



Newsletter for Docs in Marine Sciences

No. 7 // March 2017

Dear all,

Structures at Kiel University and GEOMAR may be confusing – by spending two pages we address this topic and help you to orient yourself. We'll also have a Theme Lunch on this topic. Find more information on the next pages.

Based on the discussion at the last Docs Plenary, we renamed the Newsletter to "Newsletter for Docs in Marine Sciences"

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.

Subscribe at:

www.futureocean.org/isos



// Have you met:



René Schubert

The aesthetics and sprightliness of the turbulent ocean enthuse René – in his doctorate he works on submesoscale ocean dynamics in numerical model simulations in the working group of Prof. Arne Biastoch. Besides research, he is interested in politics and electronic music.

rschubert@geomar.de



Thea Hamm

Thea comes from Bavaria and always longed to live close to the sea. She now does her doctorate in the working group of Prof. Martin Wahl on the effects of microplastics on *Mytilus edulis*.

Even after years of studying she is still excited about learning new things and finally enjoys all kinds of watersports to the fullest.

thamm@geomar.de



Tobias Hahn

Tobias came to Kiel for his Master studies and now works in the group of Prof. Arne Körtzinger on novel optical sensors to determine oxygen and carbon dioxide. Tobias is most excited about the process of how own data is generated and how this can help to understand a (tiny) part of the ocean.

Besides research he likes road biking, being outdoor and pepper people with questions.

thahn@geomar.de

Upcoming disputations: Good luck!



Karlos Kochanan (12.04.17; CAU - Geoscience)

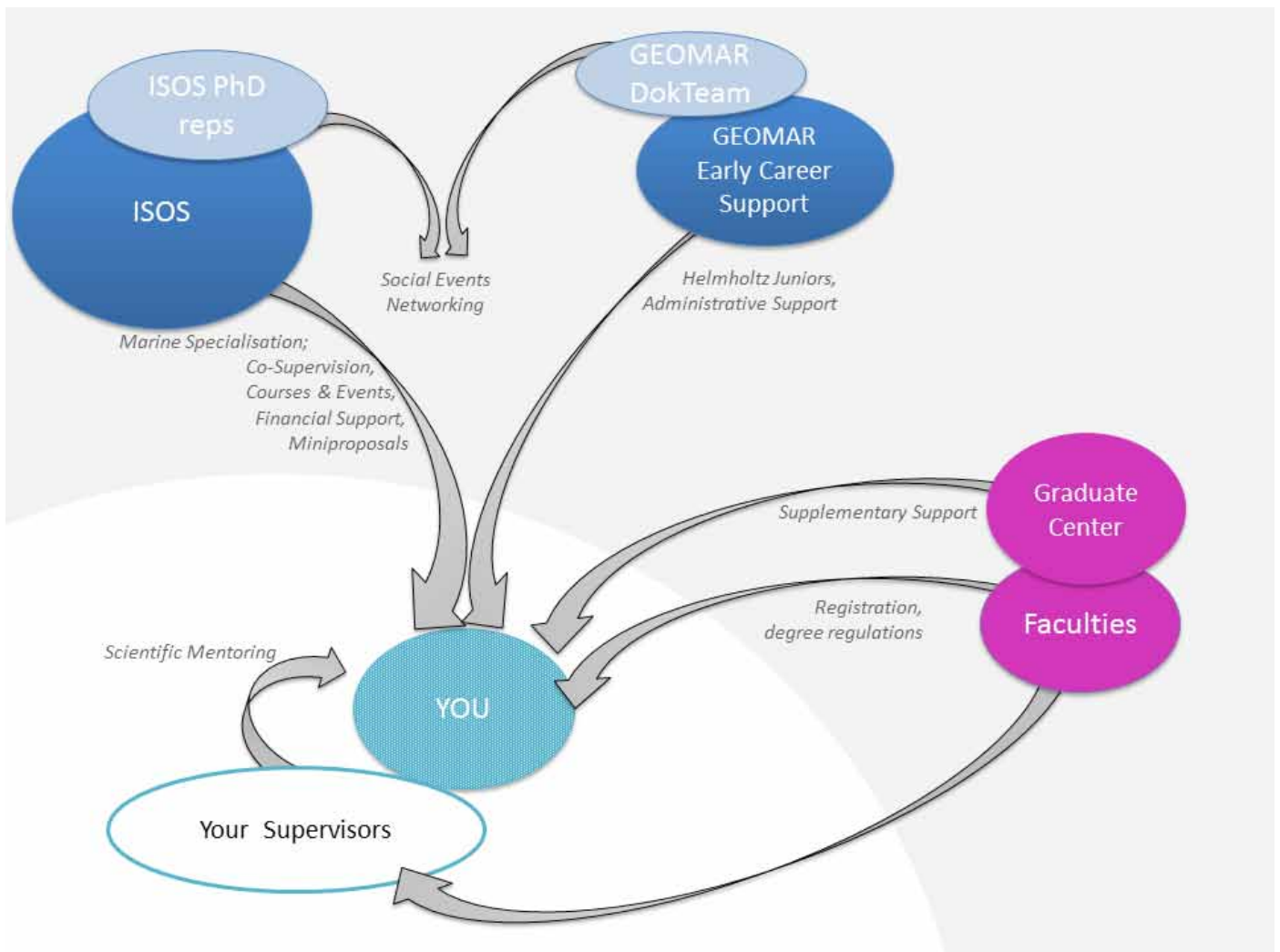
New Alumni: Congratulations!

