



Interview with Dr. Maren Brehme on behalf of WinG Turkey



Visit to Sibayak Geothermal Power Plant in Sumatra-Indonesia in 2010 to sample the geofluid from the wells

First of all, I would like to congratulate you on your new position as ‘Assistant Professor’ in the Technical University of Delft.

We have met at the 10th EGPhD Day in Potsdam-Germany in February 2019 while you were a PostDoc in GFZ-German Research Center for Geosciences. What is your current role and background?

In my current position as Assistant Professor for Geothermal Engineering, I am the contact person for all research on deep geothermal energy at TU Delft. I am responsible for several geothermal research projects with international partners, we work on new project proposals and I contribute to classes on geothermal energy. With a 10-year-background in geothermal energy research, I feel well prepared for this.

Why did you choose an academic career in geosciences instead of pursuing an R&D career in industry?

Starting from school, I have always wondered what the earth looks like beneath our feet, which motivated me to study Geosciences. In general, I have always been curious and interested to answer the questions that constantly pop up in my mind. This curiosity is my main driver for doing research. Additionally, I enjoy the welcoming international community and I like teaching-working with young people.

What is next for geothermal? What does future hold for geothermal energy? (ex. What is the most promising research direction for the future of geothermal industry and academia?)

The most urgent questions we have to answer are; 'Where to drill the next well?' and 'How to run a geothermal system sustainably?'. These are the topics I focus on in my research and they need to be answered urgently, also for the industry.



High- temperature-fluid sampling in Lahendong Geothermal Power Plant wells in Indonesia in 2011

There are many projects that you work in Turkish geothermal sites. How did you get involved in these projects? What initiated that collaboration?

My first research project, initiated by my Professor Traugott J. SCHEYTT and his Turkish colleague Prof. Dr. Mehmet ÇELİK, was on shallow hydrogeology in Turkey in 2008. Since then my partners and I are focusing more and more on deep hydrogeology in geothermal systems. Turkey is one of the richest countries in the world in terms of geothermal resources. It is the perfect place to study different

geological settings and to work on various geothermal challenges such as developing new sites and the sustainability of running power plants.

Over the years, I have met many nice Turkish people and nowadays I have deep private connections to Turkey.

What kind of challenges that you've faced in your career as a woman? How do you overcome them?

There are content-wise challenges (such as research questions you face during working) which you can overcome by smart thinking, hard work, a good team and a commitment to the topic. There are societal challenges (such as domination of men in high level positions, no acceptance of women in the sector, puzzled faces who see women going to the field alone or carrying heavy equipment, to not being taken seriously just because you are a woman, being labeled as a secretary rather than a researcher only because you are a woman etc.) which you can overcome by working on your personality and exchanging with others but some of these challenges will not disappear easily.



Fluid property measurements in boiling hot springs of Ulubelu geothermal field in Indonesia in 2010

If we define 'success' in a different way, how do you define it? What are the moments that you find yourself 'successful'?

In science I define success as ‘contribution to the future society’. That is why I like geothermal research; it is applied so that your work has a direct impact.

On a personal level I am successful, when I feel fulfilled by what I do and how I live.

On your personal website, you upload the recent developments in the projects as podcast (http://maren.familie-brehme.de/Maren/LoLa_1/LoLa_1.html) and there is a map showing your network on your CV (<http://maren.familie-brehme.de/Maren/CV.html>). Why do you think it is needed?

Researchers have a responsibility to society by informing them about their latest results. This has to be done in a simple “language”. I use my website to give people access to knowledge and get them interested in the topics I work on. I find it important for their future.

The map presentation is an alternative way of showing with whom I work, instead of a simple “boring” list. Also, this is easier to understand for people outside science. Scientists mainly can guess who is the partner institution in the country for my topic.

Is there any advice that you remind yourself in difficult times?

I remind myself that the trouble making topic is not the only subject in my life. There are up and downs in everything in life. I am convinced there is something positive and something to learn in every unfavorable obstacle.

If you had a chance to give your younger self an advice, what would it be?

Stand up for your ideas, speak them out loud and exchange with others.

As of 2019, WinG is represented worldwide by its 1600 members. How did you get in contact with WinG? Why do you find it valuable to work voluntarily to enhance ‘gender equity’?

I have been interested in the gender topic for several years and follow different movements like WinG in the world. We need to work on that topic urgently to increase the diversity. Mixed teams deliver the best results. That is scientifically confirmed!

Everybody, interested in this topic, I recommend to read the book from Sheryl Sandberg “Lean in”.