



Year Report

2022-2023

Board Eling



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PREFACE

Dear Reader,

Before you is the year report of G.T.D. Bernoulli 2022-2023. This document will contain all the information regarding the educational, career and social events organized within the year as well as our efforts to increase the organization's internal and external relations. Other than that, we will give our evaluation of the policy plan we presented at the start of the year, complete with the financial and sponsorship overview. Finally, we will show a statistical overview about several interesting and entertaining facts about the association from the past year.

The past year has been an incredibly enjoyable one. We had our ups and downs, we had events that succeeded beyond our expectations, and we even made a new look for Bernoulli. We had Woktober, Cooking with Picchioni, Sinterklaas and many other memorable moments from the year. We believe that the association has risen back up again after the COVID period and this really shows the strength within the association.

This year was incredibly memorable, from the start of the year to the incredible Bernoulli Goes Abroad trip to Indonesia. There's nothing much for me to say but say thank you to all the members and committees that made this year possible.

We hope you enjoy reading our report.

Kind regards,

Amanda Tiffany Hendra

Secretary of G.T.D. Bernoulli 2022-2023



Board 2022- 2023



f.l.t.r. Dani, Amanda, Mark, Roelf

G.T.D. Bernoulli 2022-2023 consists of:

Mark Eling	<i>Chairman</i>
Amanda Tiffany Hendra	<i>Secretary</i>
Roelf Maring	<i>Treasurer</i>
Dani Wu	<i>Business Relations & Vice Chairman</i>

Policy Plan Reflection

On the day of the transfer GMM, before our installments as Board 38 of G.T.D. Bernoulli, we wrote and presented a policy plan as a guideline for our board year. The plan was created in consideration of the current state of G.T.D. Bernoulli (hereinafter called Bernoulli), especially on how to maintain and improve the association. With the advice of the CvA, the previous board and our own experiences we decided to focus on increasing Bernoulli's involvement of Bachelor students and first year masters in the association. We wanted to achieve it by increasing the type of promotion done and improving Bernoulli's media appearances. Throughout the year, we've managed to do so by introducing the new Photo Committee, new association trailer, and increasing the association's Instagram activity.

Social Activities

Out of the three different types of activity within Bernoulli, social activity has made up a big part of the year. The year kick-started with Bernoulli Welcoming Committee (BWC) events for 2nd year bachelors and 1st year masters which include free Wednesday lunch, Friday borrel and a pub quiz. The board then maintains these weekly socials by organizing different menus for Wednesday lunches and keeping up with the daily coffee hour and weekly Friday borrels.

In the effort to create more interaction between the people of the university, we held extra *borrels* with different themes. One instance of this was during the 2022 FIFA World Cup. We decorated the lounge and organized a watch-together group for some matches. Other than football, we do the same for Formula One Grand Prix and other sports. We organized a couple of *borrel* after the final presentation of General Process Equipment and Process Design to celebrate the end of the course. Creating this informal situation would help the students de-stress and create a better connection with other students, staff, and professors.

The activity committee made most of the social events, they had a combination of novel activities and sport activities throughout the year. They also increased the number of activities which are in collaboration with the staff and professors, such as cooking with Prof. Francesco Picchioni, and Jass card game with Prof. Jos Winkleman. Bernoulli's traditional events such as Woktober and Top 30 were highly anticipated. We managed to break the record of attendance with 83 people attending Woktober. The people present ranged from bachelor students to professors and staff. Our Top 30 event was attended not only by people from our association but from our brother's association as well. Generally we felt that our event participants has become more diverse with groups of people from 2nd year bachelor students and pre-master attending as well.

Educational Activities

Bernoulli at its base is a study association, so put the utmost importance on improving the student's education and experience in learning. In our policy plan, we highlighted three main topics: exam database, support sessions, and vierhoek meeting for bachelor and master program. We tried to keep the database as up to date as possible. As per last year, we held support session for Physical Transport Phenomena 2 and Multiphase Reactors. We tried a new system in collaboration with the academic advisor for Multiphase Reactors and it was perceived well by the people involved. Rather than just doing one support session before the final exam,

we also arranged multiple study sessions for the people that had to take the first resit. The multiple session was held weekly and was spread over a couple of months. Each session has a specific chapter they were revising. Even though the session was not always manned by a teaching assistant, the provided learning situation created an open discussion within the group and they were able to work together on increasing their understanding of the topic. Besides course-based support session, the LaTeX support session was also given in collaboration with G.L.V Idun. The support session covers the introduction of LaTeX and showed how to utilize the guides and material given by the university in Overleaf.

We helped the professor to find teaching assistant for several courses by creating a TA application form. In this form, the students can indicate which courses they wanted to teach and we provided this list to the professors. The teaching assistants were given financial compensation to encourage more students to become a teaching assistant.

During our year, the chairman continued to attend the vierhoek meetings. This meetings takes place every three weeks and it is organized by the department. The chairman served as a bridge of communication between students and department and raised the problem that the students encountered. We also play an active role during Teacher's Day by contributing advices and joining discussion on the current topics such as the course updates for both degrees, discussion on the usage of Brightspace for teaching and the usage of ChatGPT. Just like the vierhoek meeting, this opportunity was used to voice the student's opinion regarding their education.

Career Activities

At the end of the previous board year, the corona measures were lifted and luckily stayed that way. We were able to organize all activities on-site and additionally compensate the companies for cancelled activities due to the pandemic. We noticed that a certain group of new MSc students were very enthusiastic about the career activities and became more familiar with Bernoulli through them.

Attempts were made to collaborate with more food companies, however we noticed a lack of interest from their side. Then we tried to organize an excursion with FrieslandCampina instead, but this was not possible due to strict hygiene regulations within their facilities. More companies approached us in the latter half of the year, which can be picked up by the next business relations.

Committees

This year, the board introduces a new committee: The Photo Committee (PhoCo). The formation of this committee, along with purchasing a new camera is in line with Board 38's main effort to increase the appearance of the association and increase the involvement of Bachelor and first year master students. The PhoCo was tasked on documenting Bernoulli's event with high quality pictures and to be responsible with the upkeep of the Bernoulli's new camera. Though there were resistance in purchasing the camera during the initial GMM, the members were quite satisfied on the result of the photos. All of the photos made by the PhoCo will be updated on the website within the appropriate folder. Other than that, the photos will also be used as a recap post on Instagram.

Members

The effort to increase Bernoulli's internationalization effort has increased throughout the years. Out of the 10 committees we have this year, 8 of them have an international students as a member. We kept the effort to increase internationalization by increasing the different types of events and trying different methods of promotions. The board along with the Bernoulli Welcoming Committee attended the

introduction event for the pre-master and master students of chemical engineering. We also gave a short introduction about Bernoulli to the first lecture of General Process Equipment for 2nd years and had an after lecture borrel with the 2nd with Prof. Picchioni. The latter event worked very well, we received up to 15 sign ups after the borrel ended.

Since some of 3rd year bachelor students are starting to work in the 5118 lab area for their bachelor's research project, we were present to promote Bernoulli on the first safety lecture. Some of the students did become a frequent visitor of the lounge while they are working in the labs.

Representation

Throughout the year we've kept up with the plan we laid out in the policy plan. The lounge is opened by a board member or a trusted Bernoulli member in the morning around 09:00 – 09:30 am. Coffee is always three times a day and cookies are provided in the morning. For Wednesday lunch, we tried to implement healthy vegetarian lunches intermittently and provide vegetarian option on some of the frituur lunches. The board hosted Friday borrels every week and provide a free borrel on the last Friday of every month. However, we do see a lower attendance on the usual Friday borrel compared to the years before COVID happened.

