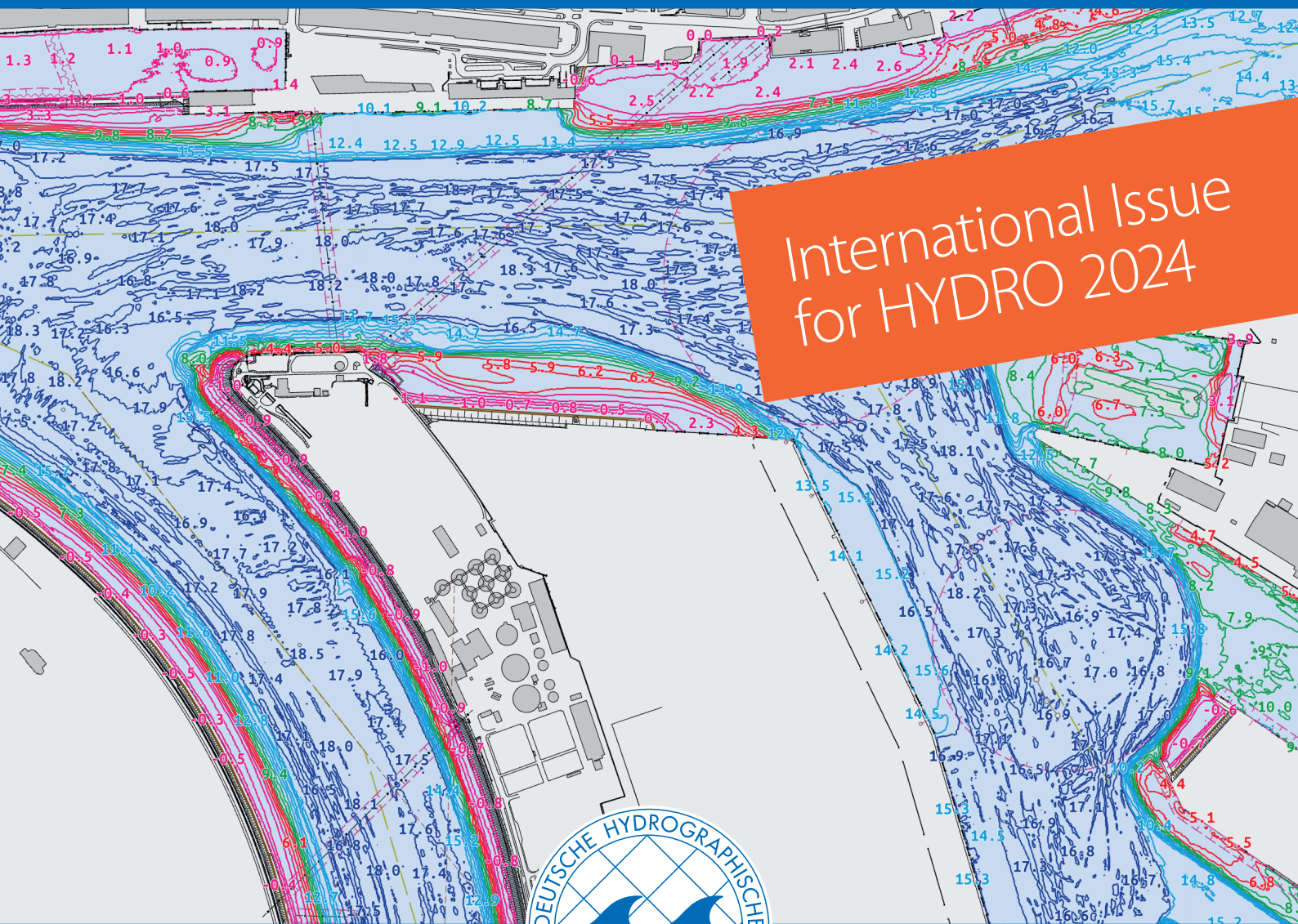


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»We are proud to state that the Innomar SBPs are »Made in Germany««

An interview with SABINE MÜLLER

Sabine Müller says of herself that she finds it difficult to say »no«. This probably explains why we don't just talk about one topic in our interview with her, but three. Firstly, there is her job as Managing Director of Innomar Technologie GmbH in Rostock. Secondly, there is her commitment to the DHyG, whose office she has headed for many years. And there is - most recently - the fact that she is the main organiser of HYDRO 2024 in Rostock. Sabine may not be able to say »no«, but she can give clear answers.

