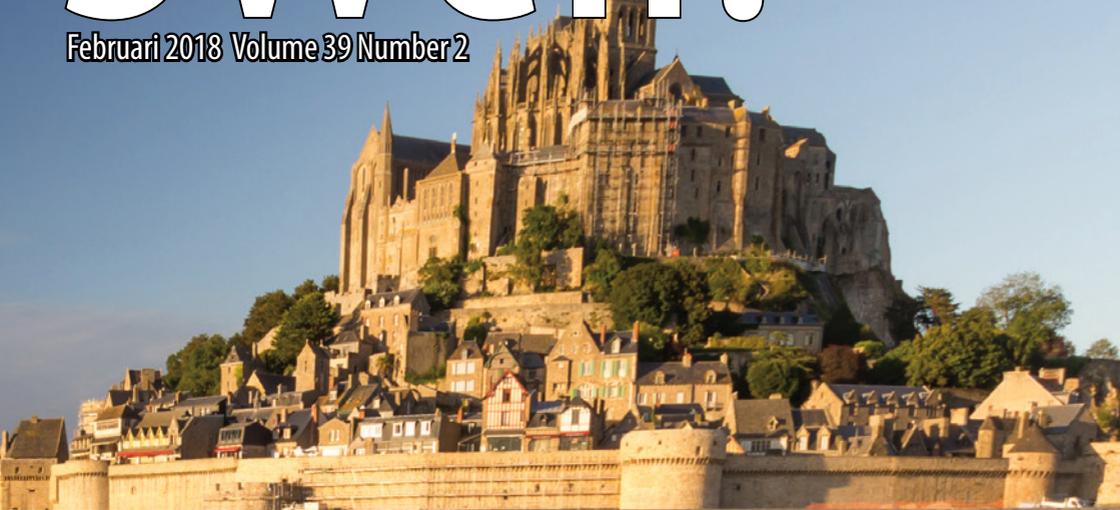


Swell!

Februari 2018 Volume 39 Number 2



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Colophon

'Swell!' is a quarterly magazine for all the members of 'Het Waterbouwdispuut' and her relations.

'Het Waterbouwdispuut' is the student association of the department of Hydraulic Engineering and Environmental Fluid Mechanics of the Delft University of Technology.

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From the editors

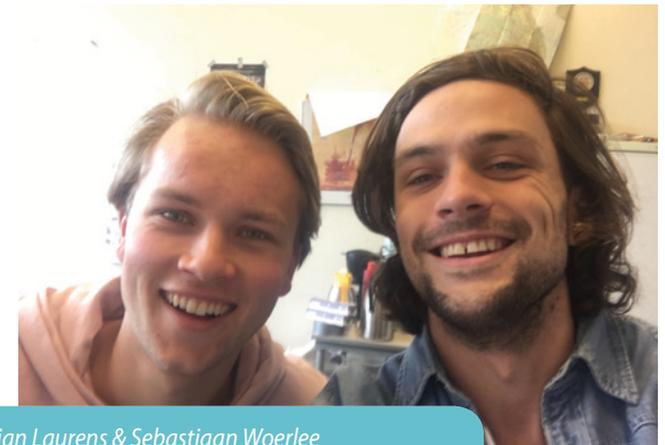
Dear Members,

We, Sebastiaan and Florian were invited to make the first Swell of 2018 for you. As this was the very first time we were allowed to edit a whole magazine we were both very excited.

In this edition we've asked various members and people affiliated with the hydraulic engineering department to contribute and make this another succesfull issue. Besides, we wanted to pay special attention to some events we organized during the past months and the events we will still organize in the future.

We wish you all a lot of reading pleasure and hope you'll enjoy reading this Swell as much as we did editing it!