During our year, we expected to have in total of four General Members Meeting (GMM). In the end we have around six GMMs since we had to dedicate two GMMs to change the Article of Association (AoA). The attendance for these GMMs was a little bit low, around 10-15 people at each meeting. At one of the GMMs, we introduced confidential person to the members.

Confidential persons are individuals who can be approached by anyone within the study association, whether they are students, staff, or professors. These individuals have been informed to provide support and guidance to those who are experiencing any misconduct or mistreatment within the university. They will listen to the member's concern, provide the necessary information, and guide through the problem. In introducing this to the members, we hoped that we can ensure the rights and well being of everyone within the university.

Financial

For the academic year 2022-2023 the aim was to realize a negative results on the balance of €2000. This goal was almost achieved with a negative result of €1849.61. This was realized by adjusting the budget throughout the year however not at the expense of our main targets stated in our policy plan, including the introduction of the photo committee, and improving the promotion of Bernoulli. For the coming years investments were made on a photo camera, Instagram templates and a promotional video. Adding up that, the general members weekend has become an important event once more by combining it with an educational excursion for which FSE subsidy could be used.

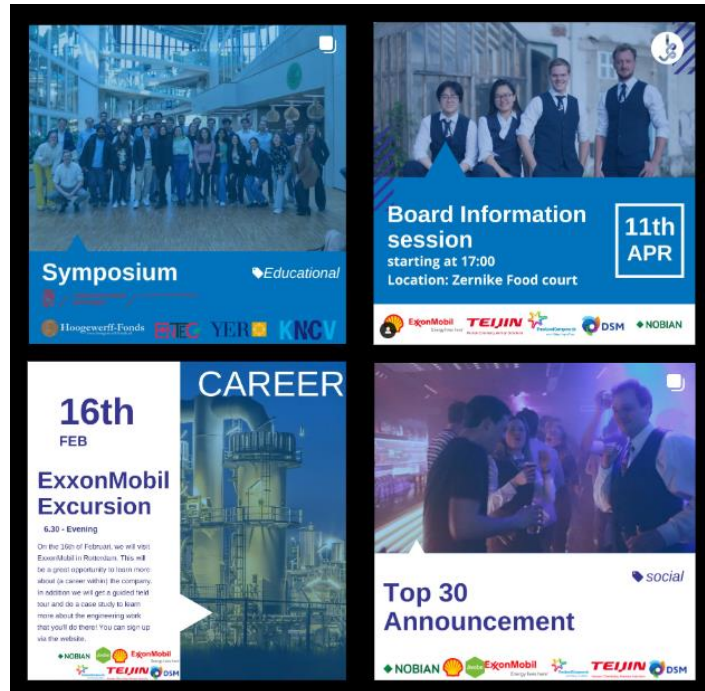
Sponsoring

As a study association we aim to help our members get acquainted with the chemical industry. We noticed an increased interest from companies looking to sponsor activities. Due to this, almost all old contracts were renewed. Additionally all budget cuts regarding sponsoring from companies were removed. During the previous years, a few activities have been cancelled because of the pandemic. One company downgraded their contract for this board year only given that they still had one activity that they had paid for in previous years. As a result the sponsor acquisition for this board year decreased slightly.

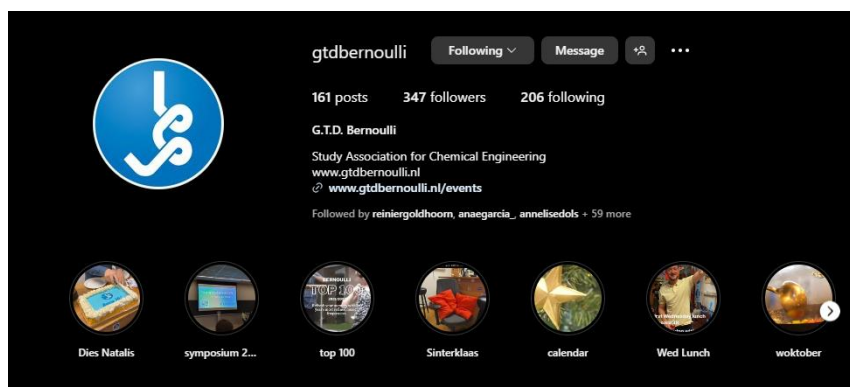
In the end a total amount of €14.350 was earned, which was slightly higher than the target of €14.000, including a new sponsor.

Media

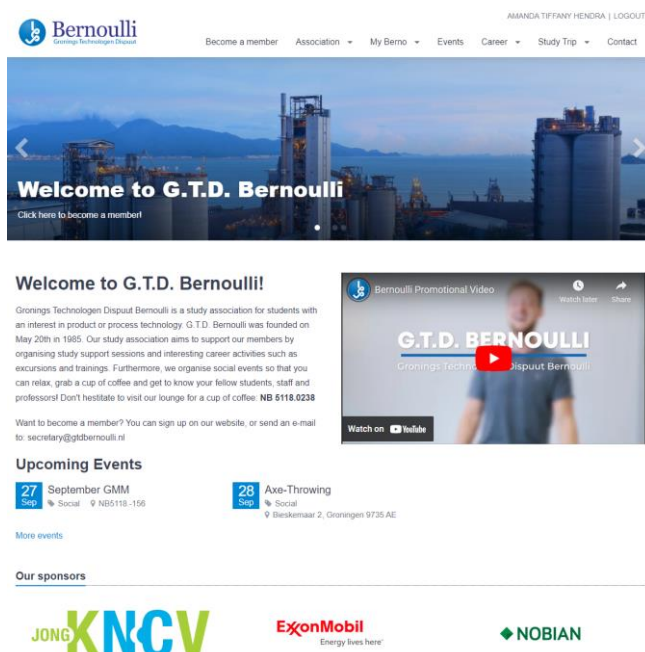
To increase the association's appearance in public's eye, we focus on four main platforms: Instagram, LinkedIn, WhatsApp, and the website. Early on in our board year we invested in a new DSLR camera and templates from a designer. The vision was to create a coherent design between the different platforms. Previously we see that the Instagram is used to post the existing A3 poster, so the overall feed looks unorganized with the different post sizing. This year we make them uniform by creating a separate poster design for Instagram, as you can see the example below.



Combined with the high quality pictures provided by the camera, our social media has gained more traction. At our peak we've managed to increase the Instagram interaction by 738 unique accounts. Instagram interaction is counted by how many unique users see our Instagram story or posts. The amount of followers increased to 347 accounts. The most post that gained a lot of traction was the graduation post and the event recap posts. We also started to create story highlights to showcase the different types of Bernoulli's events. This made our association appear to be more active and approachable by the new students.



Other than the camera and templates, we also invested in the production of an association introduction video. The video can be accessed through our Youtube channel, LinkTree shortcut or directly on our website. We used this video to promote our association during introduction days and the first lecture of some courses. We received great feedback about the video from people within and outside of the association. You can see below, the website now has a more cleaner look and layout. We modified the location of the tabs so it becomes a bit more intuitive to use.



Other than Instagram we also promote our events through physical barcode posters around the university and through WhatsApp groupchat. We posted them mainly on the coffee app, but also the groupchat for the master and bachelor students. We used LinkedIn mainly to update the career events, and we are not actively posting on Facebook group since the interaction on it was deemed way too low.