HYDRO 2024 | Innomar | parametric sub-bottom profiler | DHyG
HYDRO 2024 | Innomar | parametrisches Sedimentecholot | DHyG

Sabine Müller sagt von sich selbst, dass sie nur schwer »Nein« sagen kann. Das erklärt vermutlich, warum wir im interview mit ihr nicht nur über ein Thema reden, sondern gleich über drei Themengebiete. Da ist zum einen ihr Beruf als Geschäftsführerin der Innomar Technologie GmbH in Rostock. Da ist zum anderen ihr Engagement für die DHyG, deren Geschäftsstelle sie seit vielen Jahren leitet. Und da ist – ganz aktuell – die Tatsache, dass sie als Hauptverantwortliche die HYDRO 2024 in Rostock organisiert. Mag sein, dass Sabine nicht »Nein« sagen kann, aber klare Antworten geben kann sie.

Interviewer

Lars Schiller conducted the interview with Sabine Müller by e-mail in October.

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You know what it means to organise a HYDRO conference, because this is the third time you've done it. I'm only marginally involved in the organisation, but I have the impression that the effort increases from time to time. You would think that you would benefit from previous experience. What do you say?

This is the third HYDRO conference in Germany in 14 years. As in all other areas of life and business, conditions changed significantly, especially after Covid. It is very helpful, that the same venue site was chosen and most importantly, that almost the same people are supporting the organisation of the HYDRO 2024 as before in 2016 and 2010. It was a short moment of relief when we recognised, that almost all the »old« partners would be part of the game again. This shows that the companies and people involved do not have too bad memories of the organisation of our HYDRO events. There are some changes with reference to the marketing activities for the HYDRO event. Previously, the focus was on advertising in magazines like *Hydro International*, but this time we have a team to promote the event on LinkedIn and this works quite well.

When does the planning phase for such an event actually begin? And when does it enter the hot phase? Does the tension build up until the day of the opening?

We started more than two years ago to secure the venue. With the organisation we started few months later than for the two previous events.

This experience made it easier to define the requirements for the venue hotel (Yachthafenresidenz Hohe Düne) We knew, which partners we needed, we could evaluate the costs of the event and we had a functional team in place from the beginning.

Several people are involved in the organisation – first and foremost you, your colleague Caren Korte, Christian Maushake and Thomas Dehling. How are the tasks distributed?

Although Thomas and I are responsible for the organisation of the HYDRO 2024, we are lucky to have very committed and reliable people in the core team. For the organisation I can name Caren Korte and Christian Maushake. I am sure, that all participants know their names by now. Both take care on almost all communication regarding registration, exhibition and all related issues. Patrick Westfeld and Jens Schneider von Deimling and other colleagues in the background have been working hard to put together an interesting lecture programme. A few people are working on social media marketing. There are also issues such as special requests for the exhibition, transport and customs, transfers from the airports, organising the cultural programme and the dinner, where our team is supported by local companies.

Which tasks are particularly time-consuming?

Communicating with all the participants and exhibitors and all their wishes is the most time consuming part of the job. Caren does most of the

work. In general, 90 per cent of the communication is very easy to handle. The work is caused by the remaining 10 per cent.

[How difficult is it to find sponsors for such an event these days?](#)

The initial phase of finding sponsors and selling exhibition stands was somewhat slow. Nobody wanted to be the first. But once the first exhibitors and sponsors were on board, things went surprisingly smoothly and now almost all the sponsoring packages and the exhibition were fully booked by early summer. We are very happy about this, because the exhibitors and sponsors are essential for the success of the event.

[In 2010, when the first edition of HYDRO was held in Rostock, there were 53 presentations; in 2016 there were also 53 presentations. This year, 59 presentations are on the programme. That is an increase of 10 per cent. And there were a few more applications that could not be considered. There was also an increase in prices. Prices for venue hire have risen sharply. Of course, this also leads to higher admission prices. Please give us a little insight into the finances of HYDRO 2024.](#)

Not only did the number of papers increase, but the focus shifted to autonomous surveys and optical hydrography. There was an overwhelming interest in presenting papers, but due to limited time slots the paper committee could not accept all submissions. Delegates can look forward to presentations on a wide range of topics, an exhibition featuring more than 50 companies, live equipment demonstrations in the local marina and workshops.

