

1/2018

alumni ABSOLVENTI
VŠB-TUO



Magazine for
graduates of VŠB-TUO

UNDER THE SIGN OF ART

Ondřej Turoň

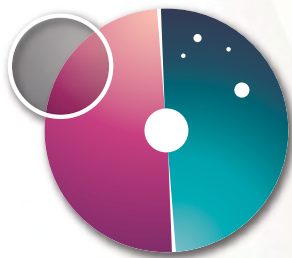
There are few young architects in Ostrava

Jakub Najdek

Linking technology with genuine craft

The „8“ anniversary

A look into history



**PLANETÁRIUM
OSTRAVA**

Už jste navštívili Experimentárium?

Je vybaveno interaktivními
exponáty pro děti i dospělé,
kteří se chtějí bavit
a zábavným způsobem
vzdělávat. Můžete navštívit
expozice s názvy: Za světlem,
K planetám, Ke hvězdám,
Do hlubin Země nebo
Na oběžnou dráhu.



Planetárium Ostrava je součástí
Hornicko-geologické fakulty
VŠB-Technické univerzity Ostrava

Provoz Planetária Ostrava finančně
podporuje statutární město Ostrava

OSTRAVA!!!

www.planetariumostrava.cz

Alumni 1/2018
Magazine for graduates
VŠB-TUO

Issued by
VSB - Technical University
of Ostrava

ALUMNI – relations with graduates
17. listopadu 15/2172
708 33 Ostrava-Poruba

Telephone: +420 597 324 397
Email: alumni@vsb.cz
Web: alumni.vsb.cz

Editor-in-chief
Marie Boháčková
Editorial Board
Šárka Sikorová
Petra Halíková

Language editing
Vlasta Tobolíková

Graphic design and production
Ivana Kunová

Print
Knowlimits s. r. o.

Issued in June 2018
5000 copies
issued 2x annually
not for sale

Title page
Photo: AVS VŠB-TUO

A change in programme is exclusively made by the organizers. It is recommended to check the validity of each event by phone with the organizers. The provider is responsible for the content of its advertisements. A contribution's content may not be in agreement with the opinions of the editorial staff.



alumni | ABSOLVENTI
VŠB-TUO

Rector's editorial



My Dear Graduates,

Since this year's first issue of our magazine ALUMNI has come out at the time of graduation, I would like to immediately wish our fresh graduates only the best in their future lives in this introduction. You are leaving your Alma Mater and stand on the threshold of a number of other great decisions. Ostrava will never be left out of your memories. I understand that after your state exams you would want to have a possible short „pause“, but I believe that you will return to us. After finishing your study our university still has something to offer you. Besides the traditional graduate's reunion there are a number of other activities and projects in which we welcome your cooperation. You are an important measure of feedback for us and only thanks to you can we also prepare future students for the needs of the labour market. And even if you do not know it now, some of you in a few years will be on the „other side of the department“ and will be lecturing to students as experts from the field.

In this issue of the ALUMNI magazine we will be devoting ourselves more to art at VŠB-TUO. Perhaps someone will be surprised at how much

a technically-economically oriented university can manifest itself in this direction. Possibly someone opposes disciplines such as architecture, artistic metallurgy or design. But there is much more that we can show. A number of artistic works are located on our campus and have thus become a natural part of our university. You can also see and experience a lot of art at our Art and Science Festival, which will be held for you on the university campus 6. 9. 2018.

In this issue of the ALUMNI magazine we will be devoting ourselves more to art at VŠB-TUO.

The year 2018 is a great anniversary year for our whole republic. In cooperation with the Archive Department of VŠB-TUO we are looking back into the past at several significant milestones, which also involve our university. It is this September that we welcome the Golden Graduates from the year 1968 - a year which was fundamental for a number of our students and professors. We will never go forward unless we know or try to understand our history.

prof. RNDr. Václav Snášel, CSc.
rector



[Introductory word](#) [1](#)

[Table of Contents](#) [2](#)

[Interviews: Art in Technology](#) [3](#)

Ondřej Turoň: There is a lack of young architects in Ostrava [4](#)

Lukáš Chrobáček: Obtaining the title Ing. is now my goal. But then I would also like to gain an MBA. [5](#)

Vítězslav Zbořil: A person has to mainly have respect towards airplanes [6](#)

Jakub Najdek: My studies gave me a technical foundation [8](#)

[What's up at university](#) [10](#)

Where to meet us? [14](#)

Confucius classes and Chinese language lessons [15](#)

[Career corner](#) [16](#)

Innovations in the Career Centre [16](#)

Doing business and start-ups [18](#)

The Night of Scientists [20](#)

[Fragments from the Faculty](#) [21](#)

Geological Pavilion [23](#)

Introducing a new formula at FS [25](#)

We are lifting the load to the heavens [26](#)

New methods for crisis situations [27](#)

FAST Experimental Centre [28](#)

Research of Czech roads [30](#)

[A window into history](#) [31](#)

The „eight“ anniversary and VŠB-TUO [32](#)

Milestones in university history [34](#)





Under the sign of art

A technical university and art? If we go through a Greek dictionary, we will find out that the word „tech“ means art. Thus, art and technology are one and the same.

It may surprise you but a technical-focused university is also greatly concentrated on art. By glancing at the range of disciplines we can find a more artistic orientation: metallurgy, architecture and design. Among the students, academics and staff there are many creative souls overlapping into other areas. The Academic Choir and Brass Orchestra perform on the university grounds, not to mention Younie, that is the Stavovská Union of Students, who annually organize a number of cultural events, the culmination of which is Majáles (Student's May Festival). It is no wonder that even the architecture on campus is enriched by many valuable works. The influence of art is known everywhere.

This is a reminder about the interconnection between technology and art, as well as about the traditional Art and Science Festival, which will take place on the campus at the end of the summer. This is the fourth year it is waiting for us and these days the preparations are getting to the final stage. Messages from backstage tell us that we have something to look forward to. Write down Thursday September 6, 2018 in your calendar.

TEXT: Marie Boháčiková
PHOTO: VŠB-TUO Archive



In Ostrava there is a lack of young architects

Ondřej Turoň¹⁵ is a graduate of the Civil Engineering Faculty of VŠB-TUO in the field of Architecture. At the beginning he was not satisfied with working for a bathroom studio and decided to become freelance. He already has behind himself projects such as Salon Felix, the bistros Faency Fries, Eat Meat and other projects. What's the way to take to do business on one's own? And where does he gather inspiration for his work? All this in an interview with the graduate of the month of January.

Where did your steps lead you after school?

A week after the state exams I joined a bathroom studio. After a year I discovered that the boss did not suit me, moreover I considered him as a link between me and a client. We also did not fit well together in an aesthetic sense so we decided to put an end to our cooperation. But at that time I was already dealing with my first implementation, which was Salon Felix in Masaryk Square. I told myself that I would not look for work immediately and tried to hang on to it. So I went „to do it myself“ a year after school.

After school a person doesn't know much about doing business...

The truth is I didn't know much. It was such a case of sink or swim. What's more going alone meant not having money for anything. I spent about a year working in a mustard and rolls studio. At times I was at the labour office, where I took advantage of a subsidy programme for creating one's own work position. I passed a five-day course for beginning entrepreneurs, where they told me how to create a business plan, on the basis of which I applied for the subsidy, which I obtained.

