

## GREEN KURDISTAN PROJECT

Kurdistan Region of Iraq is one among the newer regions of the world that started to progress at the end of the nineteenth century, and mainly after 2003. The progress in this region has been incredibly fast.

However, like most countries in the Middle East, the government does not care about environmental issues as much as is needed. Additionally, the local population lacks awareness of environmental issues and does not know how to minimize solid waste. Therefore, the public is concerned by issues on the problem of solid waste management, its minimization, and its subsequent treatment.

As a student of WASTE, I (Rzgar Albewani) wished to help my city which has a population of about 300,000. I realized that if the local population could use cloth bags instead of plastic bags for their shopping, it could drastically reduce the use of plastic in the Kurdistan Region.

I presented this idea to M. Sc. WASTE course Director Ms. Hahn-Ebner, who helped me to collect a few cloth bags with the "M. Sc. WASTE" logo on it. I hereby would like to express my gratitude to her who has helped me to realize this dream of mine.

Interestingly, the quantity of the cloth bags sent has quickly fallen short when compared to the demand of the region's population. However, this new idea has had a positive impact on the people and they have shown their acceptance of this project. I have interviewed some of the people who are employed in that region.

I wish to promote this project in a big fashion but I as an individual cannot do it all alone. I have formed a group with the students at Uni Stuttgart to help develop this project in the future.

I look forward to promoting this project further with the help of my well-wishers and with the help of international friends at the university to collect bags and to send them to my country.

### This project has the following advantages:

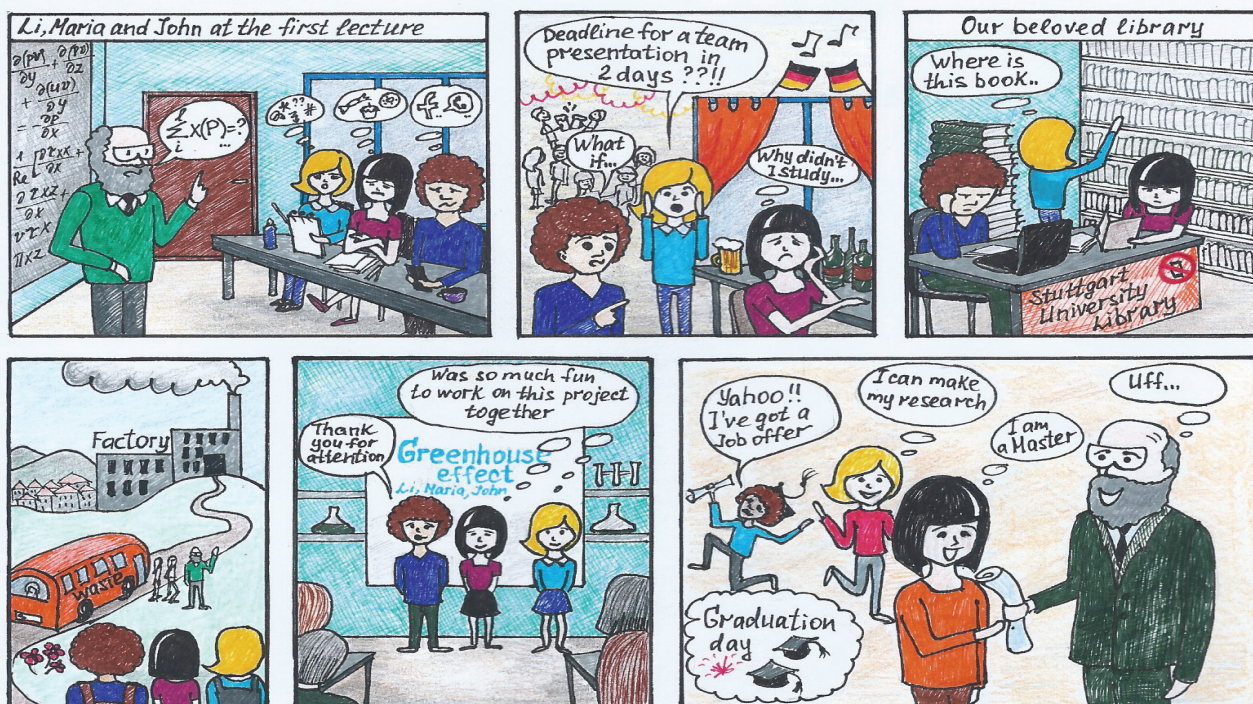
- Reduction of the amount of solid waste in Stuttgart by collecting textile second-hand bags
- Reduction of the amount of plastic waste in my city "Kalar", in the Kurdish Region by using these cloth bags
- In due course of this project, education of people on environmental issues and on how to take up responsibility

Some excerpts of the interviews taken in the Kurdish Region on this subjects on page 2.

>>>continues

## Fun

### LIFE OF A WASTE STUDENT



## >>> GREEN KURDISTAN PROJECT

**Hazhar Hassan MSc student of Geology-Sulaimani Univesity**

*1/ Mr. Hassan, how can this project reduce the amount of solid waste in the region?*

Our environment is going to greatly benefit from this project. Cloth bags are a great alternative to plastic bags and will drastically reduce the solid waste generated by used and thrown away bags. We are all aware that plastics need a lot of time to decay and the accumulation of these plastics leads to environmental pollution.

*2/ Please tell us a bit about what you are thinking about this project, and what results you are expecting from it.*

I think it's a great way to decrease plastic waste here. Normally the compiled waste would be incinerated in rather old fashioned plants. By using cloth bags we can eliminate the emissions caused, like poisonous gases like CO<sub>2</sub>, CO etc.



**Sardar Ahmed Manager&Civil Eng. at Shatw company**

*1/Do you agree that we can reduce the accumulation of solid waste with this project?*

Yes, because in Iraq no recycling is going on, and plastic bags are used without any consideration.

*2/ Which education level do people have regarding environmental topics? Do you think they will join in Rzgar's project?*

Most people do not care about it too much, as current environmental problems do not compare to the other problems they are currently facing. Also, pollution mostly takes place outside the cities, so people do not see it in everyday life and so it is not in the public's focus of attention. So this kind of project making them

aware and able to do something will be welcomed.

**Jamal Siddiq contractor&head of Shatw company (by E-Mail)**

Mr. Siddiq voices his respect towards me for starting this initiative, and hopes it to be successful, and prays that God will help me to become an active member in the field of environmental protection.

*1/What do you think of the results of this project?*

Projects like this are rare in this region, and can benefit soil and environment in terms of quantity and quality.

*2/How can the contractors play a role in keeping the environment in the region clean? How can they help this project and make it bigger?*

Contractors can have a positive role in protecting the environment by investing in this kind of project. But we need professionals to inform them about the benefits for themselves, for when they lack awareness about them they will rarely do any considerable work to protect the environment.

**Mr. Muhammed Karem Civil Engineer at the ministry of construction and housing**

*1/What is your view on this kind of a project, using textile bags instead of plastic ones?*

I strongly support this project/idea.

*2/Do you agree this project will play a positive role in decreasing the amount of solid*

*waste? How can it do that?*

Yes, I agree and I believe that we firstly need to educate our society on how to collect and separate waste in their own houses. We should also be giving more authority to those collecting solid waste, to get a monthly or yearly tax from households, to fund them.

\*Hint: For the first step, the market owners can give a chocolate / a sweet to those who have their own bags and do not take extra plastic bags from the market. Just to encourage them.

## News and announcements

### SUPPORT FOR THE COURSE DIRECTOR TEAM - CAROLINA ACUÑA CARO

As a former student of this Master Program I am much honoured to be part of the WASTE Office now and to have the opportunity to share my collected experiences since 2004 until these days with all my colleagues from the different generations of WASTE. I would also like to emphasise that I am very motivated to be of any

help for you either from the academic point of view or for any kind of concern that you may have. Hence, please do not hesitate to come by to the WASTE Office, my doors are always open for your good ideas, suggestions and constructive comments!

