Newsletter for

Docs in Marine Sciences

Dear all,

We hope you have all had a great start into 2019!

The last newsletter was quite a while ago – here we bring you up to date on some happenings since then. Our retreat was a wonderful event, with three superb workshops, but it still foxes us that so few ISOS members showed up. We report on Rahel's miniproposal and hear from Alumnus Hadi who is a senior post-doc at GEOMAR.

Galapagos? Another Alumnus, Rafael Bermudez, contacted our network to ask for people interested in collaboration with him there (he is a senior scientist there and eager to set up interesting projects). You will have noted the structural hurdles that we are facing since the cluster was not granted; the ISOS and DocTeam representatives did a fantastic job in surveying the community and summarizing what is required of their graduate school in the future. Thanks to them all. Hope you enjoy reading!

Best ISOS, the ISOS Reps and the DokTeam

Results of a Survey conducted by the Doctoral Representatives

In November 2018, the doctoral representatives of the ISOS and the DokTeam conducted a survey for doctoral researchers and alumni. 41 (23%) doctoral researchers and 47 alumni took part. The main conclusion is that people are very happy with the support they receive from the ISOS.

ISOS makes doctoral researchers better scientists

We found that there are three ways doctoral researchers use ISOS

- a) To learn specific skills for their research and improve their researcher profile
- b) To get support and motivation for their doctorate work
- c) To network within the ISOS community in Kiel and build up international networks

ISOS offers are unique

Everyone agreed that ISOS provides important support, during the doctorate. Mostly valued offers are communication and scientific courses, meetings with thesis committee, financial support and networking events (Figure 1). ISOS offers are not covered by the Graduate Center of Kiel University.



Fig. 1: The ISOS Offers valued most by ISOS candidates and alumni

ISOS has long reaching career consequences

ISOS is perceived to have a direct positive effect of the well-being of doctoral researchers and the quality of their scientific work.

"[..] I got my current position because of networking via ISOS"

"(ISOS courses) had a direct impact on the quality of my work during the PhD AND in my job after university"



Contact:

// New Faces at ISOS:



Anabel von Jackowski

Anabel is most excited to contribute to the current discussion of climate change in the Arctic. She has the opinion that, after 40+ years of research and awareness, our society is finally at the pivoting point and has come to realize that today's weather anomalies are closely linked to the stability of our polar regions.

The Micro-Arc project provided the perfect PhD topic for her and she didn't want to miss this opportunity. Additionally, Kiel is a good place for her hobbies: Field hockey, sailing and kite surfing.

ajackowski@geomar.de

Mariana Hill-Cruz



Mariana is excited about learning new programming skills and using them to find a creative solution for her projects' problems. Her project requires to couple two models, this will involve learning how to run the models and finding the way to allow communication between them.

When Mariana first came to Kiel, she was just looking for a city in Germany where she could study marine sciences. After two years, this city is her home.

Besides her PhD she likes to draw animals, to sing in the university choir and to spend the evenings inline skating around the city.

mhill-cruz@geomar.de



Te Liu

Te cannot wait to do some research about what she really wants to know and learn about the ocean, the earth as well as climate change. Her research topic only happens in Kiel, that is why she chose to come here. Now, she is very excited about working overseas, experiencing different cultures and talking to people all over the world.

Besides her research, Te likes to travel, to cook and to play badminton. tliu@geomar.de



Swantje Bastin

"I'm really glad I came and love to live in Kiel." Swantje came to Kiel because it is one of the few places where one can study oceanography. She is excited to get the opportunity to develop and follow her own ideas ("although that is a bit intimidating") while her doctorate.

Besides research Swantje loves languages, at the moment she attends a Norwegian language course at the University and would like to attend other courses, if time allows. Furthermore she enjoys playing the violin. sbastin@geomar.de

Hanna Campen

"Opportunities! The colorful world of Science. Meeting all kind of people. Thinking beyond and outside of frames, self-development & building something on your own." These are all the things Hanna is excited about in her doctorate. She did her Bachelor (Biology) and Master (Biol. Oceanography) here in Kiel and likes Kiel obviously because of the sea but also because of its small alternative projects, the nordish lifestyle and being outside at all weather conditions. It reminds Hanna of the norwegain "friluftsliv".

Next to good conversation, Hanna loves (Beach-) Volleyball and running; "Trying different routes is a great way to discover new places".

hcampen@geomar.de

F Jin Li



Regarding his doctorate, Jin is most excited about numerical modeling of gas hydrate. He came to Kiel because it is close to the sea and whenever he has some time besides his research, he can walk and jog along the coast. Additonally, Jin is interested in photography and enjoys to play badminton.

jli@geomar.de



Contact:

// Doc Representatives in Marine Sciences

Within Marine Sciences you as a doctoral candidate are represented by two teams of "Doc representatives": one from ISOS, one from GEOMAR. They closely collaborate and at least one doctoral 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!

