water proof

water alliance

CONNECTING WATER TECH HUBS

DOING BUSINESS IN SOUTH KOREA

INTERVIEW WILMA MANSVELD

EIGHT INTERNATIONAL TOP TALENTS

NUMBER 02, 2018

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WaterProof is the magazine of the Water Alliance, a partnership between government, research institutions and industry in the field of innovative and sustainable water technology. From its base, the WaterCampus in Leeuwarden, the Water Alliance builds on the 'water technology innovation chain'; a process whereby new ideas from universities, laboratories and test sites are converted into worldwide marketable products. WaterProof provides regional, national and global information on developments, results and background in the field of water technology.

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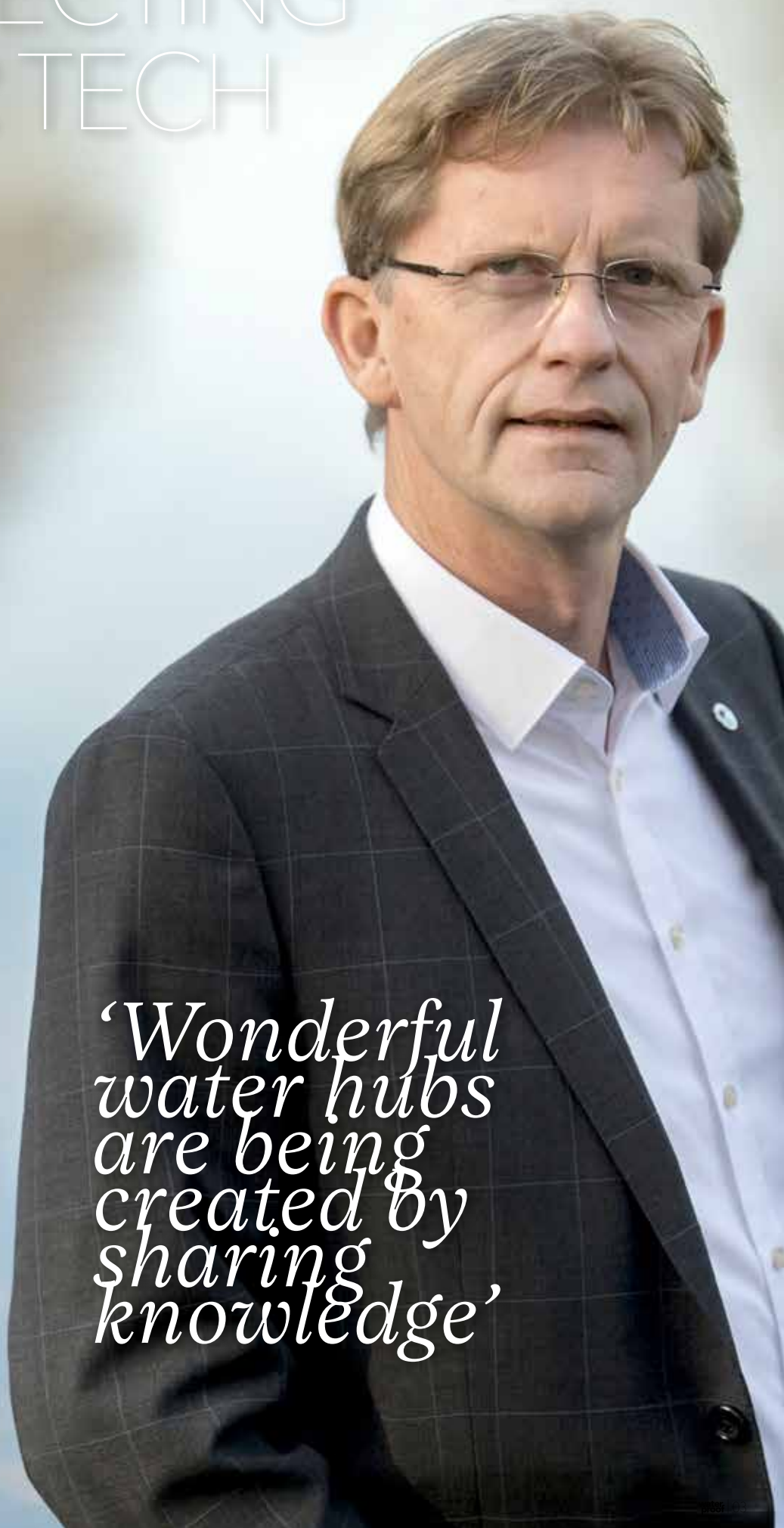
CONNECTING WATER TECH HUBS

A remarkable phenomenon that aptly underlines the ever-increasing importance of water technology in the world is the growth of internationally renowned water hubs: places where government, knowledge, and business come together, innovations are developed, and new markets are exploited.
One such place is WaterCampus Leeuwarden. In the festive year 2018, in which our hometown and region is the cultural capital of Europe, I would like to boast for once: We are extremely proud of the innovation ecosystem that we have developed over the past years! Thanks to an intensive collaboration between government, knowledge institutes and businesses, we have managed to build a solid chain of innovation that has achieved global admiration.

For example, I have fond memories of the Canadian Water Summit 2017 in Vancouver, where the words "Bring in the Dutch" were frequently spoken with regard to challenges faced in the water technology industry. A group of Brazilian water journalists who recently visited the WaterCampus also expressed their appreciation. "We have seen what far-reaching cooperation between government, education, and businesses can lead to. I am travelling back to Brazil with a big exclamation point above my head", says freelance journalist Andrea Vialli about the trip. And recently in Daejeon, South Korea, it was nice to see how serious K-Water was when discussing a collaboration.

Wonderful water hubs are being created by sharing knowledge; in Singapore, USA, Canada, Israel, South Korea, and of course, here in the Netherlands. Our door is open and we are open to collaboration. And in September we will be throwing our doors wide open. From 24 to 27 September, we will be celebrating the European Water Tech Week Leeuwarden 2018. More information on this can be found in this edition of WaterProof. If you have not signed up for it yet, I call on you to do so quickly. We will be there to welcome you!

Hein Molenkamp
Managing Director, Water Alliance



'Wonderful water hubs are being created by sharing knowledge'

ATIUM WINS WATERCAMPUS BUSINESS CHALLENGE

Photo: The jury and winners of the WaterCampus Business Challenge (left to right): Leon Korving of Wetsus, Robert Polano of Carduso Capital, winners Emma Ericson and Johan Björkquist of Atium, and organizer Ronald Wielinga

This year's competition again brought a large number of start-ups to Leeuwarden, from near and far. In total there were 17 participants, representing 10 different cases. Swedish company Atium won the challenge. The company has developed a technology for selectively removing harmful metals from water. Besides purifying the water, the method also allows the metals to be recycled.