Did you manage to apply the lessons from school in practice?

Practice is practice, and what a person doesn't experience he doesn't know. School gave me a lot in that I found out

how to think about architecture, how to set priorities, to know what is important, and what needs to be done more or less. Many times I remember my supervising architect Josef Kiszka, who gave me a lot of advice and guided me. I did not understand it at that time, I saw the light only later.

How did you get your first order?

It was helped by the Hlubina Commission, where I met many people. I got into the Felix Salon thanks to Marta Pilařová. She learnt about the idea to build her own salon with a cultural overlap from the well-known Ondra Horvát. When he found his place for putting it into action, she recommended me as an architect. Faency Fries was the second one. I also knew the boys at the Hlubina Commission. They started out there and talked about opening a bistro with fries. I told them how the place might look, and that I would do something simple. We talked about it more in fun and finally they turned to me if I could design it for them. Another was Eat Meat in the centre of Ostrava, and I was approached by Aleš Student who taught me at the Department of Architecture. He had an investor who wanted to open a new bistro, but did not want his own, because he was old (laughter). He wanted some young blood and Aleš called me, and I am grateful to him, because Eat Meat was a wonderful job.

Where do you get inspiration for your work?

I cannot say that I have had one inspirational source, a little bit of this and a little bit of that. Every project is different, every investor is different and every job requires a different type of inspiration. And since I am rather conceptual, I'm always trying to find inspiration in the location which is connected to the job.

Have you ever thought about realizing yourself somewhere other than in Ostrava? A number of people are escaping...



They're running away. But I have never thought about it, in Ostrava there is a great lack of young architects. There are many large studios here, but few of them which are small and new, and Brno and Prague are full of them. I noticed this lack at the beginning and took it to be an advantage, as there was really a weak competitive environment. But now it is slowly improving (he smiles).

What do you value the most from your creations?

I get my greatest joy now from the project which I have submitted recently. It was designing a communal garden in Petřkovice. It concerned the area of the former train station building and the mayor wanted to feel the history there. That is why we created a pavilion, which inspired us by using the traditional platform and we also tried to add to it a young look. I'm also happy with the newly opened bar U Gustrava on Tyršová Street, which I also worked on.

TEXT: Petra Polesová¹⁶

PHOTO: Archiv of Ondřej Turoň¹⁵

Lukáš Chrobáček

Obtaining the title Ing. is now my goal. But then I would still like to obtain an MBA.

Everyone evaluates success according to his/her own criteria. For some people it is obtaining a title, for others it is leaving a trail in the form of a work of art or one's own company. Lukáš Chrobáček, graduate of the field Accounting and Tax Consultancy from the Economic Faculty of VŠB-TUO, has already been doing business on his own from twenty years. And yet he is still able to study and wants to continue his studies.

At the moment you are studying at the Economic Faculty in a follow-up study to the field of Corporate Economy and Management. Why did you decide to go this way?

I am presently involved in the branch in terms of part-time study. I chose it mainly due to my interest in corporate governance and management. From the subjects I would like to highlight Digital Marketing and Logistics. Logistics itself was taught to me by Dr. Leo Tvrdoň, who was able to bring his experience from practice.

Do you plan to continue your study?

Obtaining the title Ing. is now my goal. But then I would also like to obtain the title MBA. The Master of Business Administration is close to the management I'm involved in, and I think it will certainly be good for me in the future. I see the inspiration and motivation of my acquaintances who have that title.

You began your own career in the international student organization AIESEC. Why did you join the team?

When I joined the AIESEC team as a rookie I had no part-time job and didn't have anything to do more or less. But then I also knew in my life I wanted to go into business, and I wanted to be really involved in it. Anyone can get into an organization if they at least show a little effort and hard work. It was a super

experience for me. However I spent only one semester there, because I got the opportunity to become a sales representative for the company AXA.

So you went smoothly into a real work process. Did you take this job in this international, wide-spread banking and insurance group in connection to your study practice?

Certainly. For my work I needed to know various concepts and to orient myself on investment problems. So in this way my study helped me so I could better explain to customers how the financing system works.

After experience at AXA you started doing business yourself. What did it deal with?

With my friend Pavel Hulva we founded our first limited company which is still running today. It is the company Gump-tion Swallow - IT & Marketing Agency. We started it in the year 2014 when we were in our second year. We are focused on overall marketing and mainly on branding. Our clients are for example Allianz Pojišťovna, Novoferm ČR, hotels, bars and other organizations.

You are the new co-founder of the concept SOXIT. You sell your own design of design luxurious coloured socks. How did you come across this idea?

I often went to business meetings and it sprung to me that it was stereotypical to wear black socks. At one similar meeting I noticed that my colleague Adam Froňek had a similar view on fashion as I had. So we put our heads together and thought up the concept SOXIT. We tried to give our socks a little luxury in their design, as well as in quality but mainly in the packaging. We worked exclusively with Czech suppliers. Our designers are mostly from a number of students from Tomáš Bat'a University in Zlín. They

have created the whole concept of the shop, boxes and sock parts, the total brand: logo, business cards, stickers and also the socks themselves.

Do you think your study at the Economic Faculty motivated you into doing business?

Partially yes. In my second year I attended the lessons of teachers who were very inspiring. They taught body language and were greatly inclined to doing business and self development. My environment also motivated me. I used to meet with people who were beginning to do business or had already something to do with it.

What do you do in your free time?

Most of the time I spend doing sports, mainly cycling or fitness training, and also with my friends. Every day I find an hour or two for myself. At the beginning I was terribly „on the go“ doing business and I lived only for it. With increasing age I am trying to have more leisure time. To turn off all thoughts, my bicycle helps me a lot at doing that.

Bc. Lukáš Chrobáček studied at the Economic Faculty of VŠB-TUO in the field Accounting and Tax Consultancy and is presently completing a follow-up study in the field Corporate Economy and Management. He is also involved in doing business as the co-founder of SOXIT – a shop selling coloured socks, and the IT & Marketing agency Gump-



TEXT: Šárka Sikorová
PHOTO: Archiv of Lukáš Chrobáček¹⁶

Vítězslav Zbořil

A person must mainly have respect towards airplanes.



Since he was young he wanted to fly. For Ing. Vítězslav Zbořil the clear way was through the field Air Transportant Technology at the Mechanical Engineering Faculty. However, the way to a pilot's licence is trying and to master it requires great determination and diligence. What our graduate Ing. Zbořil did about it and what he says about the profession you can get to know in today's interview.

You studied at the Mechanical Faculty of VŠB-TUO. What field interested you?

I was interested in a field focused on air transport under the name Air Transport Technology. And why did I choose it? Since my childhood aviation has been intermingled with my whole life. I wanted to be more educated in this branch and to reach my dream profession as a transport pilot. Moreover, I was at home here, which allowed me to put all my spare time and the finances I saved into flying.

How did aviation blend in with your life?

My dad was glueing plastic airplane models together. I took it over and from the age of five I also began to glue. I continued with radio controlled (RC)

models. Roughly at the age of fifteen I showed up at an airport as a pilot, at that time only on gliders.

In terms of your study at VŠB-TUO did you also have the possibility of flying?