Alumni

The alumni of Bernoulli were kept up to date with the updates from our social media and through sending digital copies of the GRIR. Other than that, the Bernoulli LinkedIn page has been updated regularly. The Alumni was also invited to our bigger events such as the Woktober, the DIES, and End of the Year BBQ. In our policy plan, we mentioned the possibility of organizing another Alumni day. However, considering the tight year schedule and the length of

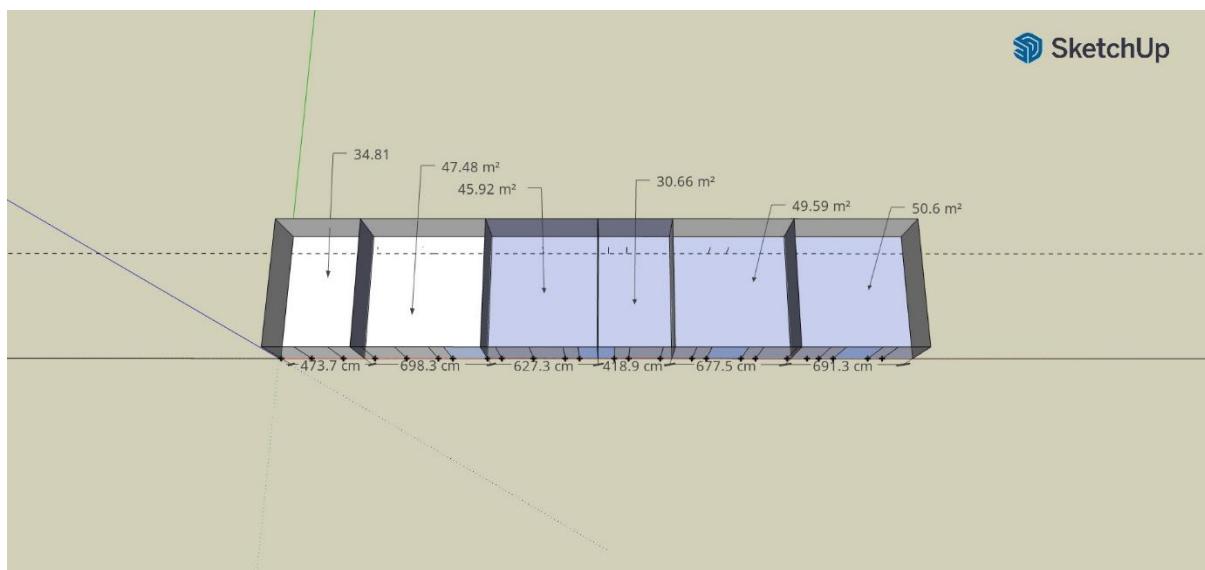
time since the last Alumni day, we believe that the event would be better suited for the next board year.

CRM System

As did our predecessors, we kept the CRM (Customer Relations Management) system implemented year before. The program used was Hubspot and it was a useful tool for tracking and updating acquisitions possibilities. In the future, it is a good idea to look at another system that is more efficient, but currently it is still a great option.

Feringa Building

In academic year 2022-2023 a final decision had to be made about the division of the space for the student associations in the new Feringa Building. Due to the fact that Sirius A also deserved space, a new division had to be made. After almost a whole year of discussions and changing plans a final division was made, based on the number of members and keeping in mind that the space is divided in the most ideal way (with the least amount of lost space). Below the final division of the area is shown. For our association this means that we will get an area of around 30m². The division that is made is sent to the FGB people, however at the moment of writing the haven't agreed on these plans, which might lead to small changes of this. However, it is decided that this is more or less the ratio between the areas of the different rooms, and that big changes are not likely to be accepted. On behalf of our association Mark Eling did the negotiations and knows more about the details.



Social Activity

Date	Event	No. Participants
07/09/2022	Free Wednesday Lunch	~50
09/09/2022	Welcoming Friday Drinks	~30
14/09/2022	BWC: Pubquiz	34
28/09/2022	Constitution Drink	~70
06/10/2022	Bernoulli Escape Room	15
26/10/2022	Woktober	83
02/11/2022	Bernoulli on Ice	20
02/12/2022	Sinterklaas Drink	22
09/12/2022	Gluhwein Drink	25
14/12/2022	Christmas Dinner	42
16/12/2022	Top 100 Announcement Drink	~20
13/01/2023	New Years Drink	35
19/01/2023	Bouldering	23
02/02/2023	Cannelloni with Picchioni	35
17/02/2023	Bernoulympics/Rietadt contest	50
24/02/2023	Top 30 Borrel	35
15/03/2023	Jassen met Jos	21
11/04/2023	Board Information Session	5
03/05/2023	Pitch and Putt	13
14/05/2023	General Members Weekend	17
17/05/2023	Dies Natalis	31
16/06/2023	Cocktail Workshop	19
19/06/2023	Candidate Board Announcement	20
23/06/2023	End of the Year BBQ	75

Free Wednesday lunch

To start the year, the BWC team visited the introduction lecture for new students and the first lecture for the courses to introduce the association. They also invited the students to join the free Wednesday lunch provided in the lounge.

Welcoming Friday Drinks

In the spirit of the new academic year, the BWC team spared some budget to make a free Friday borrel for people in the university. There were some new faces and there were some alumnis that joined in to enjoy the borrel together. Together with the new and old

members, we had a toast to celebrate the new start!

Pub quiz

The pub quiz was the last event made by the BWC team for the summer intake. We had new bachelor and master students coming in as well as some PhD students. We randomly mix the group and had a great time answering the questions while enjoying some nice drinks!

Bernoulli Escape Room

The first event of the Activity Committee was an escape room game followed by a relaxing borrel. During the event, the members was split into random groups and they tried an escape room at different level of difficulties. This event

was a great way to practice problem solving skills and be familiar with the other members.

Woktober



In accordance with Bernoulli's most beloved tradition, we enjoyed a nice dinner at Ni Hao in Stadspark. Every year the amount of attendance increases as the association increases and this year we broke the record of attendees again with 83 Bernoullians attending. We have new members joining this event. Since we are occupying a whole section of the restaurant, people could freely change seats and interact with another people within the association. At this moment, the professors also went around to do a quick survey and get to know the students a bit more.

Bernoulli on Ice



In the last week of November, the activity committee arranged an ice skating clinic in collaboration with the sports association G.S.S.V. TJAS at the Ijsbaan Karding. We had other Bernoullians who were more proficient with ice skating, helping the other beginner-level members as well. After the clinic, we had some dinner as a reward in Vapiano, all for 5 euros!

Sinterklaas Drink



We started December with a great smile to our faces. Our professor, Jos Winkleman, agreed to become Sinterklaas, so the board worked hard to get the chocolates and personalized poems ready for all the Bernoullians who participated in the event. Sinterklaas made the members sing a little song before receiving the gifts and everyone had a great laugh reading the poems out loud. Overall, it's an unforgettable experience and a great way to release stress for the upcoming exam period.

Christmas Dinner



December just doesn't feel right without the yearly Christmas dinner from Bernoulli. Around a week before Christmas, the members cooked their specialty dishes and dressed up for the occasion. This potluck style dinner brought everyone from all over the world together through food. We got to enjoy plenty of wine, plenty of food and great conversations with the other members.

Top 100 Announcement



On this day, the Bernoulli members were anxiously waiting to see if their favorite songs got into the Top 100 or not. With the playlist that spans over 5 hours playing in the background, people are chatting around with beers and snacks in the lounge. The Top 30 committee then explained how the voting system works and unveil the 2023's Top 100 poster on the lounge!

New Years Drink



After some holiday weeks, the Bernoulli members finally got another borrel together. This time it was done outside of the lounge in our new favorite bar, Tram 13. The first few drinks were for free and the Bernoullians had a great time together to start of 2023.

Bouldering



For the first AC activity on the new year, the team organized a bouldering workshop in the new Apex Bouldering. People from outside the association also joins in to practice together and overall it is a very fun and challenging activity.

Cannelloni with Picchioni



At this point, cooking with Prof/ Picchioni has become another Bernoulli's beloved tradition. In this AC event, Prof. Picchioni taught us everything to know about cooking a nice and easy appetizer, main and dessert. We all take turns cooking while enjoying some wine. In the end we all created a wonderful three course meal and enjoyed the rest of the night.