*Editors of the Swell,
Sebastiaan Woerlee & Florian Laurens*



The editors: Florian Laurens & Sebastiaan Woerlee

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From the president | *Focco Vons*

Dear members of 'Het Waterbouwdispuut',

At first, I would personally like to wish you all a dynamic and hydraulic 2018. Last year was a great year, in which a lot of us started their masters and came in touch with beautiful engineering and the first understandings of the hydraulic world. We all made new hydraulic friends which will hopefully be our colleagues for the rest of our lives. We are the people who need to keep the feet dry of a lot of people around the world. This is a heavy burden but take it with pride!



All last year's activities were a great success in the opinion of the critics. Especially the study trip towards Lisbon! Here, a group of 24 students visited many great things and had a lot of fun together. It is always nice to visit a warm country in the fall so you miss the rain and enjoy the sun. If you than even can learn something from inspiring hydraulic engineers, like Celso Pinto, the trip is more than perfect. About this trip you can read more further on in this Swell.

Another big activity we arranged was the Hydraulic Dinner with four big partner companies and 24 students. This dinner is a great way to talk about the future, your career, the different job possibilities, internships, but the most important topic is of course the subject we are all in love with, "Hydraulic Engineering". A part of the focus of 'Het Waterbouwdispuut' is to create and sustain the bridge between the students and the hydraulic companies and I am sure that everyone who was involved in the dinner agreed on the fact that the bridge has become stronger.

From the president

The coming period we will be an active one due to many different new activities. In May we arrange a symposium with a very energetic and important theme. On this day, new possibilities and solutions will be discussed with the biggest players in the field. The strong relation between the transition of the energy supply for humans and hydraulic engineering can never be seen separately. I already want to welcome everybody to this day and please bring your ideas about "North Sea power".

So, fellow Hydraulic lovers, enjoy this Swell and hopefully we will see each other at the hydraulic coffee or one of the many activities coming up! On Facebook and in this Swell, a planning for the coming five months can be found.

See you water!!

Focco Vons
President of 'Het Waterbouwdispuut'

Het Waterbouwdispuut presents the Symposium of
2018 themed

North Sea Power

24th of May

Please save the date! Further information follows.

If you have suggestions or would like to have a contribution to the organization of this event, please feel free to contact us at symposium@waterbouwdispuut.nl

Written by Hilary Richards

This year a group of 25 hydraulic engineering students as well as Tjerk Zitman and Sierd de Vries gladly exchanged the rainy streets of Delft with the sunny, warm hills of Lisbon for the three day excursion of 2017.

The city trip started off on a thursday afternoon where everyone gathered at Schiphol airport and headed towards the check-in area together. After check-in we enjoyed a cheeky beverage and then made our way to the plane. Everyone was scattered all over the place and new friends were made on the short 2,5 hour flight to Portugal.

Our bus chauffeur for the weekend met us with a friendly smile as we landed and took us to the beautiful Independante hostel in the center of the city. It is an old building that has been very well maintained over the years with its own beer garden and bar with happy hour each evening, the perfect place to get to know each other better. Once everyone was settled in we made our way to a tapas restaurant for dinner and spent the rest of the evening roaming the busy streets of Lisbon, including the famous Pink Street.

Friday morning we hopped on the bus to our first hydraulic related excursion - the coast of Caparica with coastal geologist Celso Pinto. We had an introduction to the sediment distribution along the coast and the problems the locals are currently facing. We had a tour of the coastal structures that are currently in place and how the coastline has developed over the recent years. This was an extremely interesting case and tested us to think strategically and consider different viewpoints with different challenges than those in the Netherlands.

The afternoon was spent touring the city in true tourist fashion during a walking tour of Bairro Alto, a neighbourhood in the city. We discovered hidden gems of Lisbon and ended the evening eating at Timeout food market where we were spoiled for choice for food and wine.