Unfortunately no. Flying hours are not part of the usual lessons. And we missed that. We made up for this lack a bit by having teachers from the field. For me the driving engine during the entire study was the vision of flying. I liked the fact that our branch was developing. My school year was one of the first which continued in a follow-up study. And it was even more interesting. We also had training, each of us with a different company, but we were flying. More expertise subjects like Flight Planning, taught to us by Ing. Jiří Hořínek, long-term pilot of ČSA, interested us very much.

You were fulfilling your dream to work as a pilot. Which flights were you flying and where do you prefer to fly?

Since the beginning of my career I have been flying commercial flights in the category of business jets. This concerns planes which are hired by private cli-

ents. Of course, we transport people, but rather businessmen, and the occupancy of an aircraft is regularly between two to three passengers, maximally up to nine. This is not private transport for a single owner and airline. We offer the airplane to whoever, but the price difference is really considerable. I prefer to fly to the heat. Recently I was on Malta, flying also to Spain and Nice.

Do you remember the feeling of the first flight you piloted?

For me it was a partial fulfilment of my dreams. At that time I wasn't paid for flying, I did not get any money for it, but on the other hand I was flying for free. But it was a horribly pleasant feeling to transfer all the hard work a person has gone through into practice. And moreover to make someone happy! I remember most of my first flights, when I took a gentleman who was celebrating his ninetieth birthday who wanted to jump from an airplane for the first time. It's still in my living memory today, how enthusiastic he was, he hugged me and thanked me for one of the best experiences in his life.

Have you ever felt a little afraid?

Maybe a little anxious. A person has to have mainly respect towards these machines. I felt this the most perhaps flying gliders. The first time I flew alone, I had to rely only on myself. You can stop a car or motorbike on the edge and can calmly get out. In an aircraft the life threat is great, even if one does not often realize it.

During the time of your flying have you ever experienced a technical problem?

Yes, there were some technical defects. But they are things they teach you about on flight simulators. A pilot must be able to handle them in such a way that he does endanger himself or any of the passengers. The biggest problem is when the engine cuts out. Luckily that

has never happened to me. For the turbine engines that I am piloting there may be more defects, but in most cases these are simple problems which we can solve during the flight on the basis of the aircraft flight manual.

Have you tried your reactions on the flight simulator even for the situation of a real airplane disaster?

We really practice everything. Flight simulators are very realistic and we train on them half a year so that pilots are constantly prepared. We practice real serious situations, such as cabin decompression, the cracking of a window, a door falling out. It is necessary to quickly deal with it and not to think too long about it. We also learn how to quickly descend. A disastrous scenario, which can happen during a flight is the failure of one or both engines. Then one can remember the hours spent on gliders. An airplane without an engine is also a glider. So even if it is an Airbus 380, it can sail back to an airport.

If any accident happens, the last of them could be the Antonov aircraft in Russia, we go through what a pilot should and should not do on the training simulator. In our estimates this was an unnecessary mistake. They did not do anything worse than lose speed data. But even so they have a number of options according to which they can orient themselves and fly to their target destination or fly back to the take-off location. It is important to keep a cool head and think. The case has not been closed, but it seems that

„A driven motor was the dream of flying.“



pilots could have done that. Today everything is high-tech, all important matters are ensured three times.

And what about a flight failure with a happy ending?

Definitely well known in the media is the landing on the Hudson River. It is a perfect example of when a pilot keeps a cool head than everything is under control. You can find everything on the YouTube videos, when the pilot speaks to the passengers in a very calm and even voice informing them that both engines have failed. Directly over New York, the most populous city on this planet. He didn't panic. He knew it wasn't possible to head back. He decided to land on the river. He had the most space there and moreover the certainty that he wouldn't hit anything.

The most important characteristic for

a pilot is then the art of keeping a cool head even in crisis situations...

It is exactly that. Of course, it also depends on experience, I keep it in one way and a captain with ten-thousand flight hours in another way. But it is not a rule that if a person has a lot of flight hours he will be a good pilot. This will be proven if a malfunction appears on an airplane during a flight. Psychologically it uses a person up alot.

Is it possible to prevent disasters in some way?

Before each flight, as well as regular connections we have a briefing, at which we deal with what could happen during the take-off, in flight and during landing. We calmly speak about how we should proceed. Although our approach may not be identical if something happens it can help a lot.

Tell us what you remember about your study years?

It wasn't a bad life. A lot of free time, and a person mostly didn't have to hurry somewhere. I remember we were always terribly glad to visit the building on Dr. Malého Street, because we were learning specialized subjects there, moreover often directly from experts from the field. We did not go to our other lessons with such enthusiasm, but we also managed to do them.

TEXT: Šárka Sikorová

PHOTO: Archiv of Vítězslav Zbořil



Ing. Vítězslav Zbořil is a graduate of VŠB – Technical University of Ostrava, the Mechanical Engineering Faculty in the field of Air Transport Technology. He is currently working as a commercial pilot. He actively devotes his free time to his family and travelling.

The writer's box: It is always inspiring for me to meet a person who has fulfilled his dreams. Ing. Zbořil made a good impression on me and assured me that flying continues to be the safest method of transport. It is wonderful to hear about a successful graduate of VŠB-TUO. And I believe that if we hear from Ing. Zbořil again it definitely will not be in connection with a disaster in the air.

Ing. Jakub Najdek

„Study at FS gave me a technical base“, says a Faculty graduate and team member of BeWooden.

When I study this or that how will I be able to apply it? And what if I think I really do not want to stay in the industry? And then what will my study be for? A graduate in the field Technological Management at the Mechanical Engineering Faculty Ing. Jakub Najdek found an answer to all these questions... You can get experience from your study which you can really use anywhere.

At VŠB-TUO you studied in the field Industrial Engineering. Why did you apply for this field and what did it give you?

I studied the field Industrial Engineering at the Mechanical Engineering Faculty and then I followed up with the field Technological Management. I had many opportunities to apply it, I had an internship at a company, which offered me a nice working position. But the corporate environment discouraged me. I worked there about three or four years, and I also saw how a corporation functions, I took a step backwards, I turned myself around and decided to go my own way. I then had my own project.

In any case study gave me a technical base. A way of thinking a person simply needs. I also use it daily. Unfortunately, I am not working in the field at the moment, so I would rather relate it to a way of thinking.

What discouraged you so much about corporations?

I worked at the company Auto-motive in the position of an industrial engineer. What discouraged me the most was the open space office for work. When I have to think something up, I need to close myself in so that no one speaks to me. Then I am able to create something. It overall also came to me that the processes were terribly lengthy. When a person wanted to do something he had to go to three people to approve it for



him. I didn't enjoy it. I rather deal with things myself.

What are your memories of study?

I have very good memories. University was the best period of my life. There was fun, parties, all kinds of events and overall a fine band of people. What I enjoyed the most was when people from practice gave lectures. I experienced some really good lectures, where practitioners gave examples from experience, they gave lectures on the real use of knowledge in real life. From my point of view it was far more beneficial than the theoretical lectures of doctoral students.

During your study did you have a problem with certain subjects or did everything go smoothly?