Bernoulympics



This year, the GRIR took the Rietadt contest to another level. They increased the amount of challenges and created the first ever Bernoulympic. As the iconic Bernoulympic logo hang on the side of the lounge, people started to practice and try to defeat the previous record on multiple types of competition such as chubby bunny, holding the most amount of tennis balls on one hand, thesis lifter and many more. The rietadt contest is also not forgotten, people from bachelor, master, PhDs and even staff took a shot to break the record. The final winner was announced on the next edition of GRIR

Top 30 Borrel



As always, the Top 30 party was hosted at Chupitos. The committee wore their iconic tie and announced the Top 30 songs that Bernoullians voted. As the songs were revealed,

people enjoyed the free-flowing beer and danced the night away. The number of attendees was quite high and there were new faces present as well as people from the brother association.

Jassen met Jos



Besides being Sinterklaas, Prof. Winkleman also enjoys playing the card game Jas. You could even say that he is one of the best at it. So, in this event, he passed on his knowledge on how to play the game to the other students while enjoying some excellent craft beers.

Board Information Session

As the time to the end of the board year is approaching, board 38 opened a board information session to let people know about the task and responsibilities of becoming board. Some people attended and ask questions in regards to the technicality and the workload. We all had a talk while enjoying some nice beer in the Food Court of the Zernike area.

Pitch and Putt



On the beginning of May, we had our professional golfer, Job Schoenmaker tough us

on how to properly play golf. The weather was warming up so it was quite an enjoyable event. On this day, our chairman also practices his film making capability and made an amazing story highlight of the event.

General Members Weekend



On the weekend of 14th of May the AC did their grand event: General members Weekend. The attendees were a mix of bachelor, master and PhD students. They enjoyed the great beers, they cooked a nice meal and they had some great boat ride and water sports to keep them cool.

Dies Natalis



Due to some scheduling conflict, we are unable to celebrate our DIES exactly on the 20th of May. However, it did not stop us from celebrating the event. The day started out with cake and continued with a nice kroket lunch. Then after everyone was done with work, we all headed to the Noorderplantsoen for a nice beer and some flunky balls. The event continued with a great tapas dinner and ended with a

fantastic borrel with people from Water Energy Solution. We can conclude that the anniversary was celebrated well.

Cocktail Workshop



We had our last AC event of the year in the middle of June. The members learned how to create wonderful cocktails from the professionals at Hemingway. They trained both their arm mobility and drinking skills to celebrate the end of the academic year.

Candidate Board Announcement



On the 19th of June, we proudly present our new candidate board 39! We had an announcement drink at Tram 13. Before the announcement, people were betting and discussing the new board, but nobody seemed to get it entirely right. Board 38 gave a few words of introduction to start. Then finally, Bianca Pop, Shreya Vidiyala, Marianna Angelo Tassioula and Alessia De Gregorio introduced themselves to everyone and tied their tie as fast as possible. People from within the association and from the brother association came by to congratulate them on their new positions.

End of the Year BBQ

The final event arranged by board 38 was the end of the year BBQ! 75 people came to enjoy the delicious food cooked up by our new board. The weather was very nice and the drinks were kept cold in a kiddie pool filled with ice. There's a new addition to this year's EOTYBBQ and it is a tap beer station! People

tried their skill on pouring beer and changing the kegs. Board 38 also dropped their final merch of this academic year: Bernoulympic socks. Overall, it was the best possible way to close the academic year with.



Bernoulli Goes Abroad

Due to corona measures the 2020 edition of Bernoulli Goes abroad to South-Africa could not take place. However, in March 2022 the new Bernoulli Goes abroad committee was installed who decided the destination of the 2023 edition, which was Indonesia. Before going in more detail about the details, the concept of Bernoulli Goes Abroad is as follow. A committee of four members organises a study trip of three weeks to a foreign country. The committee goes with 16 other students on a trip, who perform a case studie in duos for a company. With the money that is earned with the case studies the study trip will be financed. Two committee members are in charge of the case study acquisition. The four committee members together fully organises the trip, from destinations, activities and hotels where to stay.

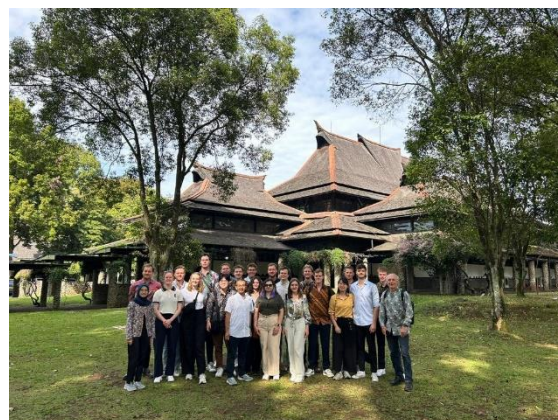


The chronological timeline is as follow. In March 2022 the new BGA committee is installed. The first task they have is deciding the destination of the trip. After an announcement borrel in May 2022 the students can apply for a case study and thus going on the study trip. After a solicitation process lead by the BGA committee 16 students are chosen who will go on a trip and who have to perform a case study. In the meantime the two external relations already started with the acquisition and the

eight case studies were performed between September 2022 and June 2023. The case studies are performed for companies who are related to our working field, Chemical Engineering. A case studie is done in a time span of three months, and the workload is 5 ECTS (so 140 hours per person). The case studies are finished with a report and presentation for the people of the company. During the case studies have regular meetings with the company and from our department a staff member is appointed who supervises the case studies. The committee members also keep an eye on the case study to see if the case study is performed in the right way and that in the end the company is happy with the result.

The actual trip took place between 27th of June and the 19th of July. During these three weeks we went to universities, companies and other cultural activities to get to know the Indonesian culture as well. A detailed overview of all the activities during the trip and the performed case studies could be found in the travel book (see attachment).

After the trip the BGA committee has been working on making an after movie, the travel book and starting the new solicitation procedure for the new BGA committee.



Career Activity

Date	Event	No. Participants
12/10/2022	YER Karting	25
16/11/2022	Sweco & Gasunie in-houseday	14
16/02/2023	ExxonMobil Excursion	18
13/03/2023	FrieslandCampina Case Study	18
23/03/2023	TeijinAramid Excursion	15
20/04/2023	DSM/ Envalor Lunch Lecture	16
02/05/2023	Nobian Lunch Lecture	15
30/05/2023	Avebe Escape Room	8
05/06/2023	Shell Borrel Lecture	13

YER Karting



The year started off with a karting activity organised in collaboration with YER on the 12th of October. First the students listened to a short presentation by two talent specialists from YER where they learned more about YER and what services they offer to students with a technical background. Then we held a mini Grand-Prix where the winner received a small prize. In between the rounds, the students could talk informally with the talent specialists to get to know more about the (soft skill) workshops they offer.

Sweco and Gasunie In-house Day



The next activity was the first excursion of the academic year, held on the 16th of November, where we visited the offices of Sweco and a plant section of one of their clients, Gasunie. Although the activity had to be caught up to this year, due to cancellation last year, all participants were extremely enthusiastic about the activity. The day started with an introductory presentation about the two respective companies and a case study we had to perform. Afterwards we could ask any questions they had career-wise to one of the

engineers or consultants from the companies. We were led through the compression section of one of the Gasunie plants. After lunch, we got the opportunity to work on the case study and held a short presentation on the findings. The winners received a small prize and we could all take a goodie bag home. To celebrate the end of a successful day, we shared a drink with the consultants and engineers that guided us throughout the day. During the drink we could ask more about the work of an engineer or consultant and the differences were highlighted.