Andrea Franke (GEOMAR - Marine Ecology)
Annika Reintges (GEOMAR - Meteorology)
Yanling Wu (GEOMAR - Meteorology)
Matthias Paulsen (GEOMAR - Marine Ecology)
Anna Jentzen (GEOMAR - Geoscience)
Michael Sswat (GEOMAR - Biological Oceanography)
Yuming Feng (GEOMAR - Biogeochemical Modelling)
Georgi Laukert (GEOMAR - Geoscience)
Stéphanie Michl (GEOMAR/CRM - Aquaculture)
Sasha Wang (GEOMAR - Marine Ecology)

Orient Yourself

Structures for doctoral candidates in marine sciences in Kiel

- **ISOS:** Your one-stop-shop for all questions and consultation during your doctorate in marine sciences – contact us directly if you have any questions.
- **ISOS Advisory Committee Meetings:** Your platform to address and discuss with your supervisors the progress of your thesis and issues you may have; ISOS also offers to participate in these meetings if invited.
- **Persons of trust/Ombudpeople:** Even with the best of intentions, conflicts may arise. The Ombudpeople can offer external advise or mediation in conflict situations with your supervisors. Further, they can give advice on Good Scientific Practice. At the Graduate Center (Kiel University) and GEOMAR people are elected for this duty.
- **Graduate Center** at Kiel University: Here you get supplementary support when it comes to general questions concerning the doctorate at Kiel University, travel money or financial support. If you will obtain your degree at Kiel University you are eligible to register. Find more information on the next page
- **Faculty:** They help you with questions concerning the rules you need to follow for obtaining your degree. You should register yourself here at the start of your doctorate.
- **International Center** at Kiel University: Support for international doctoral candidates with e.g. insurances, housing, visa, etc.



Full graph with links at <https://goo.gl/Mh3z4n>

Spotlight on the CAU Graduate Center Support

Dr. Sabine Milde, Head of Graduate Center, Kiel University
contact: smilde@gz.uni-kiel.de

Kiel University supports the qualification of all its doctoral candidates through the Graduate Center (GC). This support is available to every doctoral researcher at Kiel University: members of a doctoral program like ISOS or without the frame of a program, funded by an institute, third parties, companies, by scholarships or self-funded, etc. The Graduate Center was set up by the University Board in 2010 to complement the assistance and qualification measures you receive from your supervisors and institutes, but also those from your program.

Our offers are

- information about the doctorate
- co-financing for travelling expenses, further training or self-organized workshops
- consulting about funding
- interdisciplinary qualification & transferable skills trainings
- support for networking with other doctoral candidates
- helpful tips concerning specific questions.

To make use of the offers of the GC, you will need to register through our website on which you will also find lots of information for your doctoral studies.

At the Doctoral Candidates' General Assembly, doctoral candidates at Kiel University elect representatives that are full voting members of the advisory board and bring your voices and suggestions into the strategic planning of the Graduate Center. To be elected to the group, contact the representative team at info@dokt-vertretung.uni-kiel.de

Next date for the **Doctoral Candidates' General Assembly**:
20 April 2017, 17:30 h, room 105 at Leibnizstr. 1

Help - and where to find it

Lisa Samrock on behalf of the GEOMAR DokTeam
contact: dokteam@geomar.de

Working on our research projects can be fun and rewarding – but is also very challenging and energy-sapping. Sometimes, one has the feeling that help is urgently needed. But do you know where to ask for help?