My greatest problem was English. At basic school I studied German. At secondary school I had German and English. I don't remember almost anything from German, because during those lessons I dealt with everything except the language. When I then went to university, I said to myself that I would learn English. But because no beginner's group was opened, I was thrown into

the advanced study. I almost missed the boat. I scraped by the examination from English. I am always learning now and believe that I will be able to completely speak. It is simply not possible today to do without languages.

Can you reveal to us something on the concept of the company BeWooden, where you are now working?

BeWooden is a company, which deals with the sales of women's and men's fashion accessories. We place an emphasis on honesty, craftsmanship, handcraft, quality, natural materials and the overall processing behind it. At the start one of the main ideas was to once again renew the craft tradition. At a time when there were beautiful trades such as a cabinet-maker, tailor or dressmaker. They are fading away and we are seeking to save these professions.

What signifies the products you sell?

We base it on the thoroughness of our manual work and craftsmanship, I mean we place great emphasis on the care and quality of our products. That is why we use only top-quality natural and renewable materials – such as wood and leather.

It is due to the beauty of wood that we believe that we can produce truly unique products, which appeal to a wide range of people who appreciate these values.

You started with a wooden bowtie. Why did you chose just a bowtie and where have you gotten to today?

The bowtie was only a kind of spring-board for us to know if what we were doing had any sense at all. Already after the first year it was clear to us that we had to go full throttle, and other products have naturally come about with their own development, as well as new ideas. We have in our range of goods a wide range of products, such as for example cufflinks, suspenders, wallets, wooden brooches, jewels and business briefcases.

You are one of the most important persons at the company. How did you get this job?

I had already begun to do business at university. A friend founded a cleaning company with a friend, but in the course of time we dropped it. I then went into a corporation, and when I found out it was nothing for me, I founded a shop with a specialization on cycling. I even have it until today. Besides that I was approached by a friend, who heard that I had experience with e-shops, with a request to help promote and sell the first product of BeWooden: a wooden bowtie. I was a fifth-years student and was finishing my diploma work. During the first year I experienced such a „wow effect“. There will be something out of it, there won't be something... After the state exams I chose the way of BeWooden. I thought it was a step in the right direction.

What are you responsible for at the company?

As a technical type I had to take care of the technical facilities of the company. I was responsible for IT, storage, logistics, production, processes and technology. I enjoyed it. I really like these live processes. When I look back at those two years at the company there were five of us. Now we have about 22 employees. At the moment we are moving to a larger area. A person is always trying to push the company ahead.

Have you noticed a connection between the fields which you studied at your job at BeWooden?

In terms of the study of technological management and industrial engineering I learnt a lot about the internal business processes in companies. I perceived that we were just stuck at a point. We reached a phase when, things wouldn't work only on the principle of common sense, so we had to set up a system, and to implement control systems that would control 50-100 people in the future. At least we had a view on what is considered to be a standard in production and what it was used for. I learn rather in practice. But it is the same for anyone who finishes studying at a university.

I noticed that you are now even expanding a lot abroad. Do you work everywhere?

At this time we have nine language mutations of the web. From them we have direct responsibility for five countries, the four remaining ones are the responsibility of our distributors. We have the Czech Republic, Slovakia, Germany, Austria and Switzerland under ourselves. Our distributors ensure transport to Denmark, Sweden, Norway and Belgium. We are even now freshly dealing with Spain, the Netherlands and Taiwan. Outside of distribution we have about 150 various shops around the world, which we supply to. It is worth mentioning Thailand, Australia and America. We are more focused on wholesale and are looking for new distributors.

Who is most frequently interested in your products?

Our main buyers are women. Even if lately the situation is slowly turning

around. We have mostly begun men's products. The bow tie or stylized wallet are fine presents which women give to men. We are aware of the situation, and that is why we have also introduced a women's range of goods.

And what next? In a year, five or ten years?

I don't know. But it would be interesting to me. (laugh) I want to find students at VŠB-TUO to complete their diploma work at our company. At the moment we need to deal with the topics of storage, storage systems and ERP systems. We need to set up a minimal critical general level. If someone would be interested, we could definitely agree that it could be partially paid and in addition to it their diploma work could be done.

Besides BeWooden and the cycle e-shop you also devote yourself to organizing public cultural events. What is waiting for you in the near future?

On July 14 we are organizing the FM City fest. It is a one-day festival, which takes place on Saturday. We are aiming to attract the best of the contemporary Czech and Slovak music scene into Frýdek-Místek. At the moment it looks like the whole programme is quite promising. Lenny, Anna K., Barbora Poláková, Mňága a Žďorp, Paulie Garand, Pokáč are performing there, ... You can just imagine a big gala, just in Frýdek-Místek. It will just be packed!

TEXT: Šárka Sikorová

FOTO: Archiv of Jakub Najdek



Ing. Jakub Najdek studied at VŠB-Technical University of Ostrava in the field Industrial Engineering with the follow-up field Technological Management at the Mechanical Engineering Faculty. Presently he is completely devoted to the company BeWooden in the position of the head of production a logistics and storage processes all together and in the management of the e-shop Element Store: the only specialized FIVE TEN footwear and SKINNERS shoe socks company in the Czech Republic and the co-organizer of festivals

What's up



THE UNIVERSITY AND ART – ART ON CAMPUS

Our university can boast about its new, unique Czech-English publications by authors Eva Špačková, Marie Štastná and Jakub Ivánek called Art on Campus, which is the result of several years of research on artwork in the university buildings and in the connected public areas of VŠB-TUO.

The authors' book was presented to the academic community and guests at the Festive Scientific Council at the end of March, and Eva Špačková from the Department of Architecture of the Civil Engineering Faculty emphasized that art can be an interesting and attractive medium strengthening the identity of the university. Based on work on the book a plan was also created to complete the mapping and recording of works of art focused on smaller artefacts scattered about in individual buildings and places of work (hanging

pictures, small sculptures, elements of design, etc.) and to make a complete record of the university's art collections. From there it was only a step to create a „university museum“ as a place to preserve the lasting value of all university collections. Under the Vice-Rector for Development, doc. Kuda, this intention is supported by the entire management of the university.

CO-OPERATION WITH UPOL HAS PROVIDED A NEW STUDY PROGRAMME – INDUSTRIAL DESIGN

In co-operation between VŠB-TUO and Palacký University in Olomouc (UPOL) a new, 4-year bachelor study programme, which combines a talent for art with a talent for technology, is just about to be accredited. The beginning of the lessons is planned for the year 2020.

In the first two years the students will develop their talent mostly at UPOL in subjects focused on art preparation

(drawing and modelling) and using digital technology (virtual modelling, virtual sketching). For the remaining two years the lessons will switch to VŠB-TUO and will be more practically focused, for example on prototype production and other technology (the 3D printing of plastics, metals and composites, grinding, forming plastics, etc.). Altogether in the 5th semester there will be three specializations: „Materials and Technology for Design“ guaranteed by FMMI, where graduates will obtain complete knowledge in the areas of materials and technology. „Product design“ at FS is oriented on CAD and computer modelling. „Interiors“ at FAST will help graduates be oriented not only on designing residential interiors, but in also using colours and aesthetics.

up



behind the scenes

VŠB-TUO CAMPUS SPORTS GROUNDS CAME TO LIFE on April 26, 2018 WITH COMPETITIONS AND SPORTS ACTIVITIES, WHEN THE TRADITIONAL SPORTS DAY WAS HELD!

