effects of ocean acidification into state of the art integrated assessment models and further develop my professional scientific network, which is an essential part of a future career in academia.

We developed a static two-sector model of an economy, highly dependent on agriculture and fisheries, to study the interacting external effects of ocean acidification, global warming and eutrophication on socially optimal environmental policy. The integrated model captures that CO₂ emissions not only contribute to global warming through an increase of the atmospheric temperature relative to the pre-industrial level but also cause ocean acidification. Global warming affects both sectors while ocean acidification influences fisheries. The model accounts for agriculture run-off of pesticides and fertilizers, which results in eutrophication of the ocean that negatively effects the productivity of fisheries. The utility of a representative consumer reflects both use and non-use values of agricultural and fishery resources by incorporating not only the consumption of their products but also a biodiversity value. The latter decreases in the three environmental damages. We derived optimal rules for taxes on CO₂ emissions and agricultural run-off and showed how they depend on both isolated and interacting damage effects. In addition we derived a second-best rule for a tax on agricultural run-off of pesticides and fertilizers for the realistic case that an effective climate policy agreement is lacking. The results contribute to an understanding of the economics of ocean acidification in interaction with other important environmental stressors within economies that are particularly sensitive to environmental change.

Besides the production of scientific output the Miniproposal gave me the opportunity to further develop my scientific network. The Institute of Environmental Science and Technology offers a multidisciplinary research environment including ecologists, physicists and economists all working in one building. The organization of regular meetings with scientist outside the own discipline enabled an interesting and stimulating exchange of ideas. On the weekends Barcelona and Catalonia had a variety of things to offer including cultural sightseeing, language exchange, hiking and climbing.

I highly recommend doing a research stay outside the home working group during a doctorate, because it can change the way you perceive the world of science. Different working groups in different countries have very different habits in terms of working and science culture and thus, experiencing this variety can help you in finding out which culture best fits your own way of doing science.



Victor Smetacek visited Kiel

Prof. Victor Smetacek (AWI Bremerhaven) is one of the big thinkers in ocean sciences and visited Kiel for 1 ½ days in May. During two events he drew a big picture on Earth System Science and new ways of thinking in ocean sciences and inspired the audiences with his talks. During both events, he encouraged scientists to risk more when it comes to technological renewals – a controversial point which was highly discussed by the audience.



More than 40 master students, doctoral candidates and PostDocs, took the opportunity to attend the one-day workshop and got a whole picture on how processes in earth system sciences link together and, beyond that, how evolution connects to the theory of “making sense”.

The participants valued the holistic view and sharing the ideas: *“(The) holistic view, Victor’s own thoughts, relaxing atmosphere, room&time for any questions, explaining even the seemingly most easiest terms like “sense/senses” (...) was particulat useful”.*

During the Big Question-talk Victor Smetacek discussed with more than 70 participants - Master students to Professors - his views on ongoing technological advances and open ocean “aquafarming”.

Research Integrity - Shades of Grey

Thirty participants reflected how they do science and how they want science to be done. The discussions focused on QRPs (questionable research practice) – the grey area of behavior between good scientific practice and fraud. Participants realised that sometimes there is no easy solution for doing the “right” thing and a lot depends on developing a personal attitude to science ethics ...and sticking to it despite external pressures – mainly pressure to publish in the harsh system of metric performance indicators for evaluation. Cases on the topics authorship, data management or data processing were discussed with Prof Inga Koszalka (GEOMAR), Dirk Fleischer (KMS) and Dr Mark Lenz (GEOMAR). Also, cases studies presented by GEOMAR Ombudsperson Prof Stefanie Ismar showed that minimising harm for all involved parties was not a trivial thing to do.

Keeping an openness for communication in the scientific community was one important solution identified – at an individual basis and institutional level. ‘Interesting, that the first step to a solution for many dilemmas is - to me- is at the core of science: discussing things’ says one participant. Another solution should be a different way to evaluate performance in order to switch from competition for resources to a purer, intellectual competition on the basis of scientific ideas.

‘Realizing that the process of reflecting these questions is at least as important as finding a solution was very important to me’ says another participant.



THE CONFERENCE MORNING SESSION



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"Piled Higher and Deeper" by Jorge Cham www.phdcomics.com

YouMaRes 8 conference – a meeting for Young Marine Researchers

This year, YouMaRes will take place in Kiel in September 13-15th. YouMaRes – this stands for YOUNg MARine REsearchers and is a conference and network meeting for and by early career scientists in marine sciences. It is mainly supported by the DGM (Deutsche Gesellschaft für Meeresforschung).

Mostly doctoral researchers as well as master and bachelor students attend this conference, give talks and chair sessions. This is a great platform to try out jobs which are often occupied by senior scientist during a conference. YouMaRes gives you the opportunity to practice this in a personal and rather informal atmosphere! YouMaRes is also a conference that has been constantly growing over the past 8 years and by now we await around 150 people from all over Europe to join us in September.

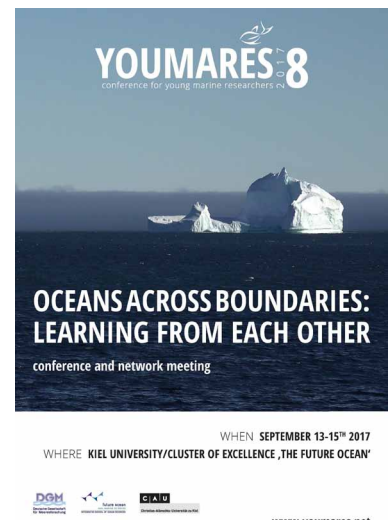
When: 13-15 September 2017

Where: Leibnizstr. 1, Kiel University

More information on sessions and registration: www.youmares.org

See you there!

Thea Hamm, organization team and session chair



Upcoming ISOS Events

4 - 6 September 2017

Chemical Oceanography Intro

Dr. Annette Kock, Prof. Christa Marandino, Dr. Tobias Steinhoff, Dr. Thomas Browning, Dr. Christian Schlosser (all GEOMAR)

7- 8 September 2017

Management and Leadership in Academia

Dr. Simon Golin, Golin Wissenschaftsmanagement, Hamburg

25-29 September 2017

Biostatistics

Dr. Mark Lenz (GEOMAR)



more courses and online registration at www.futureocean.org/isos