The DokTeam represents YOU at GEOMAR and organises **monthly regular's tables**: People from different departments and institutes get the chance to meet and have fun together but also to exchange experiences and discuss problems. The next one will be: Club68 (Ringstraße 68), 28 March, 18:30h.

Despite that, we are in contact with different committees and the directorate of GEOMAR, where we bring in the voice of us docs. We are closely linked with ISOS, and even with docs from other Helmholtz Centres.

Contact us via dokteam@geomar.de; if we cannot help you directly, at least we know who can.

Theme Lunch "Orient yourself - Support Structures"

If you have more questions on this topic join us for the next 'Theme Lunches'. Together with the DokTeam the following dates are offered:

31 March, 12-13h, venue: GEOMAR Westshore, small conference room

04 April, 12-13h, venue: ISOS, Leibnizstr. 3, room 15a

07 April, 12-13h, venue: GEOMAR Eastshore

If you are interested, come to the date which suites you best and bring your own lunch with you.

// Doc activities

Lessons learned in the Wadden Sea – Visiting Sylt with a school class

contact: Rahel Maren Borrmann, doctoral researcher (borrmann@ftz-west.uni-kiel.de)

In January, Rahel spend several days with a school class at Alfred-Wegener-Institute, Sylt. During her stay, she gave insights into the ecology of seabirds and into the daily life of scientists.



Winter at the North Sea usually is very grey and very cold, and definitely not the time to go on an excursion to Sylt. Nevertheless, 17 pupils in 11th grade at the

Comprehensive School in Kiel-Friedrichsort took the challenge and were rewarded right away as they arrived on a Monday. It was cold but sunny, and we enjoyed the afternoon during a walk in the tidal flat. The pupils had learned earlier about the ecosystem of the Wadden Sea from Karsten Reise, professor emeritus at the Alfred-Wegener-Institute (AWI) in List. Now everybody was enthusiastically collecting specimens for further analysis in the laboratory: star fish and worms, mussels and snails, large algae and water samples for plankton identification.

On the second day, I presented and discussed first results of my doctorate work with the class. By adding details of seabird ecology and related research questions to the programme, I tried to give an insight into the daily life of scientists. After my presentation, four of the pupils and I observed some gulls in the harbour of List. First, there seemed to be a very low density of gulls, and those sitting on the roofs turned out to be very inactive. The pupils had the task to study the behaviour of the animals and distinguish different activities for a period of twenty minutes. Their perseverance in taking up this challenge was impressive, and the task was a good example that in

ecology small details often matter and work might be unspectacular sometimes.

What a difference the next day! We took a cruise on the research vessel Mya II from AWI in order to collect more study material in greater water depths. The weather now was very grey and very cold, but revealing the secrets of the usually well-hidden benthos community was an appropriate compensation. The pupils could add even more species to their collection; amongst others we found hermit crabs, spider crabs, brown crabs, brittle stars, sea robins, and shrimp. We also observed lazy harbour seals at the Jordsand sandbank and added some more bird species to the list.

While the school class stayed until Friday, I left Sylt on Thursday morning. Taking the train back to Büsum, I thought about what I learned during the last days. Getting insight into teaching and taking over a small part myself was great fun. Reactions from the pupils were positive, and it was interesting to see how they dealt with their tasks. I enjoyed being in List again as it reminded me of two excursions I made during my Master's. Working with tracking data glues me to the computer quite a lot, and observing my study species directly in the field is adding interesting aspects to the bigger picture. Overall, the trip was well prepared and the programme very interesting and I am glad I could take this opportunity thanks to ISOS, the teachers and my supervisor.



fotocredits: Dr. Reimert Neuhaus



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

PHDCOMICS.COM

Jury Activity at the German Youth Science Competition "Jugend Forscht"

contact: Tobias Hahn, doctoral researcher
(thahn@geomar.de)

Research is not just a term for us doctoral candidates. As an essential part of our job, we surely know it by heart. But...did you ever wonder when, how and why you got infected? Were you an apple that didn't fall far from the tree, did a (famous) book inspire you or were you once supported by school teachers and challenged in competitions?

"Jugend Forscht" (literal translation: "Youth Researches") is one of these competitions. It actually is the biggest youth science competition for youngsters in Germany and Europe. They can participate alone or in a team (maximum 3 people) in one of seven possible disciplines, e.g. biology, chemistry and physics. Youngsters compete in one of the two age categories, either "Pupils experiment" (4th grade to 14) or "Youth Researches" (15 to 21, or first semester of university). It all starts with an idea. Participants have to eventually write down their findings in a report and present their self-chosen project to a selected jury at regional levels

all over Germany and, if successful against others, later even on the federal contest.