*Dr. -Ing. Carolina Acuña Caro*



Ms Dr.-Ing. Carolina Acuña Caro studied the international Master Study Program WASTE at our university from February 2004 to November 2005.

After graduating she did her PhD at IFK with the topic „Chemical Behaviour of Mercury in Wet Flue Gas Desulphurisation Systems“. After that time, she worked in the company Eisenmann and was responsible for projects in the field of hazardous waste incineration.

We welcome Ms Dr.-Ing. Carolina Acuña Caro in our team and wish her a successful start with her work and a good cooperation with you.

*Univ.-Prof.Dr. techn. Günter Scheffknecht*

### DOUBLE DEGREE

Since winter term 2015/16, the WASTE program joins the longstanding collaboration between ISWA and the Universidade Federal do Paraná (UFPR) in Curitiba, Brazil by offering a Master's Double Degree Program in cooperation with the MAUI Master's Degree Program (Meio Ambiente Urbano e Industrial; Urban and Industrial Environment).

Every year, five students will be provided with the opportunity to participate in the Master's Double Degree Program.

The first two semesters are to be completed at the home university. After that, students are eligible to continue their studies for the remaining two semesters at the partner university.

Students from WASTE will have the opportunity to do their two specializations in Solid and Air in Brazil and complete the program by composing the Master Thesis at the partner university. The same applies for students from Brazil.

In the end, the courses, examinations, and master thesis done at the respective partner university will be fully recognized by the home university and are equivalent to examinations taken there.

After successful completion of both programs, students are awarded the Master's Degree from UFPR and from the

University of Stuttgart.

One unique characteristic of this double degree is the longstanding co-teaching program of ISWA with the UFPR meaning that ISWA's professors leave for Brazil to teach several modules in the MAUI program.

For our very first exchange year in winter term 2015/16, we are looking forward to meeting our first 3 double degree

students from Brazil and warmly welcome them to the third semester in WASTE.

*Dipl.-Biol. (t.o.) Jessica Hahn-Ebner*

M.Sc. WASTE	M.Sc. MAUI*
Students in Stuttgart	Students in Brazil
Semester 1 Compulsory Modules	Semester 1 Compulsory Modules
Semester 2 Compulsory module Specialization Solid + Air	Semester 2 Compulsory module Specialization Solid + Air
Semester 3 Specialization Solid + Air Industriepraktikum	Semester 3 Specialization Solid + Air Industrial Internship
Semester 4 Master Thesis an der UFPR	Semester 4 Master Thesis an der US

## GRADUATION GENERATION 2013

The annual Graduation Ceremony is WASTE's official and largest party's celebrating the final farewell of our fellow seniors. This past year, on the 21st of November, 2015, my generation had worked with our seniors from 2014 to host a joyful and celebratory event to congratulate the completion of MSc program by the WASTE 2013 Family.

I had just arrived shortly in September and just a few months later we were already saying our goodbyes to our newly-made friends who were moving onto to bigger projects, industrial careers, and exciting research work.

I learnt just how much organizing and commitment was required from both the students and WASTE Office. Planning for this went as far as nine months earlier with reservations and rentals for things were planned six months in advance.

And such was expected; the graduating class of had a guest list of over 220 family members and friends, and they themselves were already a group of 50+.

As a new incoming WASTE student, it was kind of overwhelming when we were told we would be leading the Grad ceremony for our peers next year.

But we shrugged off our doubts and put our focus into the work that still needed to be done. Leading up to the event we finalized up our meetings with the safety officers. Then with the waste office, we got

on to our ways to set-up our venue with tables and chairs, decorated everything through the late evening, the next morning, did our shopping for buffet dinner that we were cooking for, made our dishes (classic North American Mac & Cheese and chocolate chip cookies), and then continued to work with a shift's worth of photography

such an honor.

Afterwards, Prof Dr. Eckart Laurien had awarded the students their long awaited certificates, and Dr. Pius Trauttmann represented Mann und Hummel GmbH to present the awards to the top 3 Students.

The reception began, with everyone excited and hungry to try over 40 different



to capture those special moments where our seniors really rejoiced with professors and loved ones.

The welcome address was given by the deputy associate dean for graduate studies, Prof. Dr. Jorg Metzger. The class speakers, Ms. Luisa Ferolla and Ms. Anna Lelickens, gave a speech summarizing their student experiences. A common German tradition is to have a member of the faculty to be nominated as a godfather or godmother, and so this year, Prof Dr. Ulrich Vogt had accepted their request for

dishes from across cultures from the entire world. All of it prepared and cooked by the collaboration of Generation 14 and 15. So then we ate, drank cocktails and beers, and danced the evening away to celebrate our classmates' new academic milestone.

*Kevin NHAN*

*WASTE student generation 2015*



## Studying WASTE

### BEHIND THE SCENES: THE WASTE MOVIE

It is certainly no secret that it is possible to garner local and global exposure through an advertisement. If done correctly, the results can be rewarding.

However, an infelicitous advertisement could cost an investment. It was one such venture by the WASTE department in which the course director (Mrs. Jessica Hahn-Ebner), a student from Hochschule der Medien-Stuttgart (Nono Weinzierl) and four international WASTE students (Kevin Nhan, Sanchita Khandelwal, Anastasia Surgaylo and Savina Padumane) came together to create a video which embodies the WASTE course.

The team met for the first time to discuss the plot, characters and the entire concept and purpose of the video. The key motive was to personify the vexation of a person in the build-up to joining of the

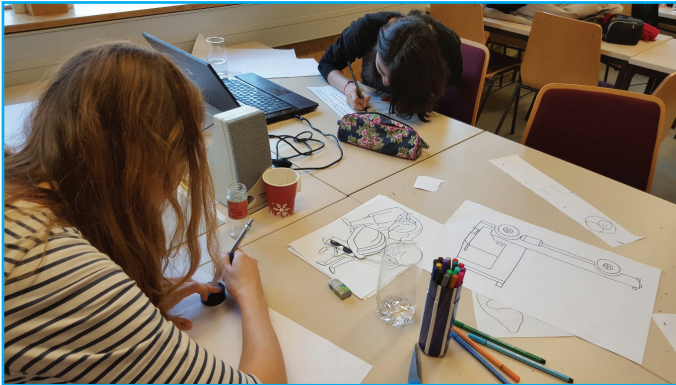
course, the hassle-free enrolment procedure in the WASTE department, the determination and perseverance during the course of the programme and ultimately the delight of graduating with a master's degree and a successful career.

Bearing these concepts in mind, three characters, Li, Maria and John, representing different countries from across the world, were illustrated and the appropriate sketches were drawn.

On completing the sketches, the video was taped meticulously and the background voice recorded. When the video was published, it emerged as a success and was well received by the people in the WASTE department and outside.

I, being one of the persons from the team, speak for all when I say that we had an extraordinary learning experience during the making of this video and also a great deal of fun.

For the ones who haven't had a chance to watch the video yet, it's available on the Universität Stuttgart's YouTube channel or on the WASTE website [waste.uni-stuttgart.de](http://waste.uni-stuttgart.de)



Savina PADUMANE YOGISH  
WASTE student generation 2015

### MY EXPERIENCE AS AN INTERN IN TWO COUNTRIES

After a very long search and many negative answers for an internship opportunity I ran into an amazing post. The job description for the intern was everything I was looking for and more.

I got an internship at Eawag, which stands for Swiss Federal Institute of Aquatic Science & Technology, specifically in the Sandec's department (Department of Sanitation, Water and Solid Waste for Development). Eawag is a research institute within the ETH Domains, which serves as a bridge between the scientific world and the 'real world'.

My internship started with a preparation period of one month in Zurich, followed by four months of practical work in Tanzania and then one final month back in Zurich, to write the report.