ExxonMobil Excursion



Due to a few unexpected cancellations from companies, it took a while for the next event to happen. The excursion to ExxonMobil in Rotterdam was organised on the 16th of February. We left early in the morning in two vans and arrived at the plant around 9.30. We got an introductory presentation from a market researcher, who had a similar academic background as us but decided to switch to a different division within the company. Furthermore, a senior engineer and a junior engineer (Bernoulli alumnus) gave us more information about a career at ExxonMobil. We then went through a few plant sections where we could see big installations that are discussed during some courses. After the tour we performed a case study after which the winning group received a nice prize. Then we ended the excursion with a group picture and started the long drive back to Groningen.

FrieslandCampina Case Study



On the 13rd of March, we were visited by two FrieslandCampina engineers, both alumni, to do a case study with them. The case study was related to designing a process to reach your product specifications with the given unit operations that were available. Most students noticed that the work was extremely related to the content of the courses that we took, but that we had to combine certain aspects of a few courses. After each group presented their solution, we had hosted a small social drink with snacks to learn more about a career at FrieslandCampina and informally chat with the engineers.

TeijinAramid Excursion



On the 23rd of March, we organised an excursion to a production facility of TeijinAramid in Delfzijl. We started with a few lectures and presentations from the site manager and an alumnus about the company and the plant. After lunch, we

started the plant tour where we saw various things such as the reactor where they perform a polymerization reaction. The tour was very interesting as it was a fine chemical plant rather than a bulk chemical plant (ExxonMobil). After the tour, we received another presentation from a recent graduate from the RUG to learn more about a career and work life at TeijinAramid.

DSM/ Envalior Lunch Lecture



Originally, we had planned a lunch lecture with DSM on the 20th of April. However, a few months before the event they turned into a new company, Envalior. This gave a nice opportunity for the participants to learn more about company mergers/ changing companies. As Envalior consists of a merger between another company and DSM's material engineering department, their business stayed relevant for us. After lunch we played a factory game where we learned more about identifying bottlenecks and streamlining them.

Nobian Lunch Lecture

On the 2nd of May we organised a lunch lecture in collaboration with Nobian. They provided a clear and interesting presentation about their company and its role in the energy transition within society. Furthermore we learned more about career possibilities for starters and internship opportunities for MSc students. After lunch, we could ask any questions that we could come up with and informally talk to the company delegation.

Avebe Escape Room



On the 30th of May, we visited Avebe at their innovation centre to learn more about the company. This was done through their custom escape room game. Through the game, we were told more about the company history, the values and their goals. After playing in the escape room, we received a small tour through the research facilities and labs. Additionally, we were taught more about the wide application of their products and we were shown a lot of food items in which their products are used.

Shell Borrel Lecture



The last career event of the year was held on June 5th. We invited a Shell engineer to come over and talk more about a sustainability project he had been working on. During the presentation he asked us questions and encouraged us to think alongside him. Afterwards, we had a drink and could ask him any questions about his career or his working life at Shell

Educational Events

Date	Event	No. Participants
26/01/2023	Physical Transport Phenomena 2 support session	10+
14/02/2023	Master Research Information Session	20+
04/04/2023	Multiphase Reactors Support Session	~15
23/05/2023	Multiphase Reactors Resit Support Session #1	8
25/05/2023	LaTeX Workshop	~20
01/06/2023	Multiphase Reactors Resit Support Session #2	~8
05/06/2023	Multiphase Reactors Resit Support Session #3	~6
15/06/2023	Multiphase Reactors Resit Support Session #4	~6
21/06/2023	Multiphase Reactors Resit Support Session #5	~6
23/06/2023	Multiphase Reactors Resit Support Session #6	~10

PTP 2 Support Session

A practice session was organized for this 3rd year bachelor course. There's a teaching assistant available and they are discussing the previous exams. The teaching assistant was also open to answer any tutorial questions. This session is great to test out the student's knowledge before the actual exam.

Master Research Information Session

This master research information session is a great way for the master students to get to know the different research groups. This event was held in the green house of the energy academy and it is a collaboration with the academic advisors. Each research group has a poster ready and several possible project. The PhDs and professors gave a short talk about their project and answered the questions the students have. There was food and drinks provided throughout the event.

Multiphase Reactor Support Session

In this support session, the students mainly went through the past exams that were provided in the Bernoulli's exam bank. They went through one past exam together and after that was done, the teaching assistant talked about another exam question from another year. The teaching assistant gave some tips on solving different types of questions. There were quite a

lot of attendees and the students were very proactive in asking questions.

LaTeX Workshop

As mentioned in the education part, this workshop is in collaboration with G.L.V. Idun. It was led by one of the Bernoulli member who is fluent in LaTeX and has written his master thesis with it. He explained the resources and templates the university provided. He gave an overview of the different types of packages that are relevant in writing a thesis and guided everyone who had an error or a problem. There were quite a lot of attendees during the workshop and the amount of hours provided seems very suitable.

Multiphase Resit Support Session #1-#6

To help the students get back on track and pass the resit of the exam, the board alongside with the academic advisor worked together to create a more in-depth support session. Unlike other support sessions, this series of sessions are not always manned by a teaching assistant. The goal is to create a situation in which the students can revise on their own pace with the help of their peers. Each session have a revision goal set together by the students at the first session. There were not as many attendance on the first session, but it increased as the resit approaches. On average there is around 5 people who are always present.

General Members Meeting

Date	Event	No. Participants
29/09/2023	September GMM	11
01/12/2023	November GMM	13
01/03/2023	Half Yearly GMM	12
28/03/2023	AOA GMM #1	11
04/04/2023	AOA GMM #2	~10
21/06/2023	Transfer GMM	18

September GMM

On the 29th of September, Board Eling (Board 38) led their first meeting to discuss the plan for the academic year and to discharge the previous board. After elaborating on their evaluation of the policy plan, Board Hobbenschot was finally discharged, and from that point, Board Eling was fully in charge. The chairman then continues to hammer in the new committee members who were not officially installed during the last Transfer GMM.

November GMM

During this GMM, Board Eling gave an update and evaluation of the events from June to March. In this GMM, the treasurer also pointed out that the Streep PC was fixed, and there's a slight modification on the budget in regard to the new camera.

Half-Yearly GMM

In March, Board Eling has been installed for around half a year. More insights were given about the financial situation and the sponsor targets. There was some discussion about the losses from the drinks and snacks in the lounge, and people discussed how to manage this problem. In this GMM, the chairman also

pointed out that we have to change the Article of Association.

Article of Association GMM #1 and #2

At the end of March, we have another GMM to add a few things to the Article of Association (statuten). In this meeting, the chairman elaborated on the different things added, mainly the concept of a designated survivor and the contingency plan if all of the board members are unable to continue their duties. The GMM is split into two parts: the first part is the proposition of the changes towards the members, and then one week later, the members voted their opinion on the second GMM. All the documents for this GMM are provided on Bernoulli's website.

Transfer GMM

After a period of being a candidate board (albeit short), Board Pop was finally installed. They elaborated their policy plan and heard the opinions of the members in regard to that. They also elaborated their financial and sponsor plan. At the end of meeting, Board Eling was resigned of their position, and then new committee members were installed by the Board Pop.

Finances

Development Financial Year

At start of the academic year a budget plan was created which was predominantly based on our policy plan and finances of previous board years. In broad terms this was similar to former budget plans though a view financial posts were adjusted based on our goals stated in the policy plan such as promotion and the new photo committee.

As stated in the policy plan, the main target of board year 2022-2023 was to increase the visibility of the G.T.D. Bernoulli through different media channels; i.e. whatsapp, Instagram and presentations. To achieve that, we have invested in a promotional video which is showcased on our website and serves as an auxiliary during presentations to new bachelor students and master students. In addition to that, a camera was purchased to improve the promotion through whatsapp and on Instagram. These measures have contributed to a impressive increase in members count of 19.5% based on paid members fee.