Organizer Ronald Wielinga, of the WaterCampus Business Challenge, explains why the jury chose Atium as the winner. "Emma and Johan had a strong pitch. They have already given a lot of thought to the company's route to the market and are well on their way with their strategy. What they have developed is a solution to a known problem. That makes for a good product. And they have a strong team in place in Sweden. Now, they can start testing their product in the field, they will soon be running an initial pilot at AkzoNobel."

Sweden, the Netherlands, Finland, Poland, Ghana, and Portugal: it reads like an exciting group in the FIFA World Cup, but in this case, it is a selection from the international group of participants of the WaterCampus Business Challenge. This year's challenge was held from 12 to 16 March. Atium, a company owned by Swedish participants Emma Ericson and Johan Björkquist, was declared the winner.

The WaterCampus Business Challenge is intended primarily to give water technology start-ups a push in the right direction. According to Wielinga, "We want to help them take the step from invention to innovation. We offer participants information and coaching sessions with experienced entrepreneurs in the water industry and experts in the areas of networking, financing, patents, etc. On Wednesday there was a dinner with CEOs from the Dutch water industry. On Monday, the participants pitched their idea for the first time and on Friday they gave a second pitch. The second pitch was in front of a jury consisting of an investor, technologist, and market specialist. As always, it was great to see how much better and more complete the Friday pitches were. Earlier winners have gone on to become extremely successful and Atium is also a very promising company."

FOUR START-UPS AND BENTEN WATER SOLUTIONS JOIN PARTY

ROYAL COMMISSIONER VISITS BENTEN WATER SOLUTIONS

A freezing day did not dampen the enthusiasm. On Friday, 2 March, Arno Brok, Royal Commissioner of the Province of Friesland, paid a visit to the Johannes de Doper WaterCampus Business Centre in Leeuwarden. Brok suggested the idea for the visit himself after an earlier conversation with Corina Carpentier, founder of Benten Water Solutions. "Mr Brok was so enthusiastic about Corina's story that he has requested a guided tour", says Binnie Hoogsteen of Benten Water Solutions. "But, as we only have a small office in Leeuwarden, the tour would have been very short. So, four other start-ups with offices in the Business Centre joined the party. He stayed for over an hour. It was a relaxed visit, and Mr Brok was very interested."

WHERE TO GO IN SEPTEMBER

EUROPEAN WATER TECH WEEK 2018

You might already have noticed: at The European Water Tech Week Leeuwarden 2018 (EWTW 2018), innovation, technology and policy leaders from companies, universities and governments get together during several inspiring events taking place from September 24 to 27, 2018. See for further details a special article in this issue of WaterProof. For the full program, visit: **www.watercampus.nl/ewtw2018**

EUROPEAN WATER TECH WEEK LEEUWARDEN 2018

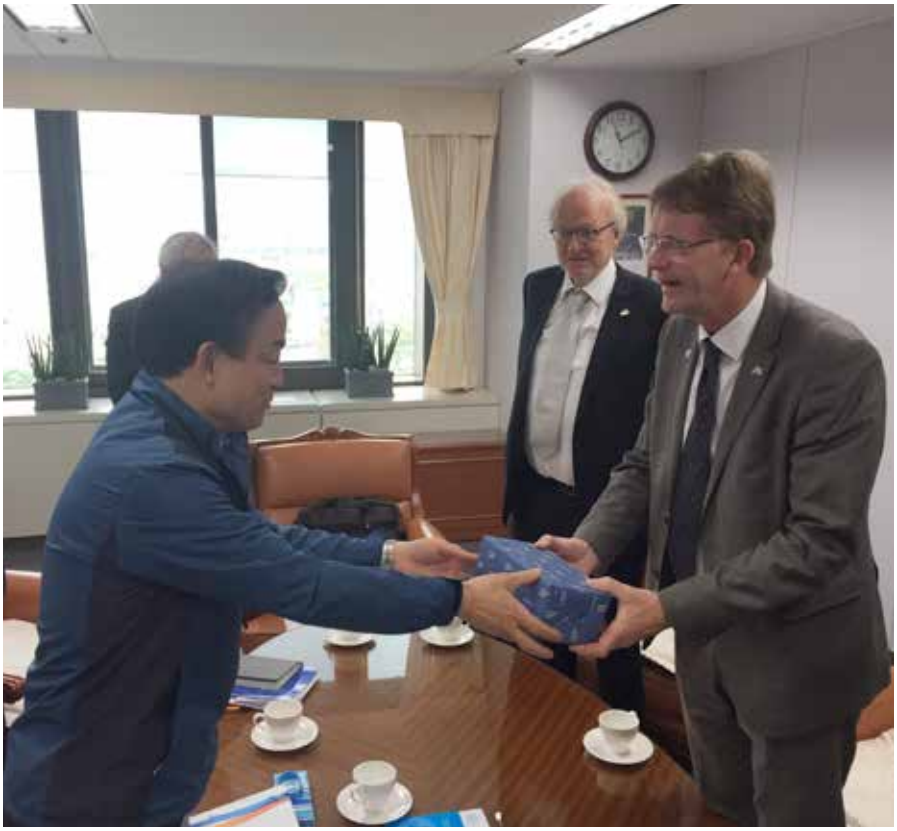
Doing business in South Korea

Opportunities for Dutch businesses in Daegu's growing water hub

The ties between the Water Alliance and the South Korean water technology industry get stronger every year. What began in 2015 with a visit from Director Hein Molenkamp to the World Water Forum in Daegu received ample follow-up in the ensuing years, with a string of visits back and forth. The latest encounter took place in early April of this year, when a delegation from the Province of Friesland and the Water Alliance again paid a visit to the Korean Water Cluster in Deagu. A sizeable water technology hub is developing in this South Korean city, bringing opportunities for matching South Korean and Dutch water technologies.

Strengthened

Research by the University of Zurich in 2017 found that it really is true: those who regularly give are happier than those who do not. The focus of the Swiss study was fairly straightforward; it looked at offers of financial help from one person to another. In business it is also generally acknowledged that those who dare to share ultimately reap more in return. In that spirit, WaterAlliance has received dozens of international delegations at the WaterCampus over the past years. Its



people have travelled the world to share their knowledge and in doing so have strengthened the ties with international water hubs such as those in Milwaukee (USA), Singapore, Israel, Canada, and South Korea. Molenkamp has given multiple presentations in South Korea on the innovation ecosystem developed in and around the WaterCampus in Leeuwarden. In early April, Molenkamp was, as noted, in Daegu again, this time accompanied by colleague Bart Volkers and representatives of the provincial government of Friesland and the NHL Stenden University of Applied Sciences. "During an extensive workshop thoughts were exchanged about the question of how you can best shape cooperation between knowledge, government, and internationally-oriented water technology businesses", says Molenkamp.