Prices at the venue hotel have almost doubled compared to 2016. So we had to increase the registration fees significantly. Not all costs are allocated to the conference fees and are cross-funded by the main sponsors. The total budget of the HYDRO conference is about 400,000 euros in income and expenses, which is about a factor of ten compared to a usual DHyG financial year.

[What about the number of participants registered so far? Has there been a development here too?](#)

We are now just two weeks away from the conference. We are looking forward to welcoming about 400 delegates, exhibitors and visitors, probably more than in 2016. Within the last four weeks more than 100 people registered for the event. Today we are almost fully booked.

[I myself cannot attend the conference this year. If there was a hybrid format, I would certainly watch some of the presentations online. Is this being discussed at the IFHS? Or is it a conscious decision in favour of the face-to-face event, which I assume is also in the interests of the exhibitors?](#)

We decided against a hybrid format due to additional organisational effort involved. Presentations will be available for download after the confer-



Sabine Müller with the venue hotel of HYDRO 2024 in the background

ence, if the authors agree. This conference should remain a face-to-face event for the community. This is also in the interest of the sponsors and exhibitors, who set up the stands, organise equipment demonstrations and making an important contribution to the funding of the event.

You are an electrical engineer. How did you get into hydroacoustics?

When I was studying electrical engineering, there was the option of specialising in marine electronics

»The HYDRO conferences should remain a face-to-face event for the community«

Sabine Müller

and hydroacoustics, which I chose. Hydroacoustics had a long tradition at the University of Rostock and the development of echo sounders had already been forced in the early 1970s with the goal to find suitable gravel

in the Baltic Sea for the construction of the highway from Berlin to Rostock. Due to the embargo policy, it was not possible to buy the equipment, so when I joined the research group in the 1990s, there was a lot of experience in the group.

How did you come to set up your own company in 1997?

The success in developing the parametric technology and the first results obtained with our research partner in underwater archaeology in Schleswig (Haithabu) made it very clear that there was great potential for other, more commercial applications. The economic conditions were right at the time and with a mix of venture capital and public funding we were able to take the risk and start a small company to exploit this technology and convert it into a real product.

What did Professor Gert Wendt have to do with the founding of Innomar?

As the scientific brain behind the research, his knowledge of acoustics and electronics was invaluable to future development and he was persuaded to come on board as a co-founder and shareholder. Prof. Wendt held a chair at the University of Rostock, but played an active role in refining the technology for the various products Innomar developed over the years. His advice and support did not stop until his death this year.

You are the Managing Director of Innomar. How do you share the role with Jens Lowag, the second Managing Director?

Jens Lowag and I have been sharing the office since the very first days, so that there is always a back-up for running the company, but also a second thought, so that both, day-to-day business and strategic decisions can be made quickly. While I now focus more on the daily business, administration and project management, and the direction of hardware development, Jens is responsible for software development and, with his background

in Marine Geophysics, also for scientific survey projects and customer support. Proximity to users and their applications forms the basis for development and marketing strategies. Keeping in mind that there are still countries and regions of the world where women are not fully recognised, it is mandatory to have at least one male manager.

Finally, running the business would not be possible without the right people behind us and we are lucky to have a long established and committed 2nd level management team covering production, R&D, sales and business development.

Your products were always called SES. The three letters probably stand for sediment echo sounder. English experts usually refer to it as a sub-bottom profiler (SBP). Why did Innomar decide in favour of SES?

When we started selling the products we were not fully aware of the common terms used in the industry and, as native German speakers, we chose Sediment Echo Sounder (SES), which was widely used in the national scientific environment at that time. A few years ago we removed the letters SES from our product names and replaced them by Innomar. It is the brand we want to sell and the users now simply ask for Innomar SBPs.

How many Innomar systems are in use worldwide? Where everywhere?