For the promotional video a professional was hired to do a shoot and edit the video. The promotional video was partially financed by a subsidy surplus from previous years (€900 from Reservation: Free to use Overschot). The camera was partially financed from a reservation from labcoats of previous years (€500 from Reservation: Lab coats).

During the year we realized that there was a subsidy surplus (Reservation: overschot USS) which we wanted to use to improve the cohesion of the association. In previous years we saw that the enthusiasm for the general members weekend (GMW) had declined with a drop in member participation. Therefore, we made a plan to combine the GMW with an educational excursion program to bring more variety in activities for the weekend to address different types of members for the weekend. By combining it with an educational excursion the criteria for the allocation of subsidy were also met.

Audit Committee (KasCie)

The audit committee was again installed to check and help with the bookkeeping of the

association. A meeting was held before each general members meeting.

Conscribo

Conscribo was again used as bookkeeping program for the association.

Major Budget Differences

During the year the prices of the consumptions in the lounge had to be increased several times due to inflation and the introduction of deposit on cans. Because the stock is evaluated on the most recent prices the value of the old stock might be underestimated resulting in a loss on the stock. At the start of the year an update was executed for the streepPC, this led to errors in the registrations of consumptions. In previous years when prices remained unchanged, there was also reported a loss on consumptions. Those losses were attributed to inconsistencies with the striping system. Overall, the loss on consumptions is a combination of multiple factors.

At the start of the year it was projected that there would be a sufficient amount of coffee cups. However, in April we almost ran out and thus had to order new coffee cups. This was added as a new post in the budget

During the year the budget was evaluated and we realized that there was a surplus of €1000. This surplus was allocated to the DIES to decrease the price for the members. This was approved by the audit committee.

The expenses made on the board ties was higher than budgeted for. This was due to a misprint of the supplier for which both parties were responsible. Fortunately we could arrange a discount on the new batch of ties.

Initially, we budgeted for a new camera of €600 yet for this price it the photo committee couldn't get a camera with adequate specifications. Therefore the budget was increased with 150 euros, which is within the limit specified by the articles of the association.

The budget for the committee gifts was combined with the budget of the committee clothing, because this was both allocated to the

active members. As a result, more expenses were made for the committee gifts.

The unforeseen costs consists of the expenses made for the adjustments in the articles of the association and expenses made for the alphabet party. Prior the alphabet party we reserved five tickets for this event yet there was no interest from the members. The expenses made for the adjustment in the articles were completely covered by the CUOS subsidy.

Balance

The financial results of this academic year is a loss of €1849.61, which is in close approximation of budgeted loss of €2000. A

remainder of €217 on the reservation for the active members dinner of board 37 was moved to the equity. Overall, the equity of the association was decreased to €21015,61. As included in the budget plan, the reservations for the lustrum and lustrum have been increased by respectively €500 and €200, while the reservation for the Feringa building remained the same. The leftover on overschot USS and Free to use Overschot was decreased to €537,07 and €325,57 resp. The surplus of €563,45 for the symposium is reserved for 2023-2024 and should be used to decrease the demand for subsidy. A negative reservation was made for the board ties, because the ties for board 40 have already been ordered.

Assets	01/07/2022	20/09/2023	Liabilities	01/07/2022	20/09/2023
Inventory: Consumpties	€ 565.70	€ 1,518.98	Equity	€ 22,647.66	€ 21,015.05
Inventory: merchandise	€ 923.50	€ 1,026.50	Reservation Lustrum	3082.85	3582.85
Inventory: Beer	€ 175.40	€ 275.40	Reservation active members dinner 37	€ 1,000.00	0
Inventory: Coffee	€ 212.80	€ 167.50	Reservation: Feringa Building	2000	2000
Inventory: Beer of the Moment	€ 152.30	€ 165.80	Reservation: Lustrumbook	1500	1700
Cash	€ 252.45	€ 267.45	Reservation: overschot USS	1179.89	€ 537.07
Saving account	€ 7,523.07	€ 7,530.80	Reservation: Free to use Overschot	1225.57	325.57
Bank account	€ 22,036.48	€ 11,926.02	Reservation: Lab Coats	500	0
Debtors Members	€ 462.85	€ 0.00	Reservation: Symposium	378.58	€ 563.45
Debtors Companies	€ 1,300.00	€ 6,755.54	Reservation Ties	90	€ -90.00
Total	€ 33,604.55	€ 29,633.99	Total	€ 33,604.55	€ 29,633.99

POST	SUBPOST	INCOME 2022-2023 EXPECTED	INCOME 2022-2023 01/07/2023	EXPENSES 2022-2023 EXPECTED	EXPENSES 2022-2023 01/07/2023	DIFFERENCE 2022-2023 EXPECTED	DIFFERENCE 2022-2023 01/07/2023
1	Consumptions						
2	Consumptions	6500	8297.41	6500	8642.03		-344.62
3	Free Barrel			1600	1600	-1600	-1600
4	Coffee Hour			300	316.31	-300	-316.31
5	Beer	2000	3422.73	2000	3518.74		-96.01
6	Free Coffee			700	855.59	-700	-855.59
7	Beer of the Moment	1900	561.05	2000	657.48	-100	-96.43
	Lunch	2000	2481.77	2000	2477.89		3.88
8	Administration						
9	Office Supplies			300	213.7	-300	-213.7
10	Print Costs	50	21.6	50	21.6	0	0
11	Coffee Cups				87.33		-87.33
12	Website	850	1022.85	850	1022.85	0	0
13	Accounting Program	300	158.99	300	158.99	0	0
	Bank Costs	300	357.92	300	357.92	0	0
14	Board Activities						
15	MIRIS	240		300		-60	
16	BBQ	350	420	1800	1649.76	-1450	-1229.76
17	DIES	1500	975	1500	2030.04	0	-1055.04
18	Theme Drinks			1000	883.34	-1000	-883.34
19	Lectures	450	190.5	550	190.5	-100	0
20	Candidate Board			300	300	-300	-300
21	Department Barrel			200	197.21	-200	-197.21
	Alumni Day	2000		2000			
22	Constitution Costs						
23	Constitution Drink			650	649.6	-650	-649.6
24	Constitution Cards			50	70.75	-50	-70.75
	Constitution Gifts			100		-100	
25	Representation						
26	Board Clothing			800	777.10	-800	-777.10
27	Ties New Board		180	90	401.47	-90	-221.47
28	Business Cards			25	7.5	-25	-7.50
29	Business Gifts			170	151.81	-170	-151.81
30	Educational gifts	600		600	0	0	
	Graduation Gifts			150	86.81	-150	-86.81
31	Committee Costs						
32	GRIR	450	419.52	850	550.16	-400	-130.64
33	BWC	200	152.36	600	520.77	-400	-368.41
34	Lustrum			500	500	-500	-500
35	Lustrumbook			200	200	-200	-200
36	Symposium	2500	2145	2500	2145		0
37	AC	3100	7943.41	6950	11821.06	-3850	-3877.65
38	Skicie			200	0	-200	0
39	Top 30		2607.8	300	2694.75	-300	-86.95
	Photo Committee	500	500	600	749	-100	-249
40	Active members Costs						
41	Committee Dinner			1000	1000	-1000	-1000
42	Committee Clothing			300	0	-300	0
43	Committee Gifts			550	702.24	-550	-702.24
44	Travelling Costs	1000		1200	23.84	-200	-23.84
45	Merchandise	700	883	1000	1324.31	-300	-441.31
	Promotion	900	900	1700	1694	-800	-794
46	Incomes						
47	Members Subsidy						
48	Interest		7.73				7.73
49	Contribution Members	1250	1540			1250	1540
	Sponsorship	14000	14296.84			14000	14296.84
50	Unforeseen costs		312.45		358.06		-45.61
51	Storno's		675.88		713.91		-38.03
52	Total	43640	50473.81	45635	52323.42	-1995	-1849.61