The director additionally commented on the importance of the good deployment of the Dutch embassy in Seoul in development of the relationship. Embassy staff was intensively involved in the meetings, according to Molenkamp, "and Wetskills was also discussed."

These are events at which Dutch water students, together with students from abroad, work on innovative solutions for international water problems. Both Daegu and the Province of Friesland participated in Wetskills events during the Olympic Games recently held in Pyeong Chang, according to Molenkamp. During European Water Technology Week, to be held in Leeuwarden from 24 to 27 September, another international Wetskills competition will be held, and Korean participants are again expected there."

Market opportunities

In addition to all of these knowledge exchanges, there is also the challenge of capitalizing on market opportunities for companies. Various Water Alliance members are already active in South Korea, Molenkamp tells us. "Paques has already delivered a number of anaerobic wastewater treatment projects for various industries. There is also a large biogas desulphurization facility that was supplied to a landfill in the city of Daejeon. RoyalHaskoningDHV recently signed a contract with Samsung Engineering to introduce its Nereda process to the Korean market. And as a result of our presence at the Korean International Water Week, KIWW [September 2017] Brightspark from Sneek was able to initiate collaboration with a Korean company to supply disinfection systems for the many water fountains in South Korea. These are inspiring examples, for other companies too. That is why we have agreed with the Koreans in Deagu that both sides will take stock of the businesses they have close ties to, and see what South Korean businesses can be matched to Dutch water technology companies."

Magnet and motor

Active support from the government is key for all business development. That is evident in the Netherlands, where the WaterCampus in Leeuwarden has clearly benefited from a steadfast government strategy, but it can also be seen in South Korea. At the same time, you need strong market parties that understand the usefulness and necessity of building a hub, says Molenkamp. "With their knowledge, and in particular, their business cases, the big players are both a magnet and a power booster." An example in South Korea is the company K-Water, with which the Water Alliance has maintained warm contacts for the past several years. K-Water is Korea's largest organization in the water purification industry and, among others, a very strong contender in the Hydropower industry—in South Korea, but also in various other countries. People understand that knowledge and entrepreneurship are essential for development. Molenkamp was therefore asked to explain once more the structure by which Dutch water technology start-ups receive assistance in their growth via the WaterCampus. According to Molenkamp, "K-Water is very interested in expanding its relationship with the Water Alliance and the WaterCampus. That became evident when the CEO of K-Water, Mr Lee, devoted considerable time in a separate meeting to talk with our delegation about a collaboration. We even received a brief tour of the impressive control rooms from which all K-Water facilities in South Korea are monitored and managed."

'Active support from the government is key for all business development'

Daegu as city of knowledge

Daegu is located approximately 230 kilometres, as the crow flies, south-east of Seoul, and it is the capital of South Chungcheong Province. With 2.5 million residents, it is South Korea's fourth-largest city. The city has four universities and physical construction of the Korean Water Cluster began here in 2017. In addition to a modern water campus, there are also plans to build extensive testing facilities for new technologies concerning surface water treatment, district and household wastewater, and industrial processes. There is also considerable emphasis on a range of new developments related to robotization, and sensor and ICT applications.
There are now commitments from 20 Korean businesses that want to set up shop at the new complex and space is available for 60 more water-related businesses. The complex is being financed largely by the Korean government. It is expected to be completed in 2019.

South Korea and the Dutch

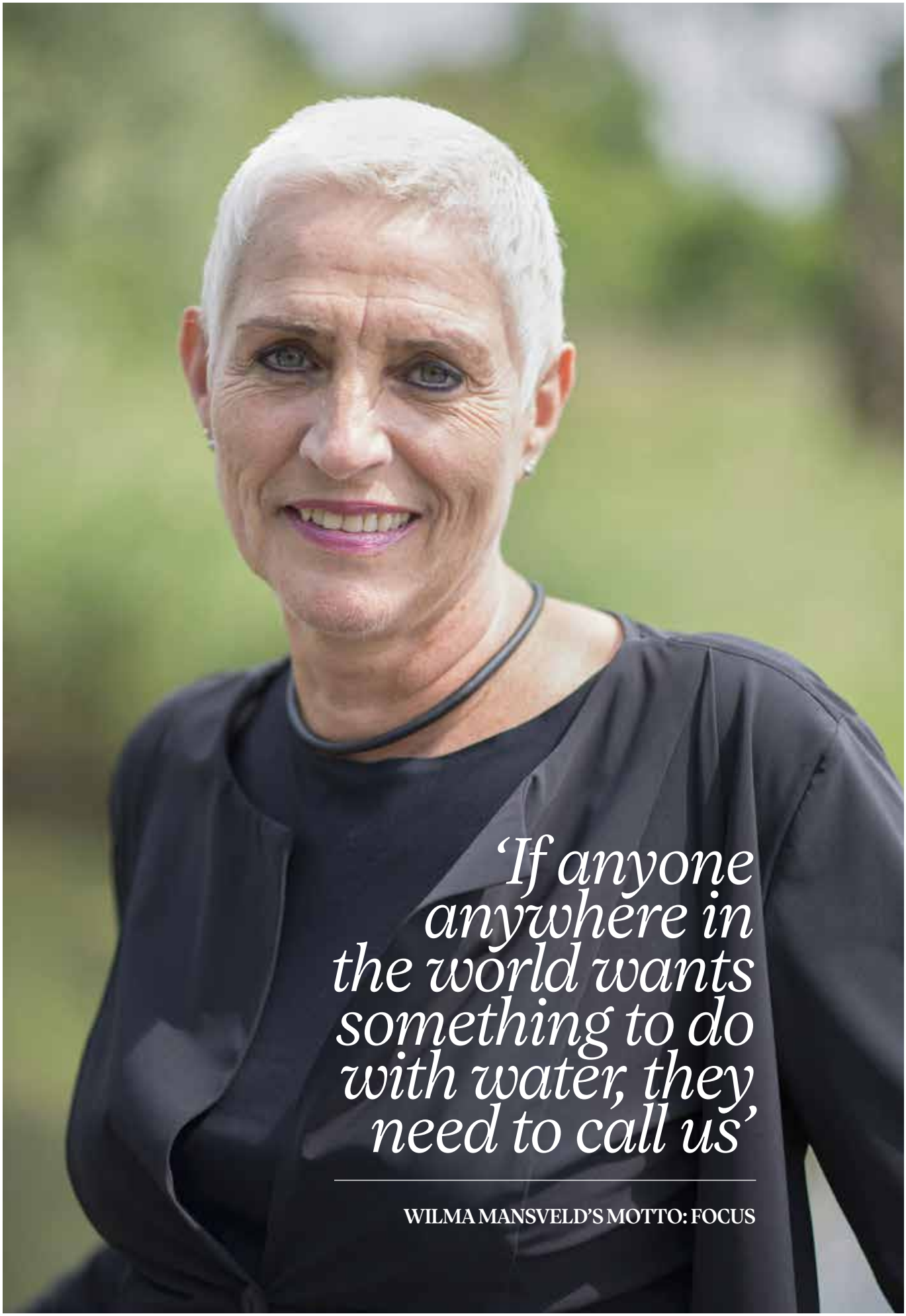
South Korea has a special historical connection to the Netherlands, which dates back to the seventeenth century, when the Dutch East India Company plied a lucrative trade in virtually all corners of Asia. Of course, that was not always without hitches. On the way to Japan a certain Hendrik Hamel suffered a shipwreck near South Korea and was captured and held there. He escaped 14 years later and went on to write a book telling of his life story and his, by then, warm ties to South Korea. That book introduced Korea to the western world, and the South Koreans still honour him for that, even erecting a statue in his image. Every Korean knows of him, like their newest Dutch idol, Guus Hiddink.