The research project is named Faecal

Sludge Dewatering and Pyrolysis in Dar es Salaam, Tanzania. The main objective is to improve faecal sludge (FS) dewatering and assess the potential of slow pyrolysis of FS to produce charcoal briquettes for household fuel purposes. FS has a competitive energy content, which makes it a potential pyrolysis feedstock with a high revenue possibility.

Since the sanitation needs of around 90% of the population in Dar es Salaam are met by on-site sanitation technologies, such as pit latrines and septic tanks, the revenue could be used to offset costs and contribute to a financially viable sanitation service chain in Dar es Salaam.

So far, my experience working with the Sandec team has been quite rewarding. I admire the job that these people do, I feel that they are helping to make the world a

better place and I would like to be part of that. Since Eawag is a research institute, which works with many universities, there are possibilities of getting master thesis topics and/or internships. Go ahead and take a look at their webpage ([www.eawag.ch](http://www.eawag.ch)), you might find something interesting for yourselves!

Hildemar Mendez  
WASTE student generation 2014

## OUR WASTE STUDENTS ARE ROCKING IFAT

IFAT is one of the world's prestigious trade fair specializing in waste, water, and environmental technologies. IFAT is being organized every two years in Munich and is being visited by thousands of visitors providing a direct connection between them and people working in environmental sectors. Following its successful recognition in Munich, IFAT spread all over the world and is currently being held in different countries such as Turkey, India, China and a lot more

On June 1st, a well-organized excursion was provided for students of the University of Stuttgart. Students from different master programs such as WASTE, WAREM and MIP decided to participate in this excursion in order to familiarize themselves with Germans top companies working in the environmental sections. The students visited and interacted passionately with the different platforms that have been organized in IFAT.

This year, IFAT witnessed for the first time a worldwide competition known as world university challenge (WUC). WUC is a technical competition where students from different disciplines

are challenged to solve and work on environmental – based tasks. The tasks were optimally designed to asset and test the analytical thinking and management skills in the water resources sector. WUC lasted



for two full days during which 18 teams were competing against each other. The internationally participating teams included students from various countries as well as

various engineering disciplines, thus, the teams showed a high degree of diversity and internationalism.

On June 2nd, two teams representing Stuttgart University participated in WUC among which four students were from WASTE master program (class 2015). The students are Tasneem Barakat, Salma Kamaly, Rzgar Al-bewani, Maryam Aliabadi. Team 18 managed to get the first prize in flow measurement and control task while team 14 showed excellent performance allowing them to win two prizes. The team managed to get the first prize in the „Kill the rat“ task, as well as the third top ranking (also known as the bronze medal) in all the tasks. WASTE students showed a high degree of commitment and integrity. It is clear that their passion for environmental engineering is an essential asset for their success and their future career. A passion that is being supported with the technical knowledge provided in WASTE master program.

WASTE students do ROCK.

*Salma KALAMY*

*WASTE student generation 2015*

## Recent events

### WELCOME EVENT 2015



Arriving in Stuttgart with a lot of enthusiasm and being confronted at first with one week of bureaucratic issues, most of the new WASTE students of generation 2015 finally met for the first time at the invitation of Mrs. Jessica Hahn, the WASTE Course Director. We got to know more about the study program and about each other, all while exploring the city of Stuttgart.

The event consisted mainly of two parts: one was the introduction of the study program, and another was travelling to the city centre. The first part took place in the morning. During this welcome meeting, Mrs. Jessica Hahn introduced the structure of the WASTE study program, the procedure for choosing the modules and specialization areas and the rules for exams registration.

We also met Luisa Ferolla, a WASTE alumni and class speaker of generation 2013, who gave us an impression of what

the program looks like through the eyes of a student.

At the conclusion of this stage of the meeting, each of us received as a gift a reusable shopping bag with the logo of the WASTE program, a reminder to avoid the extensive use of plastic bags that pollute our environment.

What followed was a delicious international vegetarian lunch at the Weltcafé, an intercultural learning and meeting place in the center of the city. Afterwards, we went to the Welcome Centre, which luckily is right beside the Weltcafé. Under the slogan "Good to have you here", Dr. Verena Andrei, the centre's leader and her team advised us on issues related to living in Stuttgart.

Learning German, working, training and studying, international cultural associations and their meetings, were the main topics on the agenda that day, with the pur-

pose of making the transition to our new home as quick and smooth and possible.

Accompanied by Ms. Sera Babakus who is part of Welcome Center Team, we headed afterwards to an interactive exploration of the city. We visited the Schlossplatz which is the largest square in Stuttgart.

Divided into working groups, we discovered the history of the place that will be our home for the next two years. By a lucky coincidence, we bumped later on into the city's famous

wine fair, which brings together every year wine producers from the region.

All in all, a great first contact with

wonderful people, and interesting study program and a new place to call home full of history and nature, with a rich cultural scene. We are excited to be part of the big WASTE family and we look forward to continuing its traditions over the next two years.

Gina Catherine OLAYA  
BURGOS,  
Zhiwei CHEN

WASTE student generation-2015



## 57<sup>TH</sup> WIM - PERUVIAN NIGHT

We celebrated the 57th WIM meeting Peruvian night. A WIM full of incredible biodiversity, rich history and fascinating culture.

The Friday night of the 13th November 2015, 5000 years of history, traditions, ancient culture, dances, music, biodiversity and delicious food invaded the room V23.02 of the University of Stuttgart, where more than 50 people among students, workers and teachers enjoyed a short but unforgettable journey to the amazing Peruvian culture.

### Peru, a paradise to discover

Peru is the land where the "Navel of the world" is located, the city of Cusco which was the capital of Tahuantinsuyo during Inca's Empire and the same place where "Machupicchu" one of the New Seven Wonders of the World is still preserved and visited every day by tourists all around the world.

However, the WIM assistants were able to discover not only the magic of the unique Cusco but also a little bit more of

the Peruvian beaches in the coast, the desert, the Andes with its high peaks over the 5000 MASL, the wild jungle and the most important ingredient: the friendly Peruvian people, all of these thanks to the collaboration between Peruvian Students of the MSc. Waste and the MSc. Umweltschutztechnik who were helped and supported by their friends and mates of all other countries around the world.

sharing, eating and celebrating with friends, that is why in the end of the presentations of the students, the participants tasted a fresh "Pisco Sour" the national cocktail of Peru, then different Peruvian dishes such as "Causa rellena" "Ají de gallina" "Papa a la huancaina" "Canchita serrana" made of the basis Peruvian ingredient: "Yellow Chili". Finally, they enjoyed a sweet "Mazamorra Morada" and "Chicha Morada" made of purple corn.

*"Peru has 70% of the glaciers in the tropics. 84 of 104 of the ecological zones of the world. And 28 of different climate zones".*

Source: Peruvian Ministry of Environment

**Friendship is sharing, and that is the Peruvian culture**

In Peru, there is no party, meeting or friendship without

*"Last but not least, thank you to all who came and who enjoyed as much as we did, we really appreciate it and we feel very happy to let you know more about the land of the sun, where we were born, come back whenever you want".*

Vanessa Leslie BOLIVAR PAYPAY  
WASTE student generation 2015  
Javier Asdrubal BECERRA ROMERO  
WASTE student generation 2014



## 58<sup>TH</sup> WIM GAMES NIGHT

WIM Games night is an intercultural games night where WASTE students come to learn and participate in a fun, thrilling environment leaving the stress from academic study behind.

The night began with a simple presentation about games in different cultures and countries. Following the presentation, the students had a small share of snacks and food before the action began. The students were divided into 4 teams. Each of these teams competed against each other in different games. The first game required speed and high concentration. Participants had to carry small balls on spoons while the spoon is being held using their mouth only. The fastest participant was the winner.