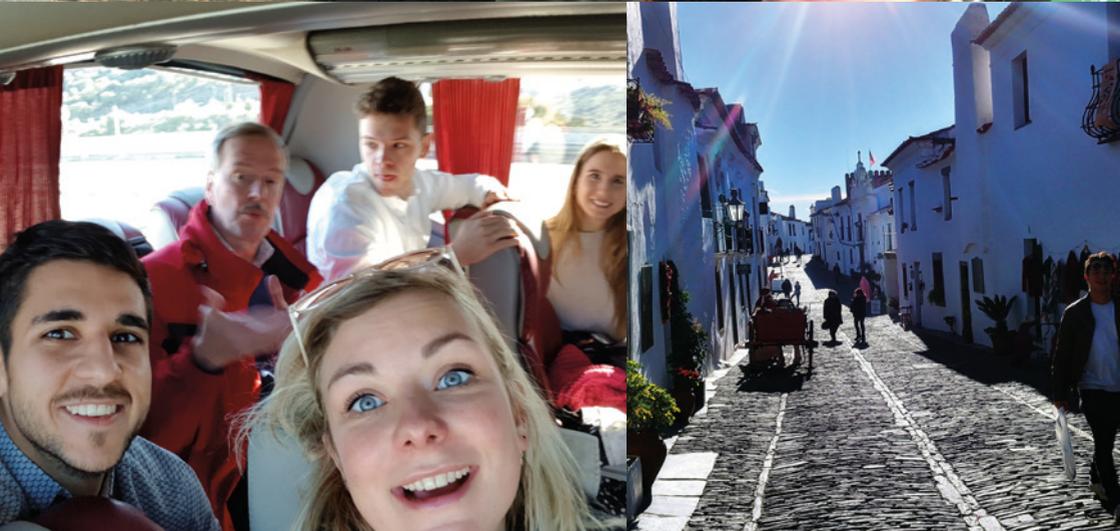
Saturday morning we were up bright and early and headed towards Alqueva Dam which was our second educational trip of the weekend. The two hour drive flew by and before we knew it we were staring at the largest dam in Europe. This was a breathtaking construction and it was difficult to imagine the enormous volume of water it contained. After an explanation of the area and the dam we had time to take some pictures and then it was time to head back.

On the way back to Lisbon we had a pit stop at Monsaraz, a civil parish near the Spanish border. Lunch in the afternoon sun, and a view of the horizon where Spain lies, made for the perfect time to recover from a long day. This was also the last night of the trip and we celebrated in style back in Lisbon at a classy restaurant where we ate like kings.

Sunday may have been the last day but an evening flight meant that the daylight hours could be taken advantage of. We started off with the last excursion to a Oerias Marina where we marvelled the huge breakwaters and listened to the stories of 15 meter high waves causing chaos in the past. We spent our last hours in Portugal enjoying the sun and views of the blue coastal waters of Cascais.

Overall, our time in Lisbon was filled with laughter, learning and lots of sun, little did we know that about a week later we would be covered in snow back in the Netherlands.





Kom jij het maken in de Waterbouw?

De Nederlandse waterbouwers zijn wereldmarktleider op het gebied van baggeren, havenontwikkeling en landuitbreiding en worden wereldwijd geroemd om de waterbouwkundige werken die zij realiseren.

Werken die landen en hun inwoners beschermen tegen overstromingen. Werken die gebiedsontwikkeling en transport mogelijk maken. Werken die economieën laten groeien. Niet voor niets heeft de Nederlandse overheid de waterbouw tot een van de meest kansrijke sectoren van de Nederlandse economie benoemd.

Facts & Figures

- Totale werkgelegenheid: **10.000, verspreid over de hele wereld**
- Totale omzet per jaar voor deze branche: **Meer dan 11 miljard euro wereldwijd**
- Aantal bedrijven: **Ongeveer 250**
- Aantal werknemers: **Ongeveer 6.000 in Nederland**

Bedrijven

In Nederland zijn zo'n 250 bedrijven als aannemer of dienstverlener actief in de waterbouw. Zij voeren in Nederland projecten uit voor Rijkswaterstaat, waterschappen, gemeenten, provincies en havenbedrijven. Internationale opdrachtgevers zijn onder andere grote maatschappijen en projectontwikkelaars.