Are you interested in doing business in South Korea?

Would you like to learn more about business opportunities in South Korea? Or do you have concrete plans for doing business in South Korea? During the European Water Tech Week (EWTW) 2018, from 24 to 27 September, a Korean Water Cluster delegation will be present in Leeuwarden and would welcome the opportunity to speak with you.

For more information contact Hein Molenkamp of the Water Alliance. E-mail: **h.molenkamp@wateralliance.nl**

wateralliance.nl



'If anyone anywhere in the world wants something to do with water, they need to call us'

WILMA MANSVELD'S MOTTO: FOCUS

Wilma Mansveld took over the chair-person's gavel of the Supervisory Board of the Water Alliance in February last year. This former state secretary for infrastructure and environment, Provincial Executive member on economic affairs in Groningen, and acting mayor of Tytsjerksteradiel feels at home in the position. She admires the passion in the water technology industry. That will be crucial, she says, to solve the many water problems in the world. Like applying focus.

Did you have any hesitations when the Water Alliance approached you about the chairperson's position? After all, as director of the Groningen Safety Region you already have a busy job.

"Not at all, because I am very impressed by everything going on in Leeuwarden. I was already well acquainted with Wetsus from my time on the Provincial Executive. As state secretary, I visited the Antonius Hospital in Sneek. There I saw the demo site and the water filtering system, and it once again became clear to me how important clean water is. There is more and more junk in drinking water that you can't see, like the antibiotics in hospitals which we don't want to become immune to. In addition, millions of people in the world are on the move because of a shortage or, in some cases, an excess of water in the places where they lived. So water technology is tremendously important, and I hope to play a role in that. Another reason for immediately saying 'yes' is because the ambitions of the Water Alliance are so well aligned with my own."

What is your ambition?

"Achieving focus. Friesland is water, the Netherlands is small. So Friesland needs to belong to all of the Netherlands. The Randstad [the Netherlands' most densely populated area] sees that differently. The Netherlands is just a pinprick on the global map, a kind of city-nation, with Leeuwarden as a suburb of Amsterdam. But our water technology innovation ecosystem in Leeuwarden is simply top of the bill. It is also important to me that we be the centre when it comes to water technology. Focus! Leeuwarden is water. That is the message I tell everyone, everywhere I go. If anyone anywhere in the world wants something to do with water, they need to call us."

What stands out to you in the water capital of the world?

"The passion. That is crucial for innovation. Take 'Concentrating Milk', an invention that separates water from milk on the farm. That means less energy is used, reduced transport costs, and lower CO2 emissions. Brilliant! It often starts with a good idea from a lone individual. The art is to find those clever minds, and get them together. Compare it to California, where large organizations like Apple started out in garages and Silicon Valley was born. We want to create a similar wave here too, a movement you want to be part of. That is why it is wonderful to see more and more international students coming to Leeuwarden and doing their doctoral work here. It would be great if the garage atmosphere remained, and others joined, The Water Alliance is very important in achieving that."

Because a garage discovery has to be marketed.

"Absolutely. That is stressful. From idea to product is a long road. First you need a lot of ideas. Then you need to further develop those ideas. To do that, testing environments and knowledge institutes are important. The Water Alliance helps with the marketing; is there a market, and how can you enter it? It is also positive that an economics expert like Siem Jansen, Director of the Investment and Development Agency for the Northern Netherlands, is a board member. The Water Alliance needs to give clever minds a push in the right direction, be a sounding board, offer a network, have a lobbyist in The Hague, and take part in trade missions. We are the cement between the bricks and bring the players together."

Are we on the right track?

"Yes. When it comes to water technology, I notice that the world increasingly understands that it is happening here. Just look at the many foreign visits to Leeuwarden. People are impressed, for example, by the way we link together businesses, government, and knowledge institutes. To us, that may seem normal, but that is not the case elsewhere in the world. The triple helix, golden triangle, or whatever we call this collaboration; nowhere else does it work as well as it does here, with us. That is key in the water technology world. I am a fan of 'poldering' [the Dutch practice of conducting extensive talks aimed at consensual decision-making]. That is another reason why the Water Alliance is a good fit for me."

Does the Leeuwarden success story deserve more air time?

"I believe so, but it is also a function of our character. In Silicon Valley the pioneers were much more brazen. Americans learn how to project an image of success in kindergarten. They are eager for their turn to do a presentation. It is in their genes. We are

more restrained and still have some growing to do when it comes to expressing ambition.”

We do put ‘Capital of Water Technology’ on the welcome signs in Leeuwarden.
“And rightly so.”