GEOMAR DokTeam ISOS Representatives (contact: phd_reps@isos.uni-kiel.de) (contact: dokteam@geomar.de) Joshua Jan Katriina Arne Lara Thea Hanna GEOMAR GFOMAR CAU CAU Geoscience Marine Ecology Chemical Physical Geography Geosience Geoscience Oceanography Oceanography Florian Henrike Felix Henrike Yang GFOMAR

CAU Geoscience

GEOMAR Marine Biologi-Geoscience cal Modelling



Caroline Marine Chemistry

Geoscience



ISOS Miniproposals

Doctoral Miniproposals have turned out as a real success story! Admittedly this format is only for one or two people a year, but for each of them it has been a great experience. Thinking of a project, writing a proposal, going through the entire review process and then implementing their first really independent project can be a life-change (with other great side-benefits, as you see from the quote below).

From 13 miniproposals, 19 papers published or in preparation – congratulations to all awardees!

"the miniproposal was great as it allowed me to go to another university and learn a new skill while conducting independent research; ISOS created a network between PhDs from different departments - and led me to meet my husband :) a life changer."





Contact:

// ISOS Retreat 2018

We did it! Creative science communication at the ISOS Retreat

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

"It's all about communication, stupid!" was the advert for our doctoral retreat, attended by candidates from ISOS and the SPP "Climate Engineering". But how? Through drawing, poetry, science videos...we spent three days in the creative ambience of Travemünder Strand learning techniques but also using the perfect weather to play volleyball, Frisbee, and take dips in the Baltic. Professional lecturers took us through three workshops to present our science in new forms:

Graphic Drawing:

Have draw-phobia since primary school? This was not a problem for Sonja Niederhumer and Grant Johnson from Graphic harvest, South Africa, who inspired us with simple techniques and a few tricks (and some background african music!) to create graphic posters tailored to our science. We learned to think with the pen – to develop new ideas while drawing and to simplify research concepts into icons. The results were meaningful and creative pictures to tell our science story. A group of very happy budding artists left the workshop with their posters that visualized science in a new, creative way.



Foto/Copyright: ISOS-TEAM

Science Video Making:

Storylines, unusual perspectives, "*B-roll*", and editing with open source tools – we got an impressive insight on how easily our smartphones can be used for creating a 'scientifc' video. Matthias Süssen expertly took us through the steps. After getting familiar with our devices, we learned some theory on how to shoot and which angles to use. Then we went off to film our own videos! We put our research topics into a couple of concise sequences and developed a story around the pictures. For many, the greater benefit of the course was not only to learn about theory and practice of shooting video sequences, but also to think about their research from a different perspective.

Science Poetry:

Sam Illingworth, Senior Lecturer and professional science poet, introduced us to his theme: "We want to get inspired and discover new ways to use words [...] and to tell the story of our research to the public through poetry, to inspire them with our scientific enthusiasm to understanding nature ...", Easier said than done; Sam started us off with reading science poems of all kinds, analyzing their structure and their effect on us. Soon we were creating our own List Poems and Nonets. The familiar atmosphere of our group and the superb venue of the retreat inspired us all; "we found confidence in our ability to create and learned to reassemble our thoughts and discover unexpected allies. We want to pursue poetry further!"

We returned inspired and empowered with creative communication tools. We all look forward to the next retreat and encourage those who have not yet had the opportunity to be part of it!

ISOS Doctoral representatives Jan, Katriina, Joshua, Arne, Florian and Yang

"A inspiring, entertaining, meaningful course. Makes you think out of the box." "Really enjoyed getting to know other PhD's in a relaxing atmophere without any pressure" Feedback from Participants



Contact:

Individual specialisation in great black-backed gulls Larus marinus breeding on the Faroe Islands

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

As a follow-on from my successful research project on great black-backed gulls in the German North Sea, I aimed for a better understanding of the ecology of this species elsewhere in its breeding range. The ISOS Miniproposal gave me the opportunity to do so on the Faroe Islands, where the breeding population of great black-backed gulls is larger than in Germany. There are few studies of this species, and very little was known about foraging strategies of individuals on the Faroe Islands. I was particularly interested in individual habitat use and to what extent foraging site fidelity would occur.

It was intriguing to see how the birds behaved in a larger colony and in a habitat very different from the German coast of the North Sea. Unfortunately, the gulls were extremely hard to capture, probably because the long history of persecution at the Faroe Islands has selected for wary individuals, and I could only deploy three GPS/ GSM devices. This provided initial data on foraging locations, but technical issues meant that data transmission ceased much sooner than expected based on the manufacturer's specifications. Subsequent fieldwork involved regular visits to nests to

monitor breeding success and collect feather samples of recently-hatched chicks.



Foto/Copyright: Caitlin Frankish

This material, along with samples of prey items can be used to infer the diet of female great black-backed gulls prior to egg-laying, and I look forward to the result of this analysis.

I consider the ISOS Miniproposal to have provided a great opportunity to develop, design and implement a study based on results from my previous research. Working in a new environment brought new challenges, such as nearconstant wind and rain in the beginning as well as steep and difficult terrain, which slowed down the work in the field. The Faroese research community was very welcoming, and I also received great support from my international colleagues.