Bedrijven in de waterbouw houden zich bezig met de aanleg en het onderhoud van havens en waterwegen, landaanwinning, aanleg van kunstmatige eilanden, bouwen met de natuur en infrastructuurprojecten.

Interesse?

Kom dan werken in de waterbouw, een branche met een breed carrièreperspectief zowel in binnen- als buitenland met aandacht voor je persoonlijke ontwikkeling en begeleiding gedurende je hele carrière.

 VERENIGING VAN
WATERBOUWERS

Henk Jan Verhagen retired in December last year. Besides his role as lecturer for Bed, Bank and Shore Protection and many other functions within the department, he was also the Master Coordinator of Hydraulic Engineering. We interviewed him in order to get some insight in how he perceived this period and what he is going to do now.

Henk Jan, what have you done before you became the Master Coordinator of the department of Hydraulic Engineering?

This question assumes that Master Coordinator is a full-time job, but it is only a part-time job. It should not take more than one day per week. And all the things I did before I had to continue after my appointment as Master Coordinator. In fact I did this task only as interim. Until end 2016 Tjerk Zitman was our coordinator, but because of many other obligations, he had to stop with this work. The department had to find a replacement at short notice. Because I started working for TU Delft in 2000, I knew most ins and outs of the programme, so I did not need too much time to familiarize myself with the duties. In this way the department had more time to look for a long-term replacement.

If you could pick a special moment in your career working with students, which one would it be?

The task of the Master Coordinator is on one hand to look to the program in general, and secondly, to advise individual students on their programme (and give advice on admittance to the program of students with a degree other than from our faculty).

An important problem to solve in the programme was the overload in period 3 for students who did not have followed the “right” courses in the BSc (i.e. open channel flow and hydraulic structures 1). Several options have been elaborated, but until this moment it is not completely solved. However it seems that we have found a solution for the course year 2018/19. I think it is not appropriate to mention cases of individual students.

What will you miss about working at the TU Delft?

I will stop with the guidance of individual students and I think I will certainly miss this.

What message would you give to the new Master Coordinator?

One of the tasks of the Master Coordinator is to manage the official regulations. I found that it is good to try to keep them as flexible as possible, because that allows students to make a study programme which fits the best to the interests of the individual student.

What are your plans during your retirement?

I will continue to do several things for TU Delft, like keeping our “Kennisbank-waterbouw.nl” up-to-date and adding a section with antique hydraulic engineering books (kennisbank-waterbouw.nl/tresor). I will not continue with regular lectures, but I will continue to do some lecturing for special courses, both in the Netherlands as well as abroad. Privately, I also will focus on some research of the history of my family.

Do you have a last comment or good advice you can give to a Hydraulic Engineering student?

Hydraulic Engineering is a very interesting field. And it is quite broad. Therefore I would recommend not to focus too much on one specific specialisation, but keep interest in all aspects of hydraulic engineering.

Written by Servaas Kievits

During a successful lecture at the TU Delft with a full classroom, the new Hydraulic Engineering students got to know MTBS and their business a little and as many people got excited, the company case was only a logical next event to organize.

On the 6th of December this group of enthusiastic students assembled at the Oudehaven in Rotterdam where the office of MTBS is located in the White House. In this beautiful building, that is recognized by some as the first skyscraper of the Netherlands, MTBS had just opened a new floor so that the group of Hydraulic Engineering students were the first to try out the new desks and chairs.

After being welcomed by one of the directors, it quickly appeared that our friends from MTBS were not intending on only letting us try out the chairs but also wanted to put us to work. Following an introduction of the company the business case for that afternoon was unfolded: a challenging case study in which the students got a feeling on what a real MTBS project could look like. That a sophisticated model was used in this case troubled some minds at first but soon everyone had figured that out with a productive afternoon as the result.