Is Friesland, thus the Netherlands, aware of its international position as a front-runner in the field of water technology?
“Yes and no. Because of what we have gone through in the Netherlands, the flood catastrophe of 1953 for example, we are extremely aware of the power of water and our own vulnerability. If we do not keep the pumps running all day, our feet get wet. That has led, among other things, to our famed Delta Works. A high wall that holds water back? We don’t think that way anymore. We put sports fields in low-lying areas on purpose, so when there is flooding, the water can go there. We use many techniques to try to control water, and we are very good at it, but it seems to be taken for granted sometimes, and we forget to stop and consider just how important water is. Look at what happens if a pipe bursts and cuts off the water in part of a city. I experienced that myself in my own neighbourhood in Groningen. The supermarket was a nightmare; everyone wanted to get bottled water. Water is a big issue in many parts of the world. More than seven billion people need access to clean drinking water every day. Moreover, we are headed towards climate extremes, with droughts and floods. Those clever minds in the field of water technology can help come up with solutions for that.”

And focus is the key?
“Exactly. My dream for the future is for all the Dutch universities to bring their knowledge to Leeuwarden, so the WaterCampus becomes the water university of our country and the first point of contact for the world when it comes to water technology. Universities now want to have everything themselves. Start concentrating! If you see someone working on something good, don’t copy it. Go and help them. That way universities in, for example, Delft, Eindhoven, and Wageningen could specialize in other fields. The government, particularly national political leaders, also needs to get on board and, for example, remove regulatory roadblocks. That way, the exclusivity of the knowledge in Friesland needs to get more respect from The Hague. Friesland is water. Period.”

Ultimately, it is also about recognition.
“That is a good way of putting it. We can proclaim ourselves the centre of the water technology field, but others also have to recognize you as such. I just think it is a shame that so much time is wasted on discussions about where things should and should not be. Enough ego tripping already!”

Eight international top talents visit the WaterCampus

Eight talented international professionals visited the WaterCampus on Monday, 12 March. They were treated to a guided tour and a presentation by Hein Molenkamp, Director of the Water Alliance. They were also introduced to several water technology companies: Dutch Water Partners (DWP), Berghof Membranes, and Afmitech Friesland. The visit was part of the 'Dutch Visitors Programme', a ten-day trip to the Netherlands organized on an annual basis by the Netherlands Enterprise Agency, on behalf of the Dutch Ministry of Foreign Affairs.

The selected eight participants came from Brazil, Mexico, Egypt, Ethiopia, India, Indonesia, Kenya, and Vietnam and were nominated by their embassies. The young visitors were impressed by the facilities and synergy they found at the WaterCampus. Considering their special interests, there was more than enough for them to see and do. "I am interested in the newest technologies in wastewater treatment. I was able to learn a lot about that today", said Mahardiani Kusumaningrum (32), an environmental analyst from Jakarta, Indonesia. Pham Huang Trung (34) from Vietnam was mainly interested in learning more about how the Netherlands is dealing with climate change, as well as salinization. Marlus Oliveira (28), who is active for the Brazilian government in the clean-up of the polluted Guanabara Bay, near Rio de Janeiro, also wanted to know more about the newest technologies in wastewater treatment. "We can learn so much from the Dutch", said Oliveira. "Not only in regard to technology, but also when it comes to efficiency and cost control in wastewater treatment."

Pictured: The eight high potentials together with Dutch business leaders. In the back row on the right is project staff Jesse Offringa of the Water Alliance, who accompanied the visit. ***Photo:*** Nico Pakvis.

Businesses use festivals as a launching pad to the market

Innofest: Living lab and incubator for enterprise

Innofest took home the European Enterprise Promotion Award in Tallinn, Estonia, in late 2017. For those who missed it: Innofest is a foundation, supported by eight festivals in the northern Netherlands. Innofest sees these festivals as temporary mini-societies where solutions are devised for challenges that not only festivals face, but also society as a whole. Many innovations have been tested over the past years at, for example, the Welcome to the Village festival (near Leeuwarden) and Oerol (a festival on the Dutch barrier island of Terschelling). These have included innovations from water technology businesses. So, festivals as a 'living lab' for innovative product development. But, how does business development fit in? Does a partnership with Innofest open new doors for the entrepreneurs involved? We visited some previous participants to find out.

A festival presents challenges, not least, in regard to food, logistics, energy, trash, and of course water as well. "Festival visitors do what everyone does: they move, eat, sleep, and they need water. There are numerous ways you can provide for those needs as sustainably as possible, and in doing so, you reduce the footprint of festival-goers", says Innofest director Anna van Nunen. The ultimate goal is of course to be able to make that footprint smaller in society too, she points out. "A festival has one very big advantage as a living laboratory, where you can test solutions: there is a fence around it. That means you can control everything, and so you can make everything measurable."

Knowledge exchange

There has been extensive experimentation by businesses In the water industry at Innofest events in the past years. Businessman Jan Melein, for example, tested his Hydrowashr in the staff areas of the Welcome to the Village festival in 2016. His innovation represents an advanced technology which both cleans and dries hands after toilet visits energy-efficiently and with low water consumption. Taking part in the festival did not lead directly to new business, but it did provide a good network and new knowledge. "I notice that the festival industry is not an easy one. There tends to be little or no budget for this kind of innovation", says Melein. "But to me Innofest is still a great initiative, and with the network you build up you can exchange knowledge. For example, I now have good contact with Verno, a company that rents equipment for festivals, among other things. These exchanges help filter out the naivety that you often have in your plans as a start-up.

Of course, developments continue too. We have launched a new version of our product on the market, and are in dialogue with defence about supplying it."