Myself, I'm one of the apples and frequently participated in "Jugend Forscht". Two years ago, the memory recurred and I then felt stimulated to be on the jury side. After some email correspondence I was lucky there was a need for another jury member in chemistry.

Last month, I was voluntarily judging the different projects in chemistry for the second time - together with a teacher holding a doctorate degree. Assessment criteria are transparent and focus particularly on the originality of their own (at best) idea and how participants pursued it, their scientific excellence and presentation.

This jury activity is a fantastic opportunity and quite an honour: Seeing these motivated youngsters with their cool ideas, pepper them with questions, my own never-ending learning process, networking with other jury members and the chance to return my workforce that was once invested in me when I was in their place. And what still fascinates me: Scientific curiosity doesn't know any limits in neither content nor age.

ACADEMIA



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“Piled Higher and Deeper” by Jorge Cham © 2017 www.phdcomics.com

ISOS Miniproposal

In 2016, Christian Wengel applied for a Miniproposal to go to Australia. Here, he reports about his work on El Niño/Southern Oscillation

An assessment of the Bjerknes Stability Index

contact: Christian Wengel, doctoral researcher
(cwengel@geomar.de)

The El Niño/Southern Oscillation (ENSO) is the dominant mode of interannual climate variability in the tropics. ENSO is characterized by sea surface temperature anomalies of a few centigrade in the equatorial Pacific and has an environmental and socioeconomic impact on a global scale.

The Bjerknes Stability Index (BJ index) presents a widely used tool for the quantification of coupled atmosphere-ocean feedbacks that produce ENSO. It is a measure of the growth rate of sea surface temperature anomalies. The BJ index is therefore a popular tool to explain different ENSO behaviors among coupled climate models and to assess ENSO stability changes in future climate scenarios. Despite its widespread application, there are also cautionary notes on the usage of the BJ index. In my recent work I found that an overestimation of ENSO amplitude in the Kiel Climate Model, with respect to observations, is counter-intuitively linked to an underestimation of the BJ index. In a similar context, there appears to be an inconsistent relationship between the BJ index and the ENSO amplitude between models. A positive correlation is expected, i.e. a larger BJ index (more unstable conditions) favors increased ENSO amplitude. However, there appears to be no correlation of these two quantities among climate models that participate in the CMIP5.



The Miniproposal offered me the chance to investigate this relationship in more detail in collaboration with Dietmar Dommenges at the Monash University in Melbourne.

I was able to produce some interesting results in this matter. There are indications that it may not be sufficient to use the BJ index alone as a reliable measure of ENSO amplitude, as other parameters play an important role as well. One example is the damping effect of equatorial heat content in the ocean, which is highly linked to ENSO amplitude as well and yet has been left unconsidered in the BJ index framework.

This research stay strongly contributed to my personal development as a doctoral researcher. It presents a great opportunity for extending ones international scientific network. Also, experiencing to be part in another working group during this time comes along with new perspectives on how to deal with scientific questions. I can only recommend this opportunity to everybody.

Did you know?

- ISOS offers you more scientific courses than “transferable skill”-courses: In 2016, 64% of our courses were assigned to a scientific category
- 239 participants in total attended ISOS courses in the Wintersemester 2016/17
- In numbers of participants ISOS is the largest graduate school in marine sciences in Germany (>160 active doctoral candidates, >160 active supervisors and >190 Alumni in March 2017)

// Doc Representatives in Marine Sciences

Within Marine Sciences you as a doctorate candidate are represented by so called "Doc representatives": within the ISOS community you can contact three 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

We welcome Eva and Katriina as two new ISOS reps and give a big 'Thank you' to Fabian for his support during the last years!

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.

Upcoming ISOS Events

06 April 2017

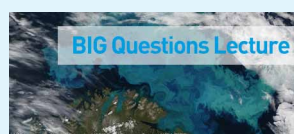
Hands-on seminar: Data Management Tools

Dr. Carsten Schirnack, Claas Faber
(both GEOMAR)

16 May 2017

BIG Question Lecture „High Time for Bold New Thinking in Ocean Sciences“

Prof. em. Victor Smetacek, AWI



17 May 2017

Course „Making Sense of Earth System Science: How to Perceive the Whole in the Sum of its Parts“

Prof. em. Victor Smetacek, AWI



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