By the end of the day, all groups had come up with an interesting solution to the challenge leading to an open discussion to conclude with. As, besides MTBS and some other companies, the White House houses a café, there was quickly agreed upon moving downstairs to end the day with drinks that were well deserved. With other employees joining, we were able to ask our final questions after which the day was concluded.

We would like to say a word of thanks to MTBS for hosting this wonderful event and providing us with an insight in the challenges they face daily.



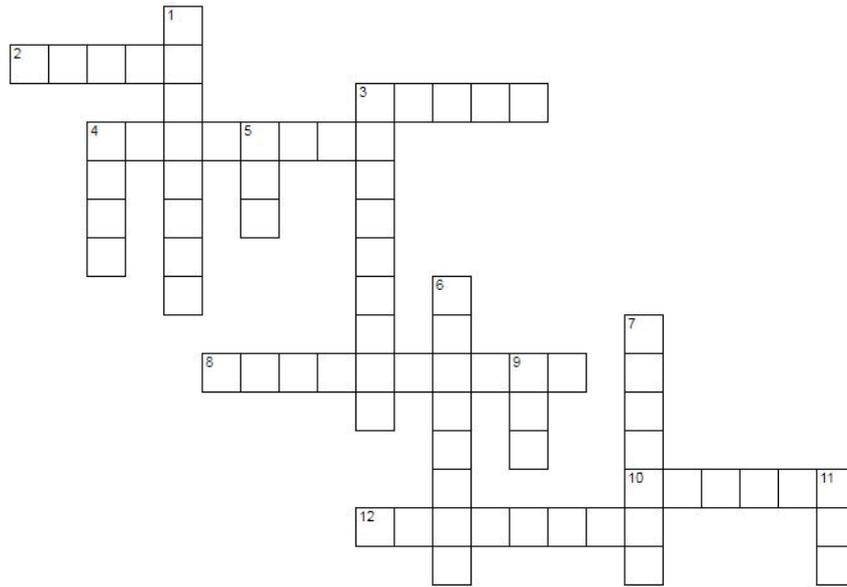
'Het Witte Huis', the iconic building in Rotterdam where MTBS is located

Puzzle Page | Hydraulic Puzzle

Level: ☆☆☆

6	7			1				4
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Hydraulic Puzzle