Budget

1. The loss on consumptions is attributed to discrepancies in valuation of the stock and errors in registration on the StreepPC.
2. As expected.
3. As expected.
4. The beer price was evaluated to late during the year resulting in loss.
5. The coffee consumptions was underbudgeted.
6. As expected.
7. As expected.
8. Office supplies were overbudgeted.
9. Within budget.
10. This post was added in April due to insufficient coffee cups.
11. This post was underbudgeted, because a update had to be executed for the StreepPC (€150).
12. Overbudgeted.
13. Bank costs increased over the course of 2022-2023.
14. No costs were made for the MRIS.
15. The BBQ was less expensive than estimated up front.
16. A large loss was made on the DIES as was anticipated. Initially, this was not within the budget, yet discussed with the Audit committee and approved.
17. The theme drinks was slightly below the budget. At the end of the year there were many activities and no available date to host a theme drink.
18. Overbudgeted. This post was used to compensate tutors during support sessions
19. As expected.
20. As expected.
21. The alumni was not organized.
22. As expected.
23. Slightly over budget due to a misprint
24. Was paid by the board members.
25. As expected.
26. Slightly over budget due to a misprint. Fortunately, the supplier granted us a discount. Also ties for board 39 and board 40 were ordered.
27. As expected.
28. As expected.
29. Educational gifts. No guest lectures were organized.
30. As expected.
31. Overbudgeted. The printing costs were covered by FSE subsidy.
32. As expected.
33. As expected.
34. As expected.
35. As expected.
36. As expected.
37. There was minor interest in a ski trip.
38. In the end €200 from the association was not included in bar tap.
39. The budget for the photo camera was increased to purchase a camera with adequate specifications.
40. As expected.
41. There were no requests for committee clothing.
42. Expenses for committee gifts were increased by combining the posts with committee clothing.
43. Travelling costs were done at the expense of the companies.
44. As expected

- 45. As expected.
- 46. This year no members subsidy was received due to the change in subsidy system.
- 47. Small interest on the savings account
- 48. Contribution of members increased due to increase in members count
- 49. Slight increase due to increase in sponsorship fees
- 50. Consists of expenses for change in the articles of the association and Alphabet party
- 51. Chargeback from members.
- 52. Total income and expenses of 2022-2023.



Active Members

Activity Committee (AC)



Chairman	Joep Lugtenberg
Secretary	Jelle Stavenga
Treasurer	Renier Goldhoorn
Member	Demmy Akintunde

The Activity Committee organized a variety of fun events over the course of the year. This year they have been incredibly creative types of events. The events range from bouldering, cooking, and even workshops. We even have multiple events in collaboration with the staff and professors from the university. This year the Activity Committee also increased the scale of the General Members Weekend and they managed to create an unforgettable trip.

Bernoulli Welcoming Committee (BWC)

Member	Adam Zubair Baig
Member	Aravind Budaraju
Member	Dani Wu
Member	Amanda Hendra

The BWC was mainly in charge of the events created for non-members during the introduction week of the summer (September) and sprint (February) intake of students within the university. They create multiple events to introduce Bernoulli to

the new students and attended introduction lectures as well as welcoming events from the university.

Bernoulli Goes Abroad (BGA)



Chairman	Bart de Jong
Secretary	Mark Eling
Treasurer	Jelle Stavenga
External	Julian Strien

The BGA committee organizes one of Bernoulli's biggest project that spans over almost a year. The committee found projects and sponsors to fund 20 members and 2 professors for this unforgettable trip. The 2023 edition of BGA went to Indonesia and it was an enormous success. The trip started in Jakarta and the participants travel through Java to reach Bali. The committee had their hands full with managing the case study, booking various things related to the trip.

Advisory Committee (CvA)

Member	Frederique Versteeg
Member	Hidde Barkmeijer
Member	Stefan Wubs
Member	Guilherme M.R. Lima

The advisory committee consists of experienced Bernoulli members who advice the board when necessary. They

have a meeting with the board before every general member meeting to discuss the course of the events. This year the CvA play a big role in advising the board in regards to the statute change and the Feringa building.

Audit Committee (KasCie)

Member	Stefan Wubs
Member	Jesse Jongstra
Member	Guilherme M.R. Lima

The audit committee advised the treasurer throughout the year. The audit committee consist of three or more members and they gave feedback about the budget plan and made sure that the financial situation is in order.

Education Committee (EC)

Member	Maria Alexandra Cracanuta
Member	Vencel Szilágyi
Member	Alexandru Trofin
Member	Mark Eling
Member	Justin Bulten
Member	Linn Cathleen Brodersen

The Education committee helps to improve the curriculum of the bachelor and the master of Chemical Engineering. They take into account the opinion of the students and be the bridge of contact to the academic advisors and course coordinators. They created support session for challenging courses and necessary skills. Other than that, they also keep the exam database up to date for students to practice on.

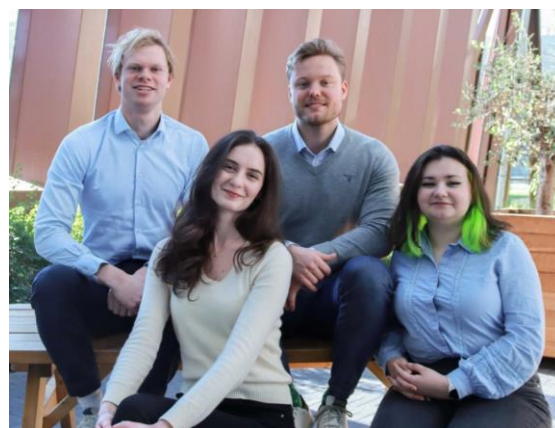
Groningenieur (GRIR)



Member	Guilherme Lima
Member	Lisl Miedema
Member	Paul van de Tempel
Member	Olaf Schipper
Member	Stefan Wubs

The GRIR is responsible for the writing of the association's magazine. They had included a wide range of subjects, from interviews, scientific articles, event coverage, puzzles and satire. This year the GRIR made three great editions: Summer edition, Protest edition, Caught edition, ...edition

Symposium Committee

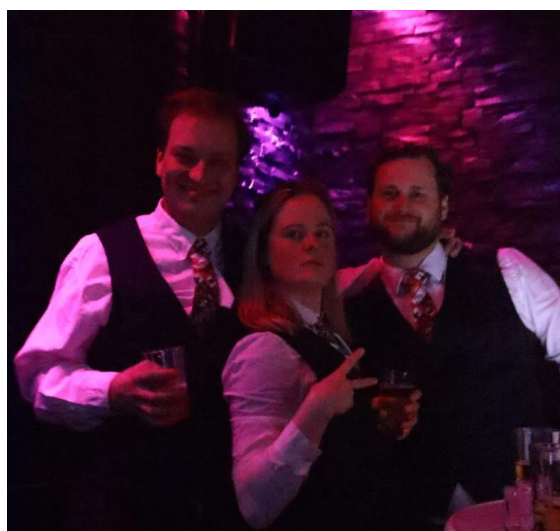


Member	Nicoleta Cucu
Member	Job Schoenmaker

Member Maria Cracanuta
Member Friso Versteeg

The Symposium Committee is tasked to plan one of Bernoulli's most important educational event. This year's symposium on electrochemistry was magnificent. The event was held in the Energy Academy and had 6 different speakers. The talk was hosted by our professor Vassilis and ended with an interesting talk-show style led by Wim Raaijen.