Focus on milestones and communicate science - lessons learned from the doctorate // An Interview with M. Hadi Bordbar

contact: M. Hadi Bordbar (mbordbar@geomar.de)

Hadi, after a Master's degree in Isfahan, Iran, did his doctorate with Mojib Latif at GEOMAR. His five publications included one in nature climate change; and he initiated and conducted a PhD miniproposal. How? Focus on milestones and communicate continuously! Read in Hadi's own words...

"A month into my doctorate I remember asking my advisor "How can I solve this problem?" and he said "I don't know. That's why you are here, to learn to solve this problem". I found this very interesting and this pushed me to start and develop my ideas and do research independently. This was the most important part of my PhD.

Another thing is that almost every Sunday I went to McDonalds and had a coffee in a relaxed atmosphere, away from the stressful work environment and among ordinary people. I wrote down a plan for the following week, and in the office I could then concentrate on implementing it. My flat mates teased me about my weekly McDonalds excursions!

I had a high-impact publication early on, I attribute this to my stringent planning and setting milestones. Talking to my supervisors, I realized that most papers are just repeating, and that we should do something new. At the beginning of each six month period I struggled with my milestones and plans, but then I really focused on the questions I needed to answer -this focus was really important.

The ISOS PhD miniproposal was not exactly related to my topic, but along the way I got this idea. I initiated the proposal myself and in Australia I really got a taste of independence. It was very very fruitful; I took a step beyond my comfort zone. Previously I was a bit shy, and usually quite silent in a group, but there I learned that science is all about communication! I improved my social and professional networks – in Australia every weekend they went to different bars and did social activities – one group had a beach breakfast before work; that was fun.

Just after my defense I started a WhatApp group at our research division, Marine Meteorology (ME) and I called it Happy-ME that has a lot of international colleagues – we have had cheese and tea tasting with samples from our countries, watch football matches and so on. This group is growing and helps new members to integrate more easily. GEOMAR is really multicultural, I love my life here...when I am away I miss it very much!



Contact:

// ISOS

Newsticker

- Collaboration welcome: if you are interested in working on/collaborating with Galapagos, please get in touch with our Alumnus, Dr. Rafael Bermúdez (email: jrbermud@espol.edu.ec)
- Science meets Society ways to co-create knowledge and solutions for ocean sustainability": last event will take place on February, 6th. For further questions please contact our alummus Dr. Franziska Julie Werner (fwerner@bot.uni-kiel.de)
- > ISOS members Hanna Campen and Tobias Hahn are part of the team planing and organising the lecture series "Wissenschaft und Alternative Fakten III" (only in german)

Upcoming ISOS Events

08 February 2019 Open Writing Lab PD Dr. Avan Antia (ISOS) 15 February 2019 Open Poster Lab PD Dr. Avan Antia (ISOS) 11-13 March 2019 Introduction to Numerical Modeling Prof. Dr. Thomas Slawig (CAU)

22 March 2019 Erfolgsgeheimnisse der Bewerbung außerhalb der Universität

Christian Kämmerer (Cursus -Professionell Karriere planen)

26-27 March 2019 Design and Presentation of Scientific Posters Sebastian H. Schroeder, Photographer PD Dr. Avan Antia (ISOS)



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

New Alumni: Congratulations!

Dirk Metz (OXFORD - Geoscience) Jan-Lukas Menzel Barraqueta (GEOMAR – Chemical Oceanography) Luisa Listmann (GEOMAR - Marine Ecology) Sebastian Beil (CAU - Geoscience) Siren Rühs (GEOMAR - Physical Oceanography) Burkhard von Dewitz (GEOMAR - Marine Ecology) Insa Rapp (GEOMAR – Chemical Oceanography) Rafael Abel (GEOMAR - Physical Oceanography) Jan Schröder (CAU - Geoscience) Sophie Steinhagen (GEOMAR - Marine Ecology) Tina Dippe (GEOMAR - Physical Oceanography) Annalena Lochte (CAU - Geoscience) Sabine Haase (GEOMAR - Meteorology) Giannina Hattich (GEOMAR - Marine Ecology) Alvaro Villalobos Claramunt (GEOMAR - Marine Microbiology) Haiyan Li (GEOMAR - Meteorology) Sinem Zeytin (Gesellschaft für Marine Aquakultur -Aquaculture

New Doctoral Candidates

Anabel von Jackowski (GEOMAR – Biological Oceanography) Hanna Campen (GEOMAR - Chemical Oceanography) Alexander Barbie (GEOMAR - Applied Mathematics) Sarina Schmidt (GEOMAR – Geoscience) Lara Jacobi (GEOMAR – Geoscience) Te Liu (GEOMAR – Chemical Oceanography) Arthur Prigent (GEOMAR - Physical Oceanography) Tianfei Xue (GEOMAR - Marine Biogeochemical Modelling) Jin Li (GEOMAR - Geoscience) Fabian Wolf (GEOMAR - Marine Ecology) Stella Luna Scheer (GEOMAR - Marine Ecology) Jeyakumar Dhavamani (GEOMAR - Chemical Oceanography)



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