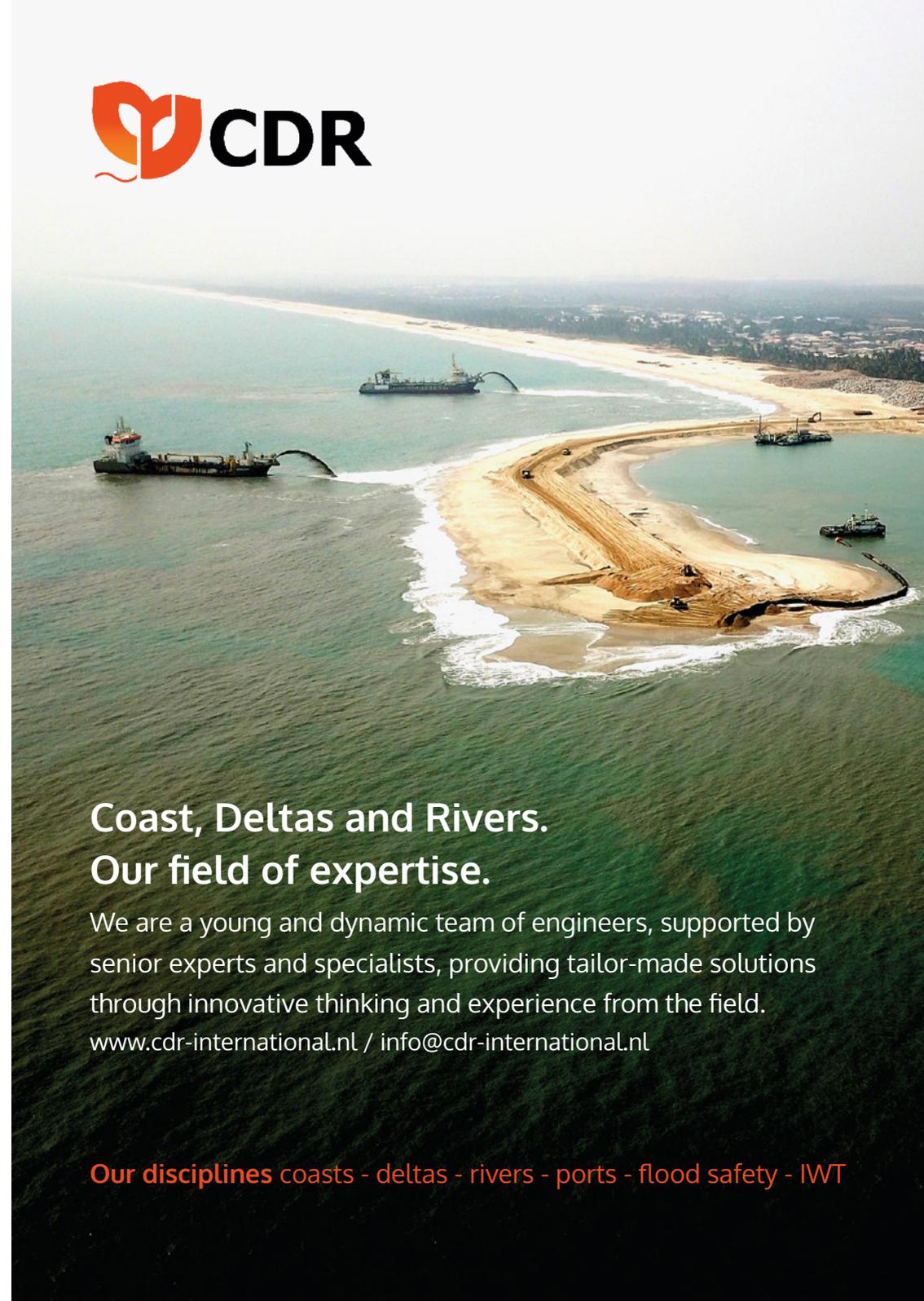


ACROSS

- 2 Destination of this year's study tour
- 3 Short period in a body of tidal water when the water is completely unstressed
- 4 Provides controlled release of flow from a dam or levee into a downstream area
- 8 Flow regime characterized by chaotic changes in pressure and flow velocity
- 10 Rigid hydraulic structure that limits the movement of sediment
- 12 Deepwater port in Shanghai

DOWN

- 1 Amount of salt dissolved in a body of water
- 3 One of the annual events of 'Het Waterbouwdispuut'
- 4 Connection between the Mediterranean Sea and the Red Sea
- 5 Liquefied natural gas
- 6 Gathering of sediment in waterways or shallow seas
- 7 Largest city along the Rhine
- 9 Cutter Suction Dredger
- 11 Movement of a tide back towards the sea



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ACTIVITY CALENDAR SECOND SEMESTER HYDRAULIC ENGINEERING STUDENT ASSOCIATION 'HET WATERBOUWDISPUUT'

February

1 Feb Hydraulic drinks
location: Tango

16 Feb Lunch lecture by Waterschap Rivierland
Master Community
location: CEG

27 Feb Master Case Day

Every Monday: Hydraulic Coffee
10:30 in front of room 3.72!

March

18 Mar Special Hydraulic Coffee in the Waterlab

20 Mar Company Case Van Oord

27 Mar Company Case Royal HaskoningDHV

Every Tuesday: Hydraulic Coffee
10:30 in front of room 3.72!