The Department of Physical Education and Sports (KTVS) prepared for students and staff of VŠB-TUO a total of ten possible sport activities, mostly involving types of competitions, but in some places those interested could just train without any obligation. In the KTVS Fitness Centre students could train for free under the expertise supervision of an experienced instructor, in the aerobics hall three different lessons were offered (dance joga, functional training and tabata) and the interest was really high. On the more relaxed sports grounds of the Karviná-Lipiny Golf Resort students and staff could try the driving range and putting under the guidance of an instructor.

The main attraction between competitors was the „Big Faculty Duel“ in rowing on rowing machines, which was held directly in the vestibule of the Rector's Office in Building A. The objective was to put together a faculty team and try to complete a marathon, although it did not succeed despite considerable efforts. The winners were the FEI team consisting of Pergl, Kvita, Majoros and Konečný, who did 32 756 m, thanks to their excellent finish second place was occupied by the FS team (30 343 m) and the FMMI team finished third by a minimal margin (30 314 m). Exemplary co-operation between students and staff was exhibited by the FMMI, FS and HGF teams, where members of faculty management were also on the training machines.

THE MINI GRADUATION OF FOREIGN STUDENTS

On the basis of an international agree-

ment between VŠB-TUO and the Ministry of Education of the Dominican Republic since the year 2014 students of our university will be placed into the scholarship programs of the Dominican government.

Students from the Dominican Republic, who apply for the VŠB-TUO courses mentioned in the international agreement and who are admitted to study, will receive from their government a scholarship covering study fees and the living costs connected with their stay in the Czech Republic. The first branches connected to this subsidy programme were at the faculties HGF and FMMI, USP – Mechatronics. We congratulate further new graduates of this programme!

DECISION ABOUT THE LOCATION OF THE ECONOMIC FACULTY OF VŠB-TUO

After lengthy consideration the Rector of the university Prof. RNDr. Václav Snášel, CSc. decided in the middle of May to relocate EkF to the campus in Poruba. So in the future the university can expect one of the greatest changes in its history.

The university had to choose between two variants. The first was to leave EkF in its existing area, which would need necessary reconstruction, the second variant was to relocate it to the Poruba campus with a newly constructed building. On the basis of considering all possibilities, the economic and organizational demands of building and reconstruction, the number of faculty students, its future and development, the possibility of building a new construction, resp. or renovating the Heaving Testing Laboratories building, which stands along Studentská Street on the university campus.

VŠB-TUO NEGOTIATES CO-OPERATION IN KURDISTAN

At the beginning of May our university newly linked up co-operation in Automated Fields with Iraqi Kurdistan. University Rector Prof. RNDr. Václav Snášel, CSc. on 3. 5. 2018 signed a memorandum of understanding with the Rector of Nawroz University in Duhok.

After the signing of the document areas were made open for research co-operation. The co-operation agreement contains in addition to other things, the number of research fields of common interest (a geological survey of Kurdistan, petroleum engineering, petroleum geology, petroleum reservoir engineering, raw material extraction, IT technology, the digitalization of 4.0 industry, the topics of electrical energy, renewable energy sources, co-operation in the fields of the construction industry, economics and other areas.).

In the future the objective is to create a joint research infrastructure, which will be the basis of a joint study programme. Its teachers will obtain education in the Czech Republic and will together with visiting professors from the Czech Republic personally transform themselves in given areas. Young people from the area of Iraqi Kurdistan will not have to leave their country in order to obtain a



top-quality technical education. They will study in a given field with the help of VŠB – Technical University of Ostrava in their own country.

THE POPULAR STUDENT „MIXER“

Student life was never only cramming, lectures, tutorials or examination periods. It is a life step, which besides piles of responsibilities young people want mostly to enjoy. It is not any different at the Civil Engineering Faculty where the popular student happening „Mixer“ has been held for many years.

It is a knowledge and skill competition, the purpose of which is to introduce individual study in an informal and en-

tertaining form and the strengthen ties not only between students, but between teachers as well. The entire meeting is organized by the Student's Senate in co-operation with the Faculty staff. The popularity of the event is proven by the fact that it is hopelessly sold out several weeks in advance.

This year a total of seven teams competed in four disciplines and the venue returned from the former washrooms of the Lower Area of Vítkovice back to the grounds of the Civil Engineering Faculty. Specifically to the school gymnasium. After a fierce but honourable fight and the adding up of points, the winner of this year's „Mixer“ was the team from the field „Transport Engineering“.





The CS:GO Tournament in terms of the ESPORT VŠB-TUO LEAGUE 2018

The first tournament of the year, which was held under the main student organization Esport VŠB-TUO, was CS:GO. The captains registered their teams with a player ratio of 5 + 1 substitute. The whole tournament was organized on PLAYzone. cz and eventually 15 teams were registered. The tournament reached its peak on May 4, 2018 with the finals, in which four top teams competed directly on the campus of our university. They fought for the prizes from the organizers and sponsors of the competition, plus participants newly gained points in the ranking of the Czech Championship. Of course, in the final tournament there was a live stream with commentary.

Since the beginning of the year 2017 much has changed. Work done can be seen by the more frequent participation of teams, which succeeded in attracting more partners and in improving the prizes and facilities for Esport. Thanks to the off-line qualification the whole country can participate as well as those from abroad. The contestants and spectators anticipated a lot of energy drinks, legume chips, socks, mice, pads, ear phones, keyboards, drawings and other prizes. And also a borrowed PC from Xdiablo/ Xplay, thanks to which players had 144Hz monitors available and FPS as much as you could wish for. Cups and

material prizes were won by the teams: HexCom.eSp, godzfm.reborn a Revital-Gaming.SEMTEX.

In June there is going to be a competition between VŠB-TU Ostrava and VUT in the WERK Arena in Třinec.

THE „BUILD YOUR OWN ELECTROMOBILE“ CONSTRUCTION SET

VŠB-TUO is co-operating on preparing construction sets, determined for secondary school students. It complements a wide range of popularization activities, which should raise the interest of young

people in technical field studies. KAIPAN 415 has an electric motor, three gears (1 forward, 1 neutral, 1 reverse) and front wheel drive. It can reach a maximum speed of 40 km/h and has a range of 40 to 80 kilometers depending on the placement of the battery or the extension unit. It does not produce any CO2 emissions.

TEXT: Marie Boháčková
 PHOTO: VŠB-TUO Archive
 SOURCE: VŠB-TUO press releases



The University sets out for festivals and other open air events.

During the entire academic year VŠB – Technical University of Ostrava offers the students of schools and their teachers visits to specialized university workplaces. With the coming of spring the university will also again get closer to the general public through its active participation in a number of open air events in the region. The popularization programmes of university workplaces reminds us that science and technology are part of our everyday life and also that technical branches are highly attractive. Technical branches attract the youngest of visitors, as well as older children and their parents.

The first successful spring event was the celebration of Earth Day in Ostrava – Poruba in April. The concrete surface of the roundabout on Main Street came to life with stands and exhibits on the theme Life in Motion. The working centres of VŠB-TUO jointly exhibited and created a principle part of the programme. Teachers and students of the Mining-Geology Faculty from the Department of Environmental Engineering, the Planetarium, the FEI Physics Department, the FAST Department of Urban Engineering and the Energy Research Centre prepared popularization exhibitions.