Hydrowashr's Jan Melein

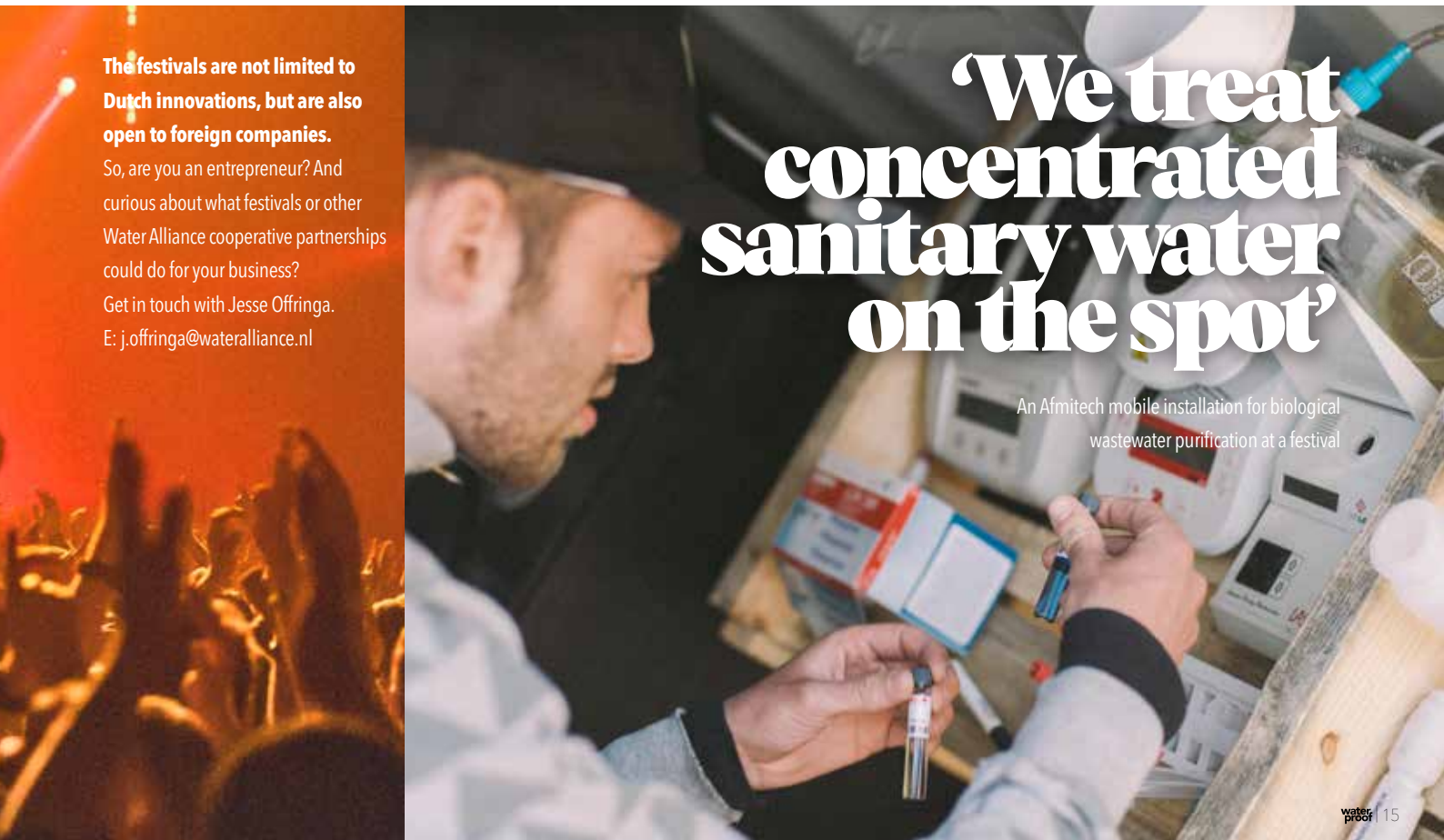
Disaster areas

The company SEMiLLA Sanitation Hubs also partnered with Innofest. They developed a sanitary unit where people in disaster areas, developing countries, and refugee camps can use the toilet and wash their hands. Wastewater streams from the sanitary facilities are treated directly in the unit, utilizing space technologies from the European Space Agency. The output is recyclable water and plant nutrients in the form of fertilizer, explains CEO Peter Scheer. His invention was tested early this year at the Eurosonic Noorderslag festival, and Sheer looks back on the experience with satisfaction. "During the festival we were able to conclude that our toilet units work. Moreover, I had the opportunity to pitch to a room full of festival organizers, which garnered many concrete inquiries and invitations. One thing often leads to another. Also as a result of Innofest, I am involved in a trade mission to New York. A number of political leaders are coming along, and they managed to get us an opportunity to pitch at the United Nations (UN). That, of course, brings us very close to our core business: life in disaster areas, as well as making developing regions more liveable, through better hygiene, more efficient water use, and because the compost we make can be used locally for food production."

So, festivals are doing a good job of proving themselves as living labs, for testing innovations that might eventually make society cleaner. On the other hand, there are also companies that do not utilize the festivals as much as a metaphor for a society, but instead are interested in them for the typical festival characteristics. Water technology company Afmitech (headquartered in Joure), a specialist in wastewater technologies, is one of those businesses. They supply mobile installations for biological wastewater purification. In May at the Here Comes the Summer festival on the Dutch barrier island of Vlieland, they demonstrated what their installation can do at a festival, where wastewater is typically highly concentrated. "A single person uses about 135 litres of water per day in a home situation", Roemer Goossensen explains. "At a festival that is considerably less. We treat that concentrated sanitary water on the spot, so it can simply be discharged back into surface waters. On Vlieland that worked extremely well, though we still have some analysis to do on the data. The reactions of the festival-goers were positive in any case."

For Afmitech, a festival is not only a laboratory but also a showcase, as Goossensen sees it. "We know what we can do, but the festival also provides a platform. If we can demonstrate that we can purify the very highly concentrated wastewater at a festival in a sustainable way, then potential customers can start to guess what we can do for the travel industry, recreation, and in fact any situation where you don't have deep sewage close to hand."

The festivals are not limited to Dutch innovations, but are also open to foreign companies.
So, are you an entrepreneur? And curious about what festivals or other Water Alliance cooperative partnerships could do for your business?
Get in touch with Jesse Offringa.
E: j.offringa@wateralliance.nl



'We treat concentrated sanitary water on the spot'

An Afmitech mobile installation for biological wastewater purification at a festival

Connecting Global Water Tech Hubs

The first ever European Water Tech Week (EWTW 2018) is set to take place in Leeuwarden from 24 to 27 September. During EWTW 2018, the city of Leeuwarden and all the WaterCampus Leeuwarden partners will go all out to organize events at WaterCampus Leeuwarden, City Theatre De Harmonie, and the WTC Leeuwarden. The programme is brimming with activities. The Wetsus Conference with 'Excellence in Multi-Disciplinary' as its central theme and uniting various water hubs from all over the world form the building blocks for the event. The following features will sound familiar to followers of Water Alliance: WaterLink, the WIS Award, and WaterMatch.

Multiple Hubs in One Place

The event will bring together leaders in innovation, technology, and policy from businesses, universities, and public authorities in the water technology sector. Many international guests and relations of Water Alliance will also be in attendance. Alongside the EWTW events, a water-centred cultural program will be organized by the European Capital of Culture 2018, Leeuwarden-Fryslân. Several alliances have been forged around the world to stimulate innovation in the water sector. Places where government, the business community, and knowledge institutions come together are called hubs. Leeuwarden

European Water Tech Week Leeuwarden 2018

is one such hub. With the presence of parties such as PUB from Singapore, the Water Council from America, and WaterTap from Canada, EWTW 2018 will bring together multiple hubs in one place. The central question at the event is how multidisciplinary cooperation can contribute to solutions for global water problems. Topics such as water scarcity, water pollution, and water & health will be discussed. The water sector's contribution to the circular economy is another subject to be addressed. Keynote speakers from around the world will share their visions on these topics from the perspective of science, business, and politics. In interactive sessions and on the exhibition floor, these topics will be further explored and opportunities for innovation and business will be discussed.