To date we have sold almost 1,000 systems in more than 70 countries. We have contact with users of more than 90 per cent of the systems and are always keen to hear what they are doing with the equipment, which helps us to focus our R&D activities. There are systems still in use that are over 20 years old. Our main markets are Europe, Asia and North America, but our users operate in many exotic and remote locations, such as Antarctica, the Tibetan Plateau or around the Caribbean Islands. Due to their portability, our sub-bottom profilers can be used not only offshore, but also in lakes, rivers and artificial ponds. If they find water on an exoplanet, we might try to take an Innomar system there too. 😊

Please explain what is special about a parametric sediment echo sounder.

Parametric echo sounders generate the low-frequency sound beam by non-linear interaction of two high-intensity sound beams at higher frequencies in the water column below the transducer. Compared to conventional (linear) sound generation this gives a number of significant advantages, such as narrow sound beams at low frequencies with small and portable transducers, no appearance of distinct side lobes for the low-frequency sound beam during transmission and a high relative bandwidth, resulting in very short sound pulses without ringing effects and hence very high resolution in the detection of sediment layers and embedded objects as well as

lower reverberation levels and increased penetration. Let me give you an example: To achieve the same horizontal resolution with a linear system at 10 kHz, the transducer would need an active area 100 times larger than the parametric system (2 m × 2 m instead of 0.2 m × 0.2 m).

How long does it typically take for a sediment echo sounder to be sold? What services are included in the sale?

This mainly depends on the customer's organisation and whether a tender process must be initiated or an immediate industry project is about to start. Sometimes we get a call and have to deliver a system within two weeks, including on-site installation and user training, but there are also sales that take more than two years of planning, equipment demonstration, price negotiation, harbour acceptance and sea acceptance tests, user training and finally regular maintenance checks of hardware and software components. We are always driven by the need for technically profound and responsive after-sales support, because the systems are used on costly vessels at sea, and as a small company we work hard to meet this expectation.

We only ever see such a sediment echo sounder from the outside. Unscrewing is not permitted. What is under the surface of the housing? Is everything actually assembled in Rostock?

There are always two parts, one is the transducer which is a fully moulded device with piezoceramics and electronic components and the transceiver, which contains transmit and receive electronics, power converters and amplifiers, computer devices for system control and real-time data processing and not forgetting lots of connectors and cables. Over the years we have outsourced more and more mechanical and electrical parts, such as circuit boards, which can be produced much faster and cheaper with specialised machines. However, all essential parts – such as the transducers – are manufactured in our workshops in Rostock and the whole assembling is done there as well. There are a lot of companies around us, who deliver parts like the housings, fairings or brackets. We are proud to state that the Innomar SBPs are »Made in Germany«.

A wide variety of qualifications and skills are in demand in your company. What about recruiting new staff?

Many companies are currently in need of skilled personnel, the same applies to us. Due to our long term cooperation with the University of Rostock we could source several engineers through internships and support of student's thesis projects. Recruiting nowadays is getting more and more difficult. We have to look for personnel from other universities, if we want to strengthen our R&D team. To recruit people for the production not only the education counts but especially the work

attitude, practical skills and team spirit are very important. People with completely different professions can also be well suited for the tasks.

What challenges did you have to overcome with your company? For example, were there any cut-backs during the coronavirus period?

One of the challenges we experienced in the past are competitors trying to offer solutions with promises they could not keep, for example black box systems with a single button for operation which do not require geophysical expertise. Such activities can distract and confuse clients and actually delay the transfer of new technologies into markets and applications. Macro-economic challenges, such as Covid or periods of inflation and recession, do have an impact on business of course, but we managed to sail around those short-term obstacles on our path so far.

»Some competitors try to offer solutions with promises they could not keep, for example black box systems with a single button for operation which do not require geophysical expertise. Such activities can distract and confuse clients and actually delay the transfer of new technologies into markets and applications«

Sabine Müller

What is the secret of your entrepreneurial success?

Let me highlight a few important factors of our success. First, we always put the focus of our product development onto user and application orientation. We offer products which are able to solve the real-world problems and challenges of our clients with a unique solution. Second, we always provided honest advice to our clients and never tried to sell products just for the sake of a sale. Accompanying our clients from the first contact and providing high-class after-sales service and support will secure a stable long-term business. Third, we were always aware that the basis of success lies in every single person working in the company, whatever role is fulfilled. If you treat people as such, your reward is commitment and identification with the company.

This year it was announced that Innomar would become part of the Norbit family. What does the Norwegian company's entry mean?