The second game required high flexibility and fitness. The participants had to pass beneath a rod whose level is beyond their waist level. The shorter the participants were, the more flexible they moved and passed the rod. Thus being short was a winning asset in this game



The third game focused on communication skills. The game involved two participants from every team where one participant had to cover his/her eye and the other had to guide him/her till they reach their destination. The goal was simple.

The blinded participant had to carry a rod which represents the tail of a donkey. They had to place it at a certain position on the blackboard. The position corresponds to the back of donkey drawing.

The fourth game required female participants and depended mainly on fitness.

The participants had to circulate a large hoop around their waists. The participant who managed to achieve that for the longest period of time was the winner.

The fifth and most fun game was popping up of balloons. The game required two participants who had to pop balloons without touching them. Therefore, participants had to hug deeply each other in order to pop the balloons. The team who pop the maximum number of balloons was the winner.

Being loser or winner, it doesn't matter as the WIM games night is simply about having fun, enjoying time and getting to know new people. The WIM games night enabled students to create memories and share moments of happiness which shall be remembered for a long time afterwards. Therefore, everyone in the WIM night was somehow a winner. A winner of happiness.

*Salma KAMALY*

*WASTE student generation 2015*

## 59<sup>TH</sup> WIM CHINESE NIGHT

It feels good to be a Chinese, feels much better to introduce our culture to others, and it feels super cool to get people's applause towards it!

The 59th WIM (Chinese new year night) was held on 5th February 2016, two days ahead of the traditional Chinese New Year! It is the most important festival in China and it is a time to get together with families. We were so proud to have the opportunity to organize such an event to celebrate it with our Big WASTE Family.

With several thousands of years of history, the nation shares an original culture, including the unique language. All about Chinese New Year, Something interesting about China and let's learn Chinese were the three main topics of the presentation.

People got the idea about how we celebrate the New Year, the dos and don'ts in China, and the magical Chinese characters!



Apart from the spiritual culture, we also brought everyone „a bite of China“. The most representative dessert „Rice dumplings“ and different Chinese teas were so tasty and some of our friends even came to ask if they can get some more

and take home. Various kinds of delicious dishes were also provided. No matter you eat meat, vegetables or halal food; everyone could find the food suits him/her well there.

But wait that was not everything! The games later were attractive too! Even we were shocked about the heated scene. By the way, those games also brought our mind back to the childhood :)

For us as the organizers, it was a very successful event, and I hope for you as the participants also enjoyed a lot! And thanks a lot for everyone who helped us before, during and after the meeting!

*Sija YUAN*

*WASTE student generation 2014*

*Cindy YEUNG*

*WASTE student generation 2015*



## 60<sup>TH</sup> MOROCCAN WIM

It is always exciting to know about the traditions and cultures you never knew or heard before. It is always interesting to find out what was the historical, political or scientific impact of a nation to form the world we live in today. It is always curious to try exotics meals, which build your perception of the country even more. Thankfully, every Waste International Meeting can offer these intriguing amusements!

On the 22nd of April 2016, WASTE students had an opportunity to explore the beautiful country of Morocco during 60th WIM. Despite the fact, we have only one representative from this country in our generation, our student Asmae El Quajidi and her friend Ayoub lharchi did a great job together to make the first lines of this



text come true!

It all started with soft, mesmerizing Chaabi music with beautiful vocals playing in the background which immediately built the necessary atmosphere, while the guests were drinking warm green tea and waited for the final preparations.

Soon after, we could enjoy well-made presentation showing us many interesting details from Morocco, including clothes traditions, amazing building exterior and interior designs, all forms of art and hard-working people who create it, as well as charming traditional dances, which are popular not only in Morocco.

I should also mention the beautiful traditional dress our host Asmae was wearing that day! At the end of the presentation, our Moroccan friends teased us with the food culture of their country, what made us excited to try it out, of course! Everyone was happy to taste impressive diversities

of food on their plates while authors of the WIM were gathering positive comments throughout the rest of the evening.

I think I can speak on the behalf of all our friends and classmates when I say



thank you Asmae and Ayoub for such a great time and experience! See you at the next WIM!

*Andrii KOLESNYK*  
WASTE student generation 2015

## Excursions

### SCHAUINSLAND

During the end of the first semester in the month of January, Dr. Vogt had suggested us to go on an excursion which was related to our lectures in air quality control.

The number of seats for travel was limited since students from other courses had registered as well.

The excursion took place on the first week of February. By then, we were already thinking and stressed about the upcoming exams. We visited Schauinsland (UBA Measurement Station - Federal Environment Agency).

To get there we had to cross Freiberg and then continue through the famous black forest. We were very happy to see a lot of snow, unlike in Stuttgart. That is why we did not miss the chance to take a lot of photos in that beautiful weather, in such wonderful landscape.

After arriving at the station

we were shown the appliances and equipment used to control the air quality. Furthermore, we saw the equipment outside is connected to the different items of the laboratory, with the aim of making continuous measurements.

When one of the responsible people at the station showed us how dark a filter was, when they first started the measurements in the 50's, we began to wonder



about the quality of the environment in our home countries. Gradually, the filters got lighter in color and now they looked completely white, which means that the state of air was clean and good! That was a great historical record.

Then it was time for lunch. Unfortunately, it started to snow again, but this time, it was not very pleasant since a lot of snow come down. Due to the fact that most of us were not used to the snow, we had to pay close attention while walking because the pavements were really slippery. As soon as we arrived back at the restaurant we got our well-deserved rest from a long journey.

All in all, it was very nice experience, which I will cherish forever.

*AsmaeEL OUAJIDI*  
WASTE student generation 2015

## EXCURSION TO FERMENTATION PLANT AND LANDFILL

February 1st, 2016. Around 8:30 in the morning our bus hit the road with direction south west towards Backnang. Our first stop was the fermentation plant operated by the Abfallwirtschaftsgesellschaft des Rems-Murr-Kreises mbH, through the subsidiary AWG. The plant manager welcomed us in a comfortable room with drinks.

Here we were briefed on the basic operations of the plant: the receiving of biowaste, shredding, feeding it into the reactor and energy recovery. After the briefing and answers to some questions we started our tour for each of the major operations in the plant. Household biowaste is brought in by lorries and piled up into heaps. This area of the facility has an air extraction system followed by scrubber and biofilter steps which we were able to see as well.

We continued our tour through the pit and feeding area. It was interesting to see really close the feed and mixing mechanisms that convey the material to the reactor. They also explained us the overpressure mechanisms present in the reactor; some of these devices must be guarded against the curiosity of birds! After the reactor we visited the engine area including the control room.

In there you have the possibility to monitor the balance of carbon dioxide and methane present in the gas, so that an

optimal operation of the engines can be achieved and changes in the process can be advised. This can be done, for example, by injecting waste water into the reactor to balance the digestion process.

The operation of the reactor is normally uninterrupted, but not always easy; at the moment of the visit the generation of gas in the reactor was highly inhibited and an investigation of the influencing parameters was running. Electricity produced from biogas is sent to the grid while a small percentage of the heat, recovered the process, is used to keep the temperature in the reactor and for drying the solid sludge.



Digested sludge is separated into solids (compost) and liquids (fertilizer) that are given to local farmers. The suitability of both compost and fertilizer is monitored by the association Gütezeichen Kompost.

We thanked the manager for the nice tour and got back on the bus for the next stop: Vaihingen/Enz Horrheim. We headed exactly to the landfill Burghof. The landfill is operated by the company AVL and was

open in 1978.

We met the environmentalist responsible, who explained us about the different landfill classes. Burghof is a class I-II landfill, which means it can currently process mineral waste such as asbestos, normal excavated soil, slurry, gypsum and demolition waste. We rode the bus up the hills to a point where we could get a view of some of the closed and open areas in the landfill.

The site will be actively operating until 2040. Afterwards, we went back down to have a look at the leachate treatment system and the biogas conversion. Before 2005 the site was able to dispose untreated household waste.