Grand Opening

EWTW 2018 will kick off in a spectacular fashion on Saturday 22 September with the WaterCampus Experience Day. A day on which young and old are welcome to visit the WaterCampus. The Experience day is made possible in part by Waterconnecting, the Leeuwarden-Fryslân 2018 water program. Fact and fiction go hand in hand on this festive opening day. One moment, visitors find themselves in the middle of a sketch or performance, the next amid bubbling and steaming test rigs in the Wetsus and Waterapplicatiecentrum laboratories. Visitors also have an opportunity to meet the people behind the startup companies at the WaterCampus Business Center Johannes de Doper. One thing is clear, everybody who experiences the opening day will leave with a different take on water.

EUROPEAN WATER TECH WEEK LEEUWARDEN 2018

Connecting Global Water Tech Hubs
European Water Tech Week Leeuwarden 2018

Monday
On Monday 24 September, Leeuwarden's Mayor Ferd Crone will officially open the event at City Theatre De Harmonie, after which, the first day of the Wetsus Conference will commence. Scientific Director of Wetsus Professor Cees Buisman will open the theoretical part of the EWTW. Dutch State Secretary for Economic Affairs and Climate Mona Keijzer, water engineer James L. Bernard, Dr, Philip Wilfert, and Mr Ed Nijpels will also speak. In the afternoon, the focus will shift to connecting the various hubs. Initially by keynote speaker Sally Gutierrez, director of environmental technology innovation cluster development and support programme EPA R&D office. Later in the afternoon, leaders of various hubs, including Dean Amhaus, Yossi Jacoby, Kenneth Tan, and Peter Gallant will shed light on the characteristics of the various hubs. All with the purpose of laying the foundations for further collaboration.

Tuesday, Wednesday
On Tuesday 25 and Wednesday 26 September, companies and organizations from the water sector will present themselves at the WTC Leeuwarden. For two days, the floor will be fully available for exhibitor stands and curious visitors. The 2nd and 3rd day of the Wetsus Conference will have multiple speakers and a large number of sessions on various topics. The emphasis of the second day of the conference lies, as usual, on science, but other topics will be discussed. On day 3 there will be more room for business and other topics. Notable keynote speakers are Prince Constantijn of the Netherlands and Professor Kaijun Wang.

WIS Award
The Water Alliance Innovation Stimulation Award (WIS Award) award ceremony will also be held during the EWTW. Five years ago, Water Alliance launched this prize to support companies with innovative water technologies. Ten Dutch candidates will pitch their ideas on the opening day. Based on an audience vote, five finalists will remain; two days later, they will present their technologies once again. A jury made up of industry experts will choose the final winner who will go home with a prize of €10,000 for marketing and promotional purposes.

Water-tours
On the last day of the EWTW, tours along companies and sites are offered. Four different tours, four different topics. The tours are aimed at: Resource recovery, Water & Agro/Food, Water & Energy and Water & Health. During the tours, relevant technologies are discussed for each topic and meetings are held with the people behind the technology.

WaterMatch
Besides the main programme, there will also be activities organized related to the EWTW. For example, Water Alliance and the Enterprise Europe Network are jointly organizing WaterMatch. A network platform for companies, universities and government institutions. Wetskills will also be organizing a challenge. Since 2010, Wetskills organizes various challenges every year, with BA, MA, and PhD students and young professionals participating from all over the world. The big connecting factor? A passion for water! The participants form teams and each team aims to devise and present innovative solutions to one or more challenges in the global water sector. The case-studies in question are offered by companies and organizations in the field who also remain involved as case-study owners.

For more information on EWTW, the complete programme, and how to register, please visit:
watercampus.nl/ewtw2018

'the focus will shift to connecting the various hubs'

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Corina Carpentier of Benten Water Solutions was the only person to step up when asked who wanted to follow Sergio de Campos of Adasa as coordinator of the Real Time Water Quality Monitoring (RTWQM) EIP action group. So the discussion about his succession did not take long. "At Benten we have been part of this action group for quite a while now", says Carpentier, "and the topics it deals with are very much aligned with what we do at Benten, so becoming coordinator seemed a good and almost logical next step."

EIP stands for *European Innovation Partnerships*. An initiative of the European Union, pursuing three primary objectives:

- contributing to solving societal challenges
- enhancing Europe's competitiveness in relation to other regions of the world
- stimulating economic growth in Europe

Corina Carpentier

EIP themes

There are EIPs on different themes, such as Active and Healthy Ageing, Smart Cities and Communities, Raw Materials, Agricultural Sustainability and Productivity, and Water. The EIP takes a bottom-up approach; those involved can organize themselves into an operational group (the action group) to address a concrete issue from a practical perspective. The RTWQM action group falls under the EIP theme Water and deals with developments and solutions in water monitoring strategies and techniques. The action group has 25 partners, a subset of which are actively involved.

Practical applications of new techniques

Carpentier is director of Benten Water Solutions, which is located on the WaterCampus in Leeuwarden. Benten is an independent consultancy and research firm active in water quality, water quality monitoring, and sensoring. It would be hard to find a better fit with the objectives of the RTWQM action group. According to Carpentier, "I took over the chairperson's baton from Sergio de Campos in January. We are currently at the stage where we want to hammer out a clear agenda for the coming period. Practical application of the techniques that are emerging is an important spearhead. Terrific and reliable techniques are now being thought up at an extremely rapid pace, but in reality, it is sometimes hard to get the techniques to the right people. We are currently looking at the available opportunities, for example digital, to better connect developers and end-users.

On the road with WaterProof

Happy Fish Journey: From Spain to the Netherlands by bicycle

Let us introduce: Rik Bomer, bachelor of science graduate from the Van Hall Larenstein University of Applied Sciences at the WaterCampus in Leeuwarden. In April, Rik started as a special field reporter for WaterProof Magazine and WaterProof TV-Water Alliance's YouTube channel. Why? Because Rik will be traveling straight across Europe for five months, seeking an answer to an important question: How happy are fish in Europe?