Already for the fifth time on the second weekend in June university workplaces were jointly presented at the Technical Days in Kopřivnice under the name Technology Will Be Improved. Tatra events in the Kopřivnice Polygon Complex traditionally attract up to twenty thousand people, while the VŠB-TUO exhibition is one of the favorite stops for people. This year for the first time we are building a campus town in an area where at least five workplaces will be presented.

Playing with chemicals and natural sciences are awaiting visitors in terms of the event Chemistry at the Castle, and

the day for it is June 26. This interactive programme for thousands of schoolchildren from the region is mainly created by chemists from FMMI and IET, but also from other university workplaces.

The focal points of the holiday months will be the university's participation in music festivals. In the area of the Moravian-Silesian Castle on 29.–30.6. we will present our technology at the Leisure-Time Festival in the streets. Visitors to concerts of various age groups will be able to play, construct, get to know and experience intelligent entertainment. Similar to last year we will also perform at the multicultural festival Colours of Ostrava on 18.–21.7. Our teachers Eva Špačková, Petr Šimoník, Filip Řezáč, Pavel Krömer and Pavla Rygelová, the head of the university library, will enrich the melting pot science with lectures from all fields on the theme of „sharing“. In front of the World of Technology at Vítkovice's Lower Area we are also preparing thematic workshops and presentations.

On September 9 the university campus comes to life with the university-wide festival Art & Science. This year it will be connected to the tradition of establishing the Faculty of Electrical Engineering and Computer Science. „From a faculty event we wanted to try to shift it to a presentation of the university as a unified whole while at the same time fulfilling the main idea of Art & Science, it is to show the beauty in science and at the same time to show that art is a piece of science,“ Jarmila Černá from the Department of University Popularization states. During this one day and evening the university will present itself in a different world – not only as a place of science and research, but also as a place of creative thinking with an overlap into the art of creativity areas. The programme will be specialized and art oriented so that both levels naturally come together and complement each other.

The open-air programmes will not end

even with the advent of autumn. On October 5 the university is open to visitors in terms of the popular the Night of Scientists, where technology and the presentation of science will not only come to life on the campus of the university, but in a number of other places around all of Ostrava. Since 2016 we have held the Night of Scientists with Ostrava University and in the name of our University and Ostrava's we are making presentations in at least in another 15 towns and 30 scientific and educational institutions. Since last year our university has been a member of the co-ordination team of the Night of Scientists in the Czech Republic.

„The objective of the Night of Scientists is to bust the myths about male and female scientists as people closed in laboratories and to show the wider public that scientists are „ordinary people“, who work beneficially for each other, and are able to do it imaginatively, and to also be entertaining. To bring young people to science and technology, but also their parents and grandparents. This is especially the objective of all the events, which we organize for the public,“ Jarmila Černá adds.



TEXT: Tereza Benešová

PHOTO: Petr Novák

Confucius classes at VŠB-TUO

In April 2018 students and staff of VŠB-TUO had a chance to visit the Open-door Days of Confucius Classes.



A Confucius classroom is the result of the joint efforts of VŠB – Technical University of Ostrava and the Chinese Hebei GEO University to centralize a Chinese language and individual aspect teaching centre, such as for example art or culture, both for the academic community, and for the public of the Moravian-Silesian Region. The classes will be financed by grants from the Confucius Institute which has its headquarters in China. In this way VŠB-TUO will join an international network of over 400 similar institutions at universities around the world.

At the Open-door Days in April visitors could take a look at activities, which will be offered since the winter semester of 2018/2019 at VŠB-TUO. They had the possibility of widening their knowledge about China such as by trying calligraphy, traditional ink painting, tasting different Chinese teas and other areas. In the course of the Days event visitors filled out questionnaires, and showed their greatest interest in group courses

for learning Chinese. Among other things the results have shown that the future activities that visitors are interested in are courses in calligraphy and being acquainted with the tea ceremony. The event was attended by not only Czech students and staff, but also by foreign students. There were also positive ratings for Chinese student Chuzhuang He, who is presently studying at the Economic Faculty of VŠB-TUO. Samuel performed a play on the traditional Chinese string instrument Er – hu and also taught visitors how to play it.

Given that Open Days were also available to the public, and students and schoolchildren from the Moravian-Silesian Region, they also welcomed students from the first and second level of the basic school Monty School. They tried out the activities that were available, listened to a presentation on a topic connected to Chinese culture, which they chose themselves, and finally got little cards with their names written in Chinese symbols.

From October 2018 genuine Chinese language courses will take place and it will be in co-operation with the Language Department of VŠB-TUO. Courses will also be offered at the University of Ostrava, where up to 60 students will attend it next semester. Participants of the course will also be able to learn how to write and understand up to 150 Chinese signs. Activities during the lessons will include group exercises, and becoming acquainted with the Pinyin font. Students will be able to react on how to deal with basic problems in everyday life and to lead simple conversations in Chinese, for example, greetings, orientation, speaking about work and study, how to order food in a restaurant, shopping etc.

They of course will be led by a native speaker qualified in teaching. For participants in the class there will be made available calligraphic brushes, paper, textbooks and other study aids and materials. Lessons in groups of a maximum of 10–12 students will be carried out exclusively in English, and it is then necessary to have it at least on a communicative level.

In addition to courses at VŠB-TUO there is also the possibility of visiting lectures, which will be focused on art, Chinese medicine and acupuncture, taichi – Chinese martial arts, and other areas.

Contact person:
Kristina Hoblíková Nguyenová, M. A.
kristina.hoblikova@vsb.cz

TEXT: Kristina Hoblíková Nguyenová
PHOTO: Petra Valášková

Career Center of VŠB-TUO is expanding



The Career Center of VŠB-TUO is one of the few university career centers in the Czech Republic which also offers its services to its graduates. That is why you should not hesitate and visit our web <https://www.vsb.cz/karierni-centrum>, where you will find a wide range of counselling and educational activities. We can help you with your curriculum vitae or motivation letter. By using personality-professional tests you will get an overview about your work potential, and thanks to coaching you will increase your productivity and work efficiency.

Since it started to function at the university we have prepared dozens of events, seminars, workshops and lectures, at which several hundreds of students have participated from all faculties. During the past half-year there were for example the workshops Professional Image and Behaviour, MBTI Personality Types and Job Selection,

Leadership, Assertivity and Project Management. The range of job opportunities on our website is broad and interesting, and determined just for students and graduates of VŠB-TUO. If your company is looking for co-workers in working positions suitable for graduates of VŠB-TUO, do not hesitate to contact us.

KARIÉRA PLUS 2018

In March 2018 there took place the twelfth anniversary of job fair opportunities Kariéra PLUS. A wide range of 104 employers came to look over 4000 visitors. These numbers annually make Kariéry PLUS the biggest jobfair of its kind in the Moravian, Silesian Region. At this year's Career Centre programme there were again lectures and discussions with employers. Without a doubt the biggest star was Czech Businesswomen and HR manager Rostya Gordon Smith, who had an interesting lecture on the

topic We are Already Living the Future. „We often have the future just now”. Some people live it, use it and prosper, and some do not”. They say I am already too old, I don't understand it, I will not need it. To live in the future means also that we anticipate what will be good for us, how we will communicate, how we will work,” said Rostya Gordon Smith in an interview about her lecture at this year's Kariér PLUS.