The decomposition products from back then, allows the production of biogas today, but the production diminishes every day.

An interesting feature is that for every load that is disposed in this landfill, samples are taken and coded. If the analysis finds elements which are suitable for a class I-II site then it is possible to track the location of the load within the landfill to prevent further damages or contamination.

Around 4pm we arrived back at the campus after a nice field trip. Many thanks to Dr Fischer for organizing it and to the people who managed to come!

Luis SÁNCHEZ

WASTE student generation 2015

## EXCURSION TO IFAT

In the trade fair for Water, Sewage, Waste and Raw Materials Management, which took place from May 30 to June 3 in Munich, several and different pioneering technologies, innovations and strategies could be found, presented by more than 3000 exhibitors from all around the world, but mostly from Germany (56% of the exhibitors).

This fair is a great opportunity for industry and municipal authorities to find technologies that help them to increase the cost-efficiency and ways to recover and re-

use resources intelligently. As the industry platform for innovations, attending IFAT as a trade visitor give the chance to meet with the entire industry, ranging from a system provider operating on a global scale to highly specialized medium-sized enterprises.

In addition, is a great way for students, future engineers, to get to know companies from the public and private sector, their projects, their aims, know-how; as well as, associations related to the environmental field and the way these innovative

technologies are presented to the consumers, i.e. the marketing of environmental development.

The exhibition could be sort in two big sectors: Waste and Sewage, and Recycling and Municipal Technologies. In the sector Water and Sewage, technologies for water extraction and utilization; water and sewage treatment; water distribution and sewers; coastal protection, flood, and water bodies control; as well as, measuring, control, and laboratory technology were to be found.

In the second sector, topics such as waste management and recycling, generating energy from waste materials; street cleaning and maintenance; decontamination of old sites and soil treatment; flue-gas scrubbing and air extraction, air pollution control; and Noise reduction and sound insulation were presented.

The fair offered opportunities for networking, exchange of knowledge, and for discussions. The live demonstrations, expert talks, and special events offered, helped to expand our existing knowledge, as engineers.

One of this supporting program was the Learning and young professionals. In the hall where this program took place, the German Association for Water, Wastewater and Waste (DWA) informed young professionals about the economic potential of research by environmental technologies.

A range of information on aspects concerning research, education, and staff

development in the Young Professionals Lounge was presented, as well as in the Speakers' Corner, which features specialist talks and panel debates took place. Research institutes and university professors brought together the two worlds of research and industry, presenting projects from the water, sewage, waste and raw material sectors at the Research and Education pavilion.

As an example, it is worth to mention that one interesting lecture related to material and energetic utilization was held in this hall, Microalgae Biorefinery presented by a researcher from the Hamburg University of Technology (Institut für Umwelttechnik und Energiewirtschaft (TUHH)), Nils Wiczorek.

Other leading industry associations—e.g. the Municipal Vehicles and Equipment Industry Association (VAK), the German Engineering Federation (VDMA) and the German Association of Local Utilities

(VKU)—presented interesting perspectives for high potentials at their booths show.

The live demonstrations introduced visitors to a whole range of possible applications for modern machines, systems, and vehicles exposed in the fair.

One of these demonstrations was the Car Recycling organized by the German Steel Scrap Association (BDSV), which showed the state-of-the-art of vehicle recycling technologies in action. These practical displayed on vehicle storage, drainage, pollutant extraction, and fractionation addressed the current challenges in the field of scrap vehicle recycling and allowed to experience the practical application of these processes up close.

*Fernanda GONZALEZ*

*WASTE student generation 2015*

## EXCURSION TO OPTERRA CEMENT PLANT



At 24th of June, we had an excursion to Opterra Cement plant in Woessingen. We had an appointment at 8:30 am at the main entrance to IFK and we arrived round about at 9:45 am at the plant.

In the beginning, one of the employees hold a presentation regarding the whole cement production process with its unique and innovative technologies and the different sections with their equipment. The name cement comes from the Romans "Opus Cementitum" and it is a hydraulically hardening building material and mostly used as an "adhesive" for other

building materials.

According to the presenter, the modernization of the company from semi-dry to dry process occurred in 2009. There are round about 113 employees who are working at the Woessingen plant, which has the production capacity of 800,000-ton cement per year.

After the one-hour presentation, we got safety clothes and helmets and started the tour through different sections of the plant. We visited the different storages, crusher, raw mill, cement mill, clinker and so on.

The most amazing points, regarding the plant, were some fuel types (for instance WWTP sludge and Tyre chips) and the low emission, which is even lower than the Germany and EU boundary values. We were amazed by the high efficiency of the air cleaning technologies, such as SNCR (Selective Non-Catalytic Reduction) for NO<sub>x</sub> elimination, AC (Activated Carbon) for Hg elimination and the filters for dust elimination. As we understood, the Woessingen is one of the most energy-efficient cement plants in Germany and Europe and is therefore nominated for the Environmental Award 2014.

Finally, I would like to thank Dr. Gehrman and Ing. Francisco Carrasco, who provided us with this amazing and interesting excursion.

*Maryam ALIABADI*

*WASTE student generation 2015*

## IWCS EXCURSION

On July 1st, the students of the lecture "Industrial Waste and Contaminated Sites" had the opportunity to visit two hazardous waste management sites: the Billigheim hazardous waste landfill site and the hazardous waste incineration plant in Biebesheim. Both locations are part of the HIM Group (HESSISCHE INDUSTRIEMÜLL GmbH), managed today by INDAVER Group, a Belgian company.

The bus left the university at 7am and arrived at the landfill at 8:30 am. We were welcomed by the site manager Mr Henningsen, who gave us an introduction to the history of the landfill site and then guided us through the installations. The site has been running since 1984 and still has a lifespan of 8 to 10 more years. However, the aftercare will continue for many decades after its closure. It receives 25 to 30 thousand tonnes of hazardous waste yearly. The location counts with a leachate pre-treatment plant, which conditions the effluent to be sent to a wastewater treatment plant. This treatment includes a biological

step for nitrification and denitrification, ultrafiltration, ion exchange and an activated carbon filter. Eventually, we were shown around the laboratories, where all the arriving waste is sampled and analysed before being landfilled.

After we left the landfill site, we travelled two more hours to Biebesheim. At the waste incineration plant, we were received by Dr Suchomel, a former manager of the site. During a presentation about the plant and its activities, we had a delicious lunch, courtesy of HIM.

The plant commenced operation in 1982 and counts not only the incineration plant but also a mechanical pre-treatment and an emulsion separation plant. It is a state-of-the-art facility, which receives 120 thousand tonnes of hazardous waste per year. The process relies on two parallel rotary kilns, which disaggregate the feed at 1200°C. The energy is recovered in the boiler, producing steam for the generation of electricity. Much more extensive than the incineration process itself is the sub-

sequent cleaning of the flue gases: SNCR NOx treatment, spray drying, electrostatic precipitation, wet scrubbing, filtration and adsorption allow the conditioning of 50000m<sup>3</sup> per hour of purified, legislation-compliant flue gas.

The visit was fascinating and a great opportunity for us to see first-hand all the processes we have learned about during our lecture.

*Celeste DOPAZO*

*WASTE student generation 2015*

## Life after WASTE

### GO GREEN AT A CORPORATE LEVEL

SRF Limited, a multinational company with its headquarters at Gurgaon, India, has set its sight on a GO GREEN mission. SRF is predominantly into Chemicals and Textile business for over a century now. The company has 13 plant locations, with a workforce of over 6000 people, bringing in a turnover of over Euros 600 million annually.

The company's top management took a serious thought to Indian Honorable Prime Minister Mr. Narendra Modi's vision on "Swachh Bharat", in simple English, Clean India.