Rik is currently on his way to France via Spain. In short, the Happy Fish Journey has begun. On the way he will be doing participatory investigative journalism for WaterProof. Take countries like Spain, France, England, Belgium, and the Netherlands. What is the status of their water quality? And, what is being done to make the lives of fish—an important link in the ecosystem—a little bit easier? Rik Bomer will travel north over mountains and plains, through cities and villages, and specifically along rivers and lakes. On the way he will be talking to water technologists, fish migration specialists, and of course, farmers, community members, and outdoor folks. Via video and in articles and photos, Rik will be reporting for WaterProof Magazine and WaterProof TV. Check out our website:

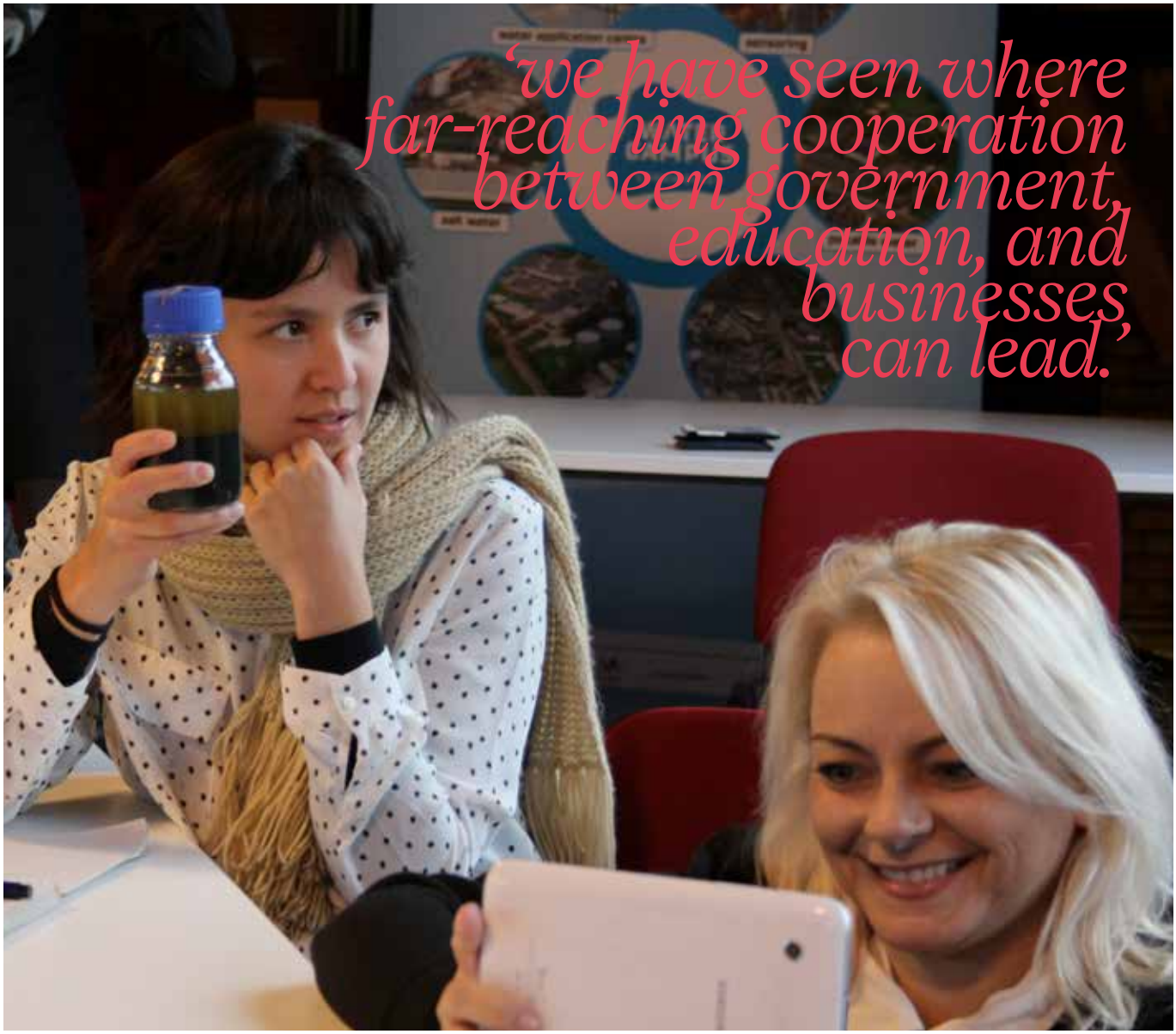
www.wateralliance.nl

Rik Bomer

"I am travelling home with an exclamation point above my head"

Brazilian journalists impressed by WaterCampus Leeuwarden

On 7 March, a group of Brazilian journalists visited the WaterCampus Leeuwarden as part of an international press trip. After a presentation by Water Alliance director Hein Molenkamp and a guided tour of Wetsus, the visitors had meetings with a variety of businesses. The Brazilian guests' reactions were glowing. In particular, the intensive cooperation between education, government, and businesses was much praised. "I saw what cooperation can lead to; more innovations reach development and more market opportunities are cashed in on."



The press trip was organized by the Netherlands Enterprise Agency, in partnership with the Brazilian embassy and the Water Alliance. It dovetailed the World Water Forum Brasilia, which was held from 18 to 23 March. A variety of companies affiliated with the Water Alliance had the opportunity to give a short presentation. "For us a trip like this is an ideal chance to spotlight our company", says Vincent van Vuure, Head of Marketing & PR at Paques. "In Brazil, water management and water technology are still in their infancy and a broader audience need to be informed. A press trip like this one can help achieve this." Paques has years of experience under its belt, and has now matured from a small pioneer in Balk to a multinational with numerous production locations, including in China, India, and Brazil.

The journalists -notably all women- were very positive about what they had been shown and told. "What we have seen here is impressive", said freelance journalist Andrea Vialli. "Especially for us Brazilians. Don't forget, we have only really been active in policy-driven water management for 13 years or so. Here, there is a lot more progress in this industry. And we have seen where far-reaching cooperation between government, education, and businesses can lead."

"Another thing that stood out was the project-based approach in all of the activities. Tight schedules, good budget control, and clearly set priorities; those are key things that struck a chord with me throughout all of the presentations. I see it as a lesson in how we should tackle issues in our country. "I am travelling back to Brazil with a big exclamation point above my head."

What the press trip will produce in terms of publicity is impossible to say as of yet. There are no guarantees for publications, but the chances are good, says Marloes de Goeijen, active in the Incoming Visitors' Programmes for the Netherlands Enterprise Agency. "They usually produce a good yield", says De Goeijen. "I have yet to see a press trip generate no publications at all. And in the end that benefits Dutch businesses and industry."



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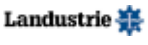
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