WHAT IS NEW HERE

Since January 2018 the Career Centre team of VŠB-TUO has been expanding... The centre was connected to the section Business Support and so a new university department was founded under the name Business and Careers. The main office of the Career Center has been shifted to the building of the Business Incubator. At the same time it has taken over the administration of all kinds of university advertising.

WE ARE PREPARING FOR YOU

We are glad that the Career Center has obtained its own area, which will be available for small workshops and individual consultation. From September we will be glad to see you in Building C (the ring) of the Poruba campus. We will post our open hours in the new area for consultation, which you do not have to make an appointment for in advance.

A further innovation is the expansion of our range of activities. For October 10th write into your calendar the lecture of former long-time Microsoft manager Jan Mühlfeit on the topic of student potential in terms of education. In the winter semester you can for example further look forward to the courses English Improvisation Methods, the Academy of Speaking and the Personal Development Package of a University Student. All sorts of existing CC services will continue and our website will receive a new, user-friendly coat.

Career Centre Services

After the coaching of Vlastík Holčák in the last Alumni issue now comes a series of personality-professional tests by psychologist Pavla Šňupárková.

PERSONALITY-PROFESSIONAL DIANOSTICS helps to reveal the strengths and weaknesses of your personality. It involves tests which discover your personality features that are necessary for employment success. And how does all take place? At first you fill in two on-line questionnaires, both of them lasting about cca 25 minutes. The results of the test will be consequently interpreted for us by our psychologist. Personality-professional testing will make it easier for you to select a suitable job and to help you specify the preparation for it.

AT THE CAREER CENTER WE WORK WITH
TWO TYPES OF QUESTIONNAIRES:



HOGREFETESTCENTRUM – BIP – BOCHUMSKÝ PERSONALITY QUESTIONNAIRE

It is a personality questionnaire, which on the basis of your answers shows your personality characteristics related to work. It focuses on your approach to work, working behaviour, social competence and psychological constitution. The questionnaire is also suitable for planning your career.

HOGREFETESTCENTRUM – SVF 78 - COPING WITH STRESS STRATEGIES

Everyone gets into situations which are not pleasant for them. Throughout our lives we create strategies, to manage the burden. Some we are aware of and are planned, while others appear automatically unplanned. Methods of dealing with stress can be distinguished according to their type, measure, function and efficiency. The Career Center of VŠB – TU Ostrava co-operates in the area of interpreting the personality-professional tests of PhDr. Mgr. Pavla Šňupárková. Pavla is an certified psychologist, psychotherapist and lecturer working in Ostrava and is also a responsible and discrete counsellor perceiving the needs of others. She is a graduate of Palacky Univerzity in Olomouc, in single-branch psychology in a masters' programme and the Ostrava University in Ostrava, in the field of Education with a focus on leisure time and resocialization. She further graduated from a five-year psycho-therapeutic practice in Cognitive Behaviour Therapy and a post-graduate course in Transport Psychology at Palacky Univerzity in Olomouc and from a basic course in hypnosis.



„The personality tests with the resultant consultation from a professional quite opened by eyes in regards to understanding myself, especially in the field of what is actually the „driving force“ and has lead me to better results,“ a student of the Economic Faculty said after passing the personality-professional test.

Moreover, the services of the Career Centre are free for all students and graduates of VŠB-TUO. That is why we are trying to improve our services and their range, and we also welcome your suggestions which you can send to the e-mail: karierni.centrum@vsb.cz. We are looking forward to our future co-operation and seeing each other at some event!

TEXT: Alice Šustková
PHOTO: VŠB-TUO Archive

Program in support of enterprise GREEN LIGHT knows the winners

On Thursday April 12th, the award ceremony for the final 5th year of the GREEN LIGHT program in support of enterprise was held in the University Auditorium. Eight commencing business ventures presented their work for the jury and audience. The jury and audience chose the personal atmosphere meter Dustee as the most successful, followed by a system to visualize 3D contents and a new aid for plastic surgeons.

„This year was one of those years when you have fewer projects, but they are all very good and have perspective. We are pleased that the focus of the projects is wide, from downright IT technologies, through design ideas, projects for travelers and athletes, to projects connected with medicine. Another great plus is that some of the projects have also great social overlap,“ said the program mentor and the head of the Business and Careers Department Andrea Šimoníková.

For the 5th year of the GREEN LIGHT accelerator, 38 projects applied, and 8 of them successfully finished the intense 3-month program. During the final evening, they were presented for

the audience and jury, consisting of investor Miloš Lukačka, journalist Miloš Čermák and e-commerce entrepreneur Adam Kurzok.

„Thanks to the partners of the program these projects had a chance to create initial prototypes, establish important contacts, and complement their teams, which is very important at the beginning of every business. Some of the projects managed to initiate trade negotiations with successful companies in the course of the accelerator, e.g. Velux, Philips, SAP...“ says Jan Adam Plaček, one of the mentors working in the Innovation Support Centre

And so what was the result?

The jury, audience and the Moravian-Silesian Innovation Center chose the project Dustee with its personal atmosphere meter. The second best project was QuineEngine, an IT platform for 3D visualisation, and the third prize was won by the project Bellecup, and their innovative instrument to collect adipose tissue, which was designed for aesthetic and plastic surgery.

The VŠB-TUO Rector's award, worth

20, 000 CZK, was awarded to VŠB-TUO students Jan Tyc and Miloslav Szczyпка for their project WapsInvoice that can greatly facilitate the work of accountants.

The projects Joystree and their application for sharing sport and travelling equipment, Domiro with a design panel for PCs, and the aforementioned projects WAPS Invoice and Dustee were supported by the company Brose, which paid 100, 000 CZK for their start-ups.

During the Start-up Show, the unique cycle carrier El Stylo of Honza Voráček was also presented, as well as the project EDDIE by clinical psychologist Petr Nillius presenting his neuron rehabilitation software that in the form of gaming helps patients with brain damage.