To implement this vision, SRF has taken a new tiny step stride into the renewable energy sector, which is a complete diverse stream from their traditional business.

On this mission, SRF has taken me, Kumar Narasimhan, an alumnus of M. Sc., WASTE from Universitaet Stuttgart as a part of their team to realize this dream.

The company has decided to cater all commercial segments such as industrial factories, IT parks, educa-



tional institutions, hospitals and other establishments which easily contribute about 100 kg – 200 kg of food waste per day.

Corporate Social Responsibility stipulates that every commercial establishment takes some initiative to go green. It has been estimated that about 30% food we make gets wastes which amount to about 1.3 billion tons of food waste per years, pricing it at 5.9 billion euros.

My team at SRF will offer solutions to all these commercial establishments to set up small biogas plants which would enable them to dispose of their organic waste to generate green energy that could be utilized back in their food canteens as cooking fuel.

Currently working on a 10 m<sup>3</sup> and a 20 m<sup>3</sup> model, we could soon look forward to taking up large scale organic wastes that come to the city corporation to be sent to landfill sites.

Over dumping of organic

wastes has led to foul smelling

cities all over India and the government initiative, towards eradicating it, needs complete support from its fellow citizens.

Post completion of our WASTE course back in Germany, I had spent time at different industries starting from Market

Engineering to study markets for Environmental Engineering and Renewable Energy, followed by a long tenure at setting up a medium scale to large scale biogas plants with cattle manure as feedstock.

These experiences have enabled me to provide the entrepreneurial skills, SRF was looking for.

I proudly write this article to our M. Sc., WASTE community and also would like to thank them.

*Kumar NARASIMHAN  
Waste alumni generation 2004*

## VIKTORIYA GOMILKO- MY EXPERIENCE AFTER WASTE

When I applied for the WASTE program, my thoughts were somewhere between "it would be nice to have an additional education to my chemistry degree" to "I already live here in Stuttgart, I would be stupid not to get a free education", but I have never in a million years expected to get as much out of WASTE, as I did.

In addition to Master's degree in the most relevant and problematic subject that our society is facing today, I have found my best friends in my classmates. (When in the beginning Mr. Vogt said that we will find our lifelong friends in this program, I thought it was the corniest thing I have ever heard. But it was true!)

I also learned so much about many countries around the world that it not only destroyed all the small prejudice thoughts I have had but also broadened my horizons about those countries and their people. It was as though I have visited those places myself.

While dealing with group members during my classes, I have learned to be patient and understanding. And the most important thing I have learned was time management thanks to the unique system of German education, I have learned to prioritize my homework and studies in order to excel.

When the two years were coming to an end, all I was thinking about was "I wish I could finish my thesis already" and "I just want to be done". After I received my degree and was officially done with my education, I took a month to sleep, catch up with my house work, and play with my son.

My family has made the decision to move back to the USA, so I started to look for a job there. First, in the cities around where my mother lives. Then, a bit further away.

From my job search, I have learned that environmental jobs are typically clustered around big cities, not small towns where I have imagined I would live. So, my search was refocused to big cities that are surrounded by industry. After few months,

I have found my-self with minimal replies, which were all rejections. At first, when I got a rejection, I would get upset, but after months and months of "no", I got kind of immune to them. After about 6 months of search, when my friends have started working already. My search has extended to all the states.

Moreover, the criteria for what type of jobs I would apply for decreased tremendously. In the beginning, I applied for jobs that I was interested in, and towards the end, I was applying for any kind of job that would pay minimal surviving salary. At that time I was so desperate, that I started to apply for chemistry jobs, using my bachelor's degree only.

At the end of August 2015, my husband said that he applied for a job in Chicago. I applied for some vacancies there too. And then there was this one position, that I wasn't even sure what my job even would be. The description was three pages long, and so broad, that I had no idea what I was applying for.

Something about water cleaning, pesticides removal from water and hormones measurements... No idea. But they were looking for a chemist, and I had bachelor's degree in chemistry so I applied. I didn't have any background experience in any of the areas, but three weeks later, I have received an e-mail about a phone interview.

After almost 8 months of rejections, I got my first phone interview. I was so nervous; I had to research everything possible about the hormones and pesticides.

At the phone interview, they were asking about my past experiences I had received at IFK, nothing about the water cleaning. After I told them everything I did during my research at IFK, they asked me if I have had any questions, and I asked what the research area was specifically and what would be my job there.

The answer was flue gas cleaning using amines, which is what I was doing at IFK. To this day, I have no idea how I was paired with that job since I was thinking I would be cleaning water from pesticides.

There was nothing about cleaning exhaust gasses on the job description. But, after the phone interview and subsequent skype interview (the only interview I have had after applying to hundreds of jobs) I got the job at the University of Illinois, researching what I wanted to: flue gas cleaning. And my husband got that job in Chicago he applied for.

After hundreds of applications between both of us, for jobs located in many different states, my husband and I got both jobs in the same area.

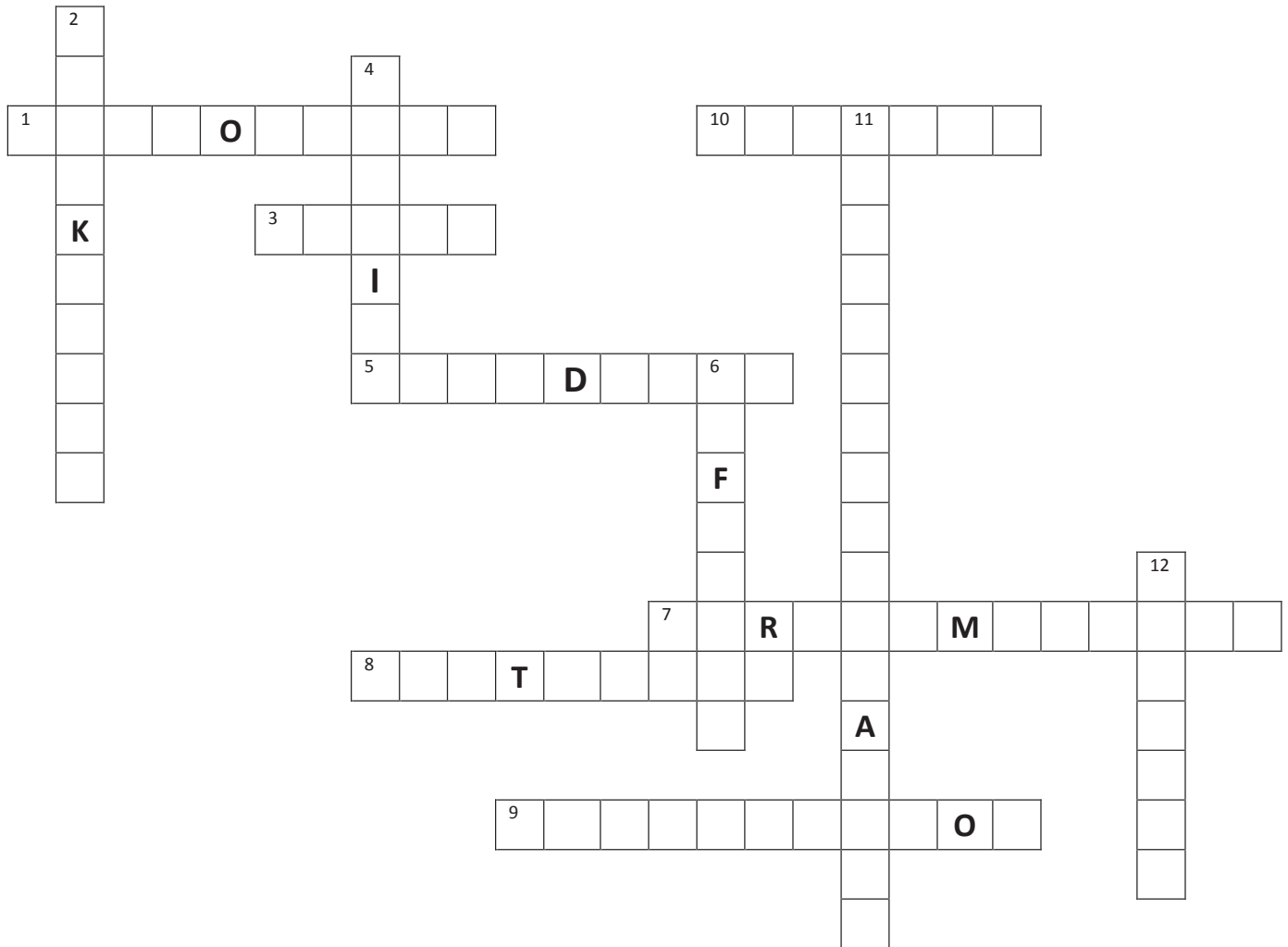
Looking over that journey, I have learned one very important lesson: job search is about 85% luck and 15% experience, education, resume/cover letter.