This summer, in mid of July, Innomar became a member of the Norbit family. We were warmly welcomed by the board and colleagues there. Also the Innomar team took this as good news. The whole transaction was realised within a very short period. Now in October we feel as it was done a year before. A lot of common activities were started already and we are convinced that Innomar and Norbit get new opportunities and we are keen to »explore more« together now. We believe that a lot of positive synergies, new products and solutions will arise from this opportunity.

You have managed the DHyG office since 2006. You were also active on the Board until 2020. Has there been less work since you ceased to be a member of the Board?

There is no less work so far. The main reason for leaving the board was, that it could be helpful for the DHyG to have an additional committed person in the board to achieve more and to implement more ideas. The DHyG-office is taking care on all

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communication with the members, on the organisation of the local events »Hydrographentag«, accounting, tax authority, local court, notary.

There is a lot of work to do and I have to mention Caren Korte here as well, who is supporting this from her office in Norway, where she lives.

What do you remember as the most outstanding events with the society – whether negative or positive?

Good memories are there of course to the HYDRO events in 2010 and 2016, but also to the »Hydrographentag« in Husum, Lübeck, Bremerhaven or Lindau and the first »big« Hydrographentag in 2008 at the BAW in Karlsruhe, when I was in charge for the organisation for the first time. It was a nice location where the exhibition was setup in the test hall. In Karlsruhe we got a lot of support from the BAW. Further I liked the 25-years DHyG event in the International Maritime Museum Hamburg in 2009.

A bad memory was the Hydrographentag in Bonn in 2011. The organisation was done with the same efforts as before, but there were less than 30 delegates including the speakers. The same small group attended the evening event on board of a passenger vessel for a cruise on the river Rhine. The boat had a capacity of about 300 people. We were really embarrassed there.

Of course there are some negative memories of disputes with the court, notary and the tax authorities, but this is more the daily business.

At some point, the DHyG lost its non-profit status. That had serious consequences for the finances. But not just disadvantages, right?

Yes, this is correct. There are advantages and disadvantages to have a non-profit status or not.

The funny story is, that the reason for the cancellation of the non-profit status was not the financial success of the HYDRO 2010, but the fact that the society purpose is beneficial for people with a certain education only and not for the whole community. Even arguments like the fact that every water sports enthusiast can use the OpenSeaMap charts did not help. From that moment on, we decided to

operate as a professional association as from now. A small disadvantage is, that the membership fees, which counted before as donations, now count as advertising expenses. The tax declaration was due every three years formerly, now it is due annually and the VAT declaration quarterly.

On the other hand the society can decide how to spend the money with significant less restrictions. In my opinion this offers the DHyG much better opportunities for their work.

The two HYDRO conferences in Rostock so far have brought in real money. What does our society do with the money?

We were happy, that both HYDRO events ended really successfully. We hope the same for 2024. The society is using the money to support student activities in a first attempt. Students receive reimbursements of travel expenses and grants to enable them to attend conferences and trade shows. Additionally, after the first successful HYDRO in 2010, the DHyG focused on organising the biennial »Hydrographentag« with an accompanying exhibition at a high level to make it attractive for as many participants as possible.

Generally speaking, why should you get involved in a society like the DHyG?

Speaking as a member like Innomar, I think that companies should join a society, which is at least partly concerned with the subject. The society offers opportunities for professional exchange of knowledge and ideas and therefore the possibility to find business or research partners. Further it is a platform for networking and recruiting. On the other hand there is the chance to get an idea of how the work is organised in other comparable companies or completely different organisations, such as much larger or smaller companies, authorities or scientific organisations. It helps to get input about how to solve certain tasks, even if they have nothing to do with the subject of the society.

What would you like to be better at?

I am very bad in saying »no«, which can be very difficult in my position. Even after so many years it is very difficult for me to clearly disagree and I am not very optimistic, that this will change.

Further I did not finish to learn to play an instrument. Maybe this is a plan after retirement. But there are other things on the list as well, e. g. that I am still not able to communicate in Norwegian although my son moved to Norway ten years ago.

What do you know without being able to prove it?

During a job interview I know very fast, without any further evidence, if the candidate would fit into the team. And I am sure that the time will come when the information we now get from the seabed using underwater acoustics will be obtained much better and with unexpected knowledge using other scientific methods. //