April

Every Tuesday:
Hydraulic Coffee 10:30 in front of room 3.72!

May

8 May Hydraulic Dinner 2

14 May Special Hydraulic Coffee in the Waterlab

24 May Symposium: North Sea Power!

Every Monday: Hydraulic Coffee
10:30 in front of room 3.72!

MORE INFORMATION? CHECK OUT OUR FACEBOOK 'HET WATERBOUWDISPUUT' OR OUR WEBSITE: WWW.WATERBOUWDISPUUT.NL

Het Waterbouwdispuut
Hydraulic Engineering student association

Upcoming activities | Het Waterbouwdispuut

For the upcoming months, many interesting hydraulic activities are scheduled! We tried to come up with a diverse range of events, so that everybody will be satisfied.

This March, we will visit two of the most popular hydraulic companies for a company case, Van Oord and Royal HaskoningDHV. If you are interested in graduating at one of these companies, or maybe to just orientate, do an internship or even apply for a job, feel free to join us!

April will be a busy month due to the exams, which is why not that many hydraulic activities are organized during this period. However, we will make up for this in May! To start with, an additional Hydraulic Dinner will be organized, because of the enormous success of the last one. In addition, the annual symposium will take place in May. The theme of this inspiring session will be North Sea Power. We will keep you updated about any progress regarding this event.

In August, the intercontinental study tour is scheduled. This year's destination is China. During these two weeks, we will visit impressive hydraulic highlights like the Yangshan Deepwater Port, the Three Gorges Dam, the impressive Yangtze river and many more. Besides, we will dive into China's pure and untouched nature and see some of the world's largest cities. Unfortunately, all places are already filled up, but we encourage to subscribe for next year's study tour if this gets your attention!

Last but not least, all hydraulic coffee days are mentioned in the activity calendar, so don't hesitate to stop by for some hot coffee before or after your lecture. If there are any additions whatsoever to the calendar, we will let you guys know via Facebook, so keep track, and we hope to welcome you all at some of our activities!

Written by Sebastiaan Woerlee

When the days are getting shorter and the sunny days make place for cool and windy times, people tend to spend more time together in a warm and cosy environment. In such a setting, enjoying good food and plenty of wine, the winter is at its best. That is why the annual Hydraulic Dinner becomes an unforgettable evening time after time.

Last December, the Hydraulic Dinner took place in the heart of Amsterdam, in a beautiful house alongside one of the 'grachten' of the city. At this location, 24 hydraulic students met with four well-known hydraulic companies, enjoying a four-course menu. All students passed a selection in order to be able to participate, which resulted in an enthusiastic crowd.

Students could ask whatever they wanted to the companies that were present, which were Witteveen+Bos, Van Oord, Royal HaskoningDHV and Boskalis for this year's version. Each company had an own table where every student had to pass by at least one time during the dinner, to share a course with the employees that were present. Besides, there was an opportunity for the students to hand in a unique question for one of the companies anonymously. These questions were all put into a hat, so that every single time one of the students had to ask a question from somebody else. This created a good balance between the conversations at the table and some central conversations due to these questions.

Apart from this, every company presented themselves in front of everybody by means of a powerpoint. We heard a lot of interesting stories concerning the working environment, company activities, ongoing projects and interesting opportunities.



The crowd that is attracted to the Hydraulic Dinner is always really diverse. Approximately half of the students is just starting their master and hence they are still orientating and trying to get an impression of all of the companies. The other half is trying to find an internship spot or a graduation project, making their goals entirely different. In addition, this year was the first time we welcomed international students to the Hydraulic Dinner, which turned out to be a huge success.

After all, it can be said that the evening was both inspiring and entertaining. I personally really enjoyed organizing it and I could not be happier about the result. We want to thank all attendants of the companies as well as the students who were present during this evening. For all the others: we hope to welcome you guys at next year's version!



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Royal Haskoning DHV



Van Oord



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