GREEN
LIGHT

TEXT: Lenka Kolarčíková
FOTO: VŠB-TUO Archive

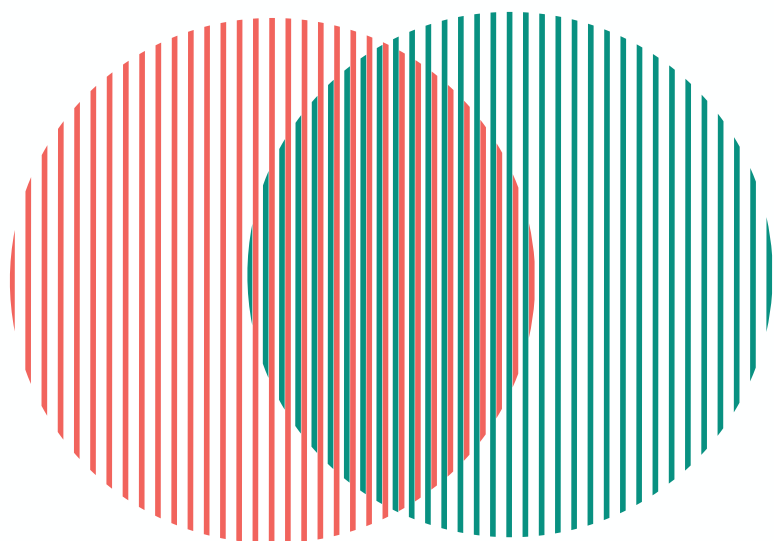




VŠB – TECHNICKÁ UNIVERZITA OSTRAVA
VÁS ZVE NA IV. ROČNÍK FESTIVALU

Art & SCIENCE

PROTOŽE I DĚLAT VĚDU JE NĚKDY UMĚNÍ A DĚLAT UMĚNÍ JE PĚKNÁ VĚDA



6.9.2018

IVAN MLÁDEK a BANJO BAND
N.O.H.A. / ATMO music

POKUSY/TECHNIKA

9:00-22:00/KAMPUS

ul. 17. listopadu v Ostravě-Porubě

OSTRAVA!!!
PORUBA



ARTANDSCIENCE.CZ

Ostrava will lead the nationwide Night of Scientists

The Ostrava's team became a new coordinator of the nationwide event Night of Scientists. This event, which is under the auspices of the European Commission, is facing major innovations.

Every year during the Night of Scientists research centres and universities are opened to the general public. It gives people a great opportunity to literally have a peek at the world of scientists. This scientific and popularising event, backed by the European Commission, is very popular in the Czech Republic, as it received a record number of 50 000 visitors last year, who visited 23 different institutions, such as universities and research centres and institutes.

Up to now, its coordinator has been the Pilsen Techmania Science Centre, which now passes its imaginary baton to the Ostrava's team composed of three institutions that provide the Night of Scientists in Ostrava: the University of Ostrava, VŠB - Technical University of Ostrava, and Science and Technology Centre in the Lower Area of Vitkovice.

OSTRAVA IS IN!

The Night of Scientists has been taking place in Ostrava since 2013 when it was organized by the Faculty of Science at the University of Ostrava. Later on other faculties gradually joined in and from 2016 the University of Ostrava started to cooperate with VŠB - Technical University of Ostrava, and the Science and Technology Centre. Thus, this event literally interconnected the entire city, as it was held at a total of 16 locations linked by free public transport, and offering almost 200 programs: fascinating experiences, workshops, lectures, experiments, guided visits, meetings with



scientists and the like.

It has become one of the biggest Nights of Scientists in the Czech Republic, and this rocketing success brought in the top teams from the whole Czech Republic to this event.

VISIONARIES WITH THEIR FEET ON THE GROUND

“We are a team of visionaries who can keep their feet on the ground, and I think this is our strong point. We can envisage our future, and the Night of Scientists belongs among the most popular events in the Czech Republic, and its date will be an important date in the calendar of every city. And we can see the way to get there. However, we need to build this future on the present, on human resources and finances,

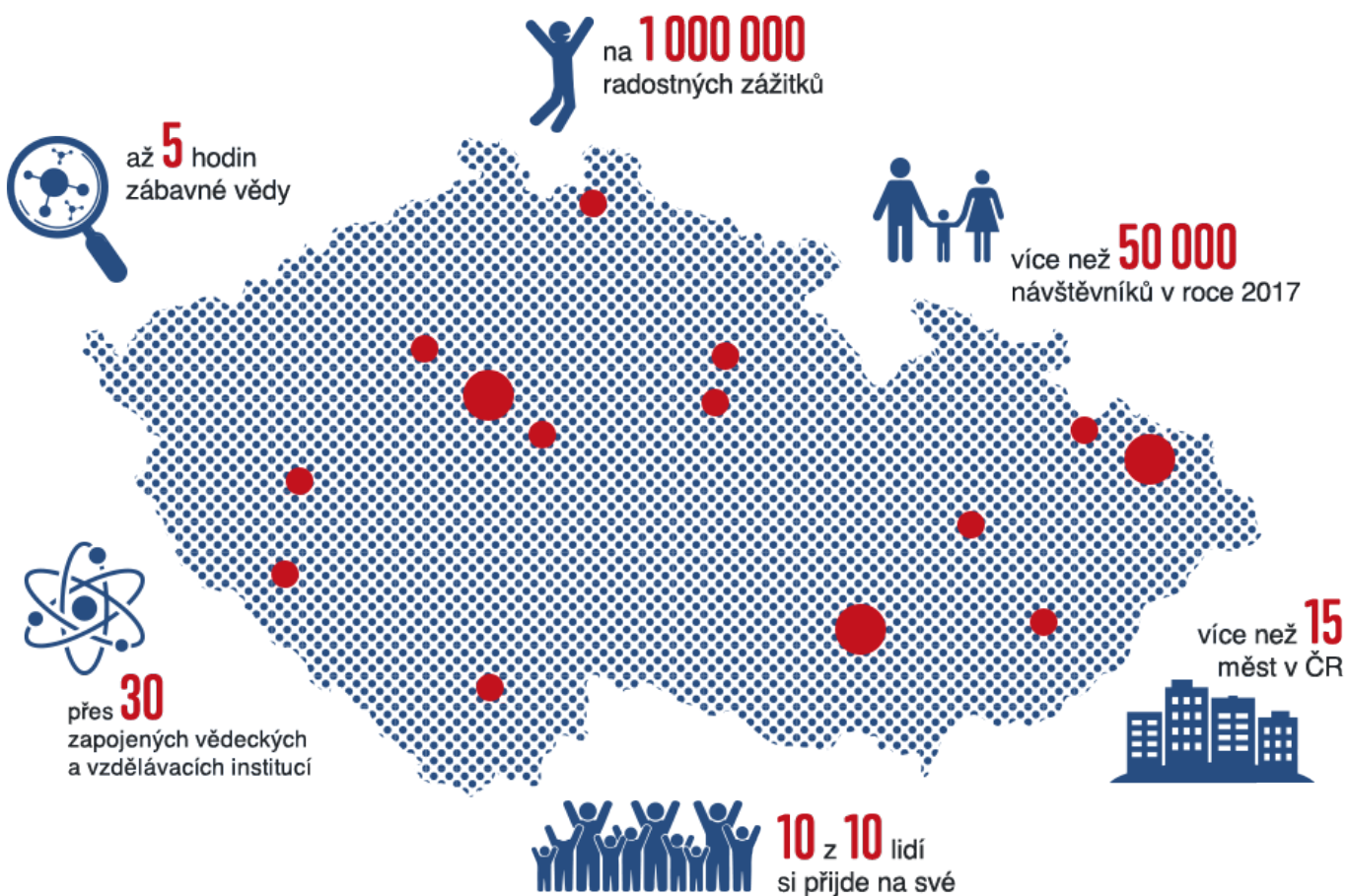
which are now quite limited,” explains for the team organizer and spokesperson of the University of Ostrava, Adam Soustružník.

The Ostrava team, therefore, wants to start with the unification of the event, which is currently rather split into dozens of smaller events. “There is much work to do for us, we meet intensively with the organisers of all subset Nights of Scientists, are finalizing our new website that will become a signposting service to all those places in the Czech Republic involved in this program