And like everything else in life, you cannot make too many plans, because fate will take over. It's like that saying: "You will tell God your plans, and he will laugh at you". But I am extremely thankful to WASTE for making part of those 15% strong enough to be an attractive candidate when I finally got lucky.

*Viktoriya Gomilko  
Waste alumni generation 2012*

# Fun with WASTE

## CROSSWORD Word-Mania



### **Across:**

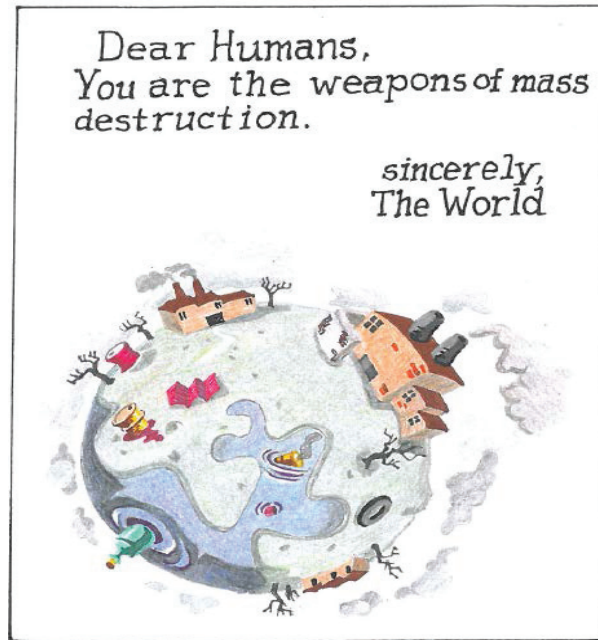
- 1** sharing a car to reduce fuel use and pollution
- 3** poisonous or harmful to the body
- 5** wood, peat, coal, charcoal
- 7** engine which does not produce or release gas directly to the environment
- 8** measurement of environmental impact
- 9** movement of air between inside and outside of a building
- 10** landfills

### **Down:**

- 2** stream containing feaces, urine and flush-water
- 4** produced during incineration and burning off
- 6** liquid waste
- 11** usually diameters of 2.5 and 10 microns
- 12** rich soil-like material

## Word-Jumble

Unscramble these jumbled words, one letter to each square to form ten ordinary words.



1. NOZOE

--	--	--	--	--

2. ULEMP

	L			
--	---	--	--	--

3. NMAISPLG

							G
--	--	--	--	--	--	--	---

4. ROTEAINA

	E						
--	---	--	--	--	--	--	--

5. TAIBAREC

			T				
--	--	--	---	--	--	--	--

6. WERSES

	E				
--	---	--	--	--	--

7. GRIDTEES

D							
---	--	--	--	--	--	--	--

8. TENTURIN

		T					
--	--	---	--	--	--	--	--

9. SENTGAPHO

			H					
--	--	--	---	--	--	--	--	--

10. ELITAOLV

						L	
--	--	--	--	--	--	---	--

Now arrange the letters in the shaded squares to form the surprise answer, as suggested by the above cartoon.

“																		”
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	---

## Alumni Letter

### To WASTE GRADUATES, CURRENT AND FUTURE STUDENTS

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When I was asked to write an article about my life after WASTE I knew I would prefer to address a letter to the new graduates and to the WASTE students.

Dear friends,

Most of us came to Germany with a similar goal: to build a stronger educational background that will allow us to pursue a better professional career. Many WASTE students dream to build a life in Germany, and so do I. During our studies we are subject to new experiences and challenges within the university environment. In spite of this, it can certainly be said that we live in a safe atmosphere. There are not only professors but also former and current students, willing to help us to adapt to the German reality and face possible problems. During two years this environment encourages us to develop ourselves, our skills, and to broaden our horizons. But what happens after we finish WASTE? What comes after this life-changing experience?

Many options and professional chances are offered in Germany. However, the job market is undoubtedly hard. The application process can be long and demands systematic work and a clear definition of our own personal and professional goals. Each candidate needs to make a complete evaluation of his strengths and weaknesses, to be patient and to work insistently on preparing a convincing application for each interesting position. Applying for a job requires a lot of time and effort, but there are ways that one can be helped through this process.

I visited many informative events for international young graduates. I participated in an interview training (freely provided by the Welcome Center Stuttgart). I went to job fairs and career days to take advice and to create a contact network. In parallel, I have been continuously working on the improvement of my language skills. The German language is a key element towards a successful entry into the job market. By attending intensive language courses I have strengthened not only my knowledge but my self-confidence as well. After the completion of the master, I worked for six months as "geprüfte HiWi" at the institute where I conducted the research for my Master thesis. This 6-month work was a great professional experience that allowed me to adapt myself smoothly to the German working environment.

In that way, almost 5 months after my first job application, I am preparing for my moving out to Berlin where I am going to start my professional life. I am ready, full of enthusiasm and excitement for the next step and this new chapter! The last months were not easy, but I never stopped believing in me, my abilities and my dreams. It was a conscious decision that the negative answers from applications and interviews would not affect my effort. Depending on your goals and your needs the path that you will decide to follow can change. But never forget that chances exist out there. Work hard, be patient, wait for a lucky chance and grasp the opportunity that will fulfill your life expectations! Meanwhile, enjoy your life with friends and people you love and be based on the help that the WASTE family can offer you anytime!

Best wishes,

Sissy Bliatsiou (Generation '13)  
Stuttgart, July 2016



## Interviews

### THE INTERNATIONAL CENTER / INTERNATIONALEN ZENTRUMS (IZ) OF STUTTART

The center with its staff provides information to students around the world who are interested in one of the programs of the University, which could be an OVERSEAS, ERASMUS exchange, an international master program or a postdoctoral research in one of the University's renowned institutes.

Besides the information found on their web page, the most important feature of the IZ is the kindness of the staff willing to help in particular cases. On this occasion, we have the opportunity to talk with Ms Ursula Habel, who has worked as an international student advisor in the IZ since 2000, and who currently is the contact person for international Master's students of WAREM, WASTE, MIP, COMMAS, international scholarship holders of DAAD/FES and international doctoral students.

#### *What is the mission of the IZ?*

We have 3 departments, one department is for the students who want to go abroad, another department is responsible for the German language course and intercultural training, which is very important for those who want to study here in German and take the DaF test. And the last department, where I work, is taking care of

the incoming students.

We support all students coming to us, helping them with their studies, and their exams so that they can successfully graduate. Of course, they can also get to know Germany, to learn more about the culture and country they are staying in so that they will have had a good experience, whether they go home or stay to work here in Germany.

#### *What are the most common problems that international students have when they are already here?*

A lot of questions are about their visas. We have a good connection to the foreign office and if there is any visa problem we try to help and usually everything can be solved. It's important to know that in the beginning, they need to extend their visa, that is one thing, but they can also extend it for another 18 months to a search for a job after they have finished their programs.