Top 30



Member Olaf Schipper
Member Frederique Versteeg
Member Jesse Jongstra

Top 30 is one of Bernoulli's most anticipated events of the year, even for people outside the association. This year, the committee started with the Top 100 submission and announcement drink in the Bernoulli lounge. The announcement of the Top 30 was done in Chupitos where they revealed the list, and people enjoyed the party. Some of our favorite songs stay within the Top 30, but we also have a few unexpected additions!

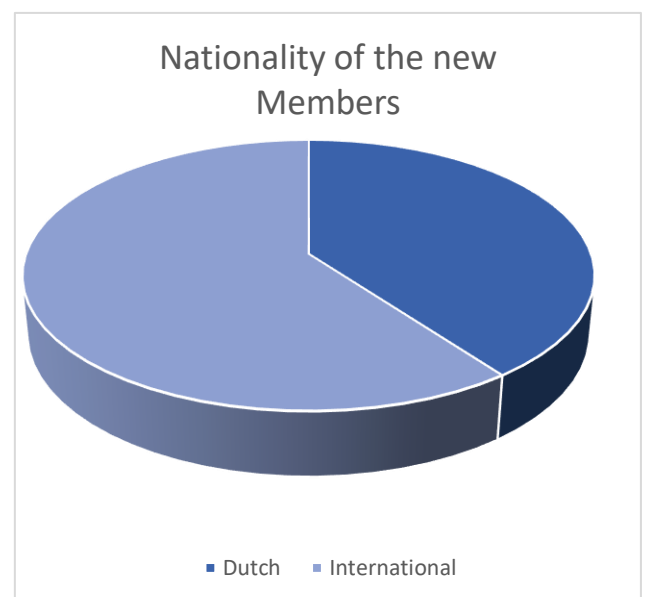
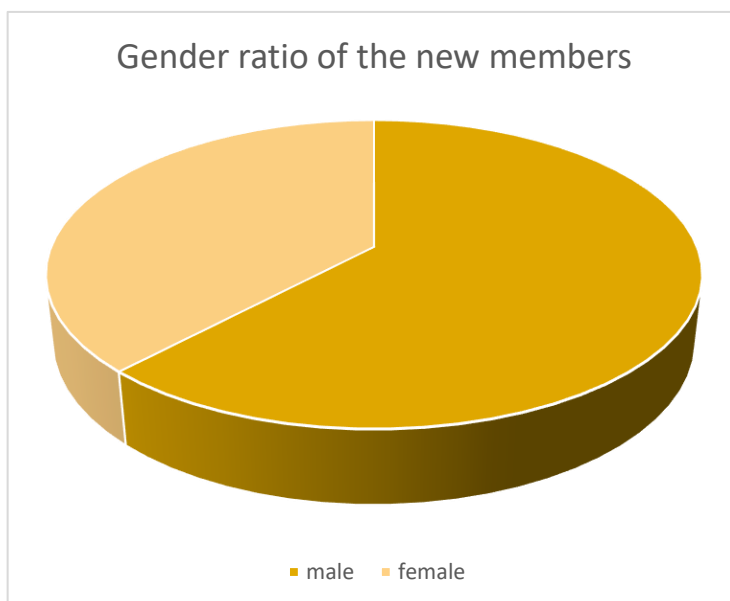
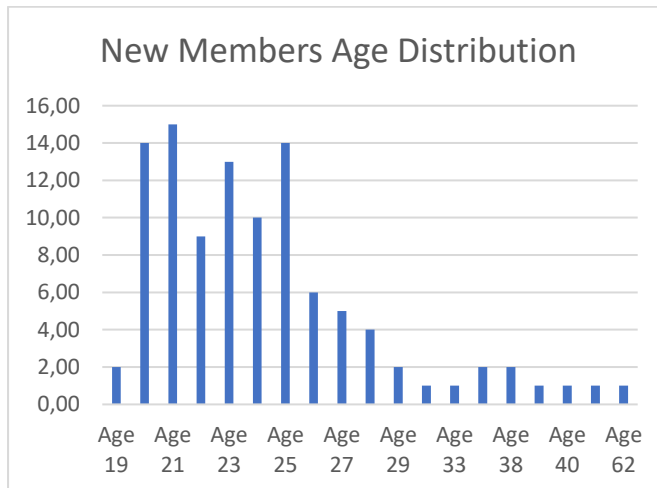
Photo Committee

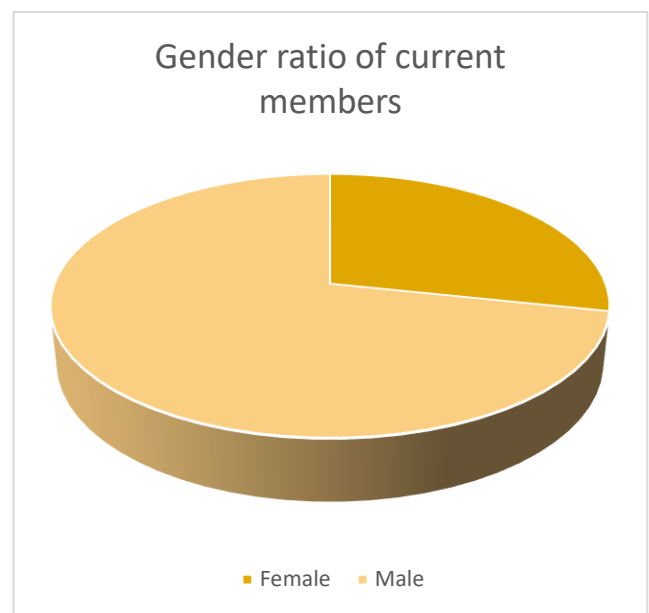
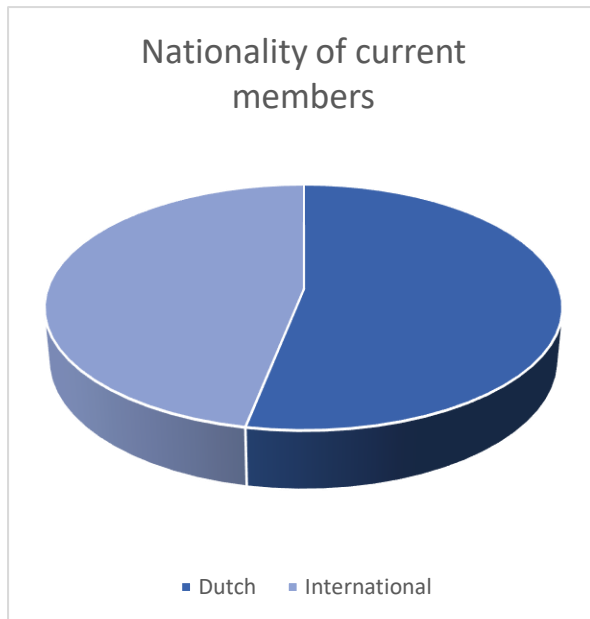
Member Nicoleta Cucu
Member Dani Wu
Member Amanda Hendra

The Photo Committee are in charge of the documentation during Bernoulli's events. They are also in charge of Bernoulli's new camera. They have a pivotal role in board 38's effort in increasing the association's media appearance.

Facts and Figures

- We have in total 108 new members
- Most of the new members are below 25 years old , speisifically 21 years old





Snacks and Drinks Facts:

- A total of 2473 beers were sold. This is without the free drinks.
- 294 Crafts beer were consumed this year.
- In total 133 packs of chewing gum were consumed of which a technician consumed 36%.
- 2906 canned soda drinks were sold.
- During the year, everyone stripped 9166 times.

Colofon

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Study association for Chemical Engineering

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Secretary 2022-2023

Treasurer 2022-2023

Business Relation 2022-2023