Another big issue is working, people looking for jobs or with financial problems, and they have all kind of questions, taxes for instance.

On living, questions concern anything that happens on the dormitories, such as things that are getting stolen or people



wanting to change rooms. For example, there are a lot of problems with the ARD and ZDF Rundfunkgebühren, the payment for TV, is a problem as a lot of times people don't realize how serious it is.

Sometimes they come too late when they have already accumulated a 300 euros bill and don't know how to get out of it. Whoever tells them that they don't have to pay for this is wrong. If you don't pay you will have a problem.

Other common questions are about driving licenses, all kind of laws and the German culture of course.

Scholarships are also a big concern, as students might already have financial problems in the first semesters since they took a loan, and now they want to learn about other options to pay for their studies.

We also have real emergencies, at least 3 or 4 per semester, like stolen luggage at the airport, a financial crisis due to a big familial problem at home, health issues, relationship issues or psychological problems.



>>>continues

## >>> THE INTERNATIONAL CENTER / INTERNATIONALEN ZENTRUMS (IZ) OF STUTTGART

*How do you help them in these cases?*

Sometimes we can resolve the problem here but if it's something more severe we try to connect them to other offices or institutions. We want to tell the students that we are here for that, and all the information they share will be treated confidentially, so they do not need to worry about that.

*Which scholarship options do students have when they are already here in Germany?*

If someone doesn't have a DAAD scholarship, there is also a possibility to apply in the first semester for the Deutschland Stipendium. It's done by the University, and part of the money comes from the state and the other part from companies. It consists of a payment of 300 euros per month for one year.

They are asking for good grades among other requirements, like volunteer work or social engagement. Students can

apply every year in November.

Through the IZ we offer two kinds of scholarships with funding from DAAD, one for finishing the thesis so for this one it makes sense to apply in the 3rd or 4th semester.

The second is for students that are really involved in volunteering, because the DAAD wants to encourage students to be involved in the university life to promote connecting German and international students, or to make life better for international students in the University, it's a scholarship between 250 or 650 euros per month for one semester, it can be applied for at the end of June and end of January.

*Besides the main services, what other activities can be found at IZ?*

We organize excursions, 3 or 4 in the winter semester, also there is the mentoring program which is affiliated with the International Office and they have their own funding. The smaller events like movies and trips around the region are organized by another colleague who is supervising

our buddy program at the moment.

In both programs, mentoring and buddy program, there is a group of German, and international students, who are very engaged and come up with very good ideas, and we support them by printing flyers, promoting their events, and with funds.

We try to inform the students of useful events like "Your future in Stuttgart", events that are really important for them and also fun activities in and around Stuttgart.

For example, we started to look for a group of students, who wanted to organize the MERAKI event. And now a coordination committee with students from different master programs is in charge of it.

Additionally, we did a photo competition last year "My personal view on Germany", which was a student's idea.

*What trends have you observed in the international master programs?*

The trend is going towards double masters degrees, as WASTE is offering now



in cooperation with Brazil. The university is establishing a lot of these with other institutions around the world right now.

*Do you know how many students stay in Germany after their graduation?*

So far there is no statistics from the University of Stuttgart. A lot of the students want to stay but they find it complicated because is not easy to find a job without speaking German. So, unfortunately, the number of people staying is not that big.

*How has been your experience working with the WASTE program?*

Always good. Since the beginning, WASTE has been a program that the course directors care a lot about and even more about its students. They do a lot of what we do for other programs.

There is a lot going on in the WASTE

program like the graduation ceremony, the Waste Club, and the WASTE newsletter, while other programs have nothing comparable. I have always thought that WASTE is great for its students; they offer something for before, during and after studies. It's really the whole package.

*What have you enjoyed the most while working at IZ?*

I'm a social worker and have worked with refugees of all ages and troubled adults before. Working with people has always been the thing that I wanted to do. This job here is perfect and I enjoy working with the foreign students.

However, other tasks have increased and so regretfully we do not get to spend as much time with the students at excursions or reunions like we used to in the past.

*Do you have any comments, invitations or suggestions for the WASTE students?*

I would recommend them to try to learn German as well as possible! This will enhance your experience while studying, your life here, and comprehension of the German culture; you need to be able to communicate with people, so focus and try as best as you can to learn it.

And eventually, I want to tell the students that they should not hesitate to come to the IZ, write an email to me or call if you have any kind of question. A lot of times, the students come too late with a problem when it has gotten more complicated and takes more time to solve. Sometimes the students find a solution themselves. But if they have a problem and don't know what to do about it, that's what we are here for, finding a solution together.

Ana Alicia GONZALEZ MARTINEZ  
Waste student generation 2015

## Travelling Around Europe

### GEHT MAL LOS, FLIEGT!

The feeling of freedom, always, is appealing to me. Being a bird or a dolphin was my childhood fantasy, I dreamed of flying up in the sky and diving deep into the oceans.

I was lucky enough to have the chance accomplishing the last mentioned activity several years ago, and I told myself it would be the time to go for the other one whenever it is affordable.

In the last semester break, Jasmin and I went on an adventure that we would always remember. We registered for a 1 week hang gliding course in France near Millau through the Hochschulsport der Universität Stuttgart. This program was organized by a third party.

For the first day, we travelled 9 hours by car crossing half of France. We stayed in a vacation house with all the other course mates.

One of them was at his 50s which really surprised me how courageous he got to be to have registered for this extreme sport. The group was sweet and nice, all of them spoke German, though... And most importantly, the instructor could barely speak English (but she improved by the end of the week, just like my German did)!

Which means the course must be in German! Nice...

Thanks to my beloved German classmate, Jasmin, and all the other course mates, it was not that hard to keep up with their help in translating and explaining.

In the mornings, we had either practical or theoretical sections depending on the weather and wind speed. Learning how to fly is definitely not easier than learning how to walk when we were babies (if you can still remember).

The hang glider is heavy, weighing more than 20kg in addition to the pressure from the wind. It was tiring, but when it came to your first lift off, the thrill and excitement were beyond description.

As the hang glider instructor said, there is nothing closer to flying than hang gliding, not even paragliding. Because when you are on a hang glider, you will be in charge, not the wind. You can control your speed and direction instead of just 'floating' in the air.

>>>continues



## >>> GEHT MAL LOS, FLIEGT!

The longest record in the sky was up to 9 hours non-stop.

In the afternoons, the hang gliding school helped to arrange different kinds of outdoor activities for us at a fairly low price. The region was amazing; close to the Mother Nature with fantastic landscapes, which offered the coolest activities. In that one week, we went hiking, rock climbing, zip-lining, kayaking, canyoning, exploring the mountains, rivers, and caves.

We also had the chance to experience the cultural part of the south of France, we went to the cheese factory and markets nearby.

At nights, we took turns to cook for everyone. We had all regular, vegetarian and gluten-free dishes, all of them were wonderful and everyone can cook really well!

I was so glad that they appreciated my Asian dishes a lot and finished every last bit of it. Dinner time was one of the best parts of the day, since you got



to know each other better and could just sit back and chill. They even taught me some of the German board games.

It was an intense week physically, but it was also the most amazing and unforgettable experience. It was totally worth it, the fee I paid was not just for learning hang gliding but also for learning German, intensively, too. I believed everyone who chose to study in WASTE loves the nature. I promise – you can't get any closer to the wild than this!

Holiday in a foreign country is always fascinating.

As an overseas student, we should use our time in Germany to the max. Why don't you take this valuable chance and give yourself a not-so-ordinary vacation?

*Cindy YEUNG  
WASTE student generation 2015*



## WASTE NEWS

NEWSLETTER OF THE INTERNATIONAL STUDY PROGRAM WASTE AND THE WASTE CLUB STUTTGART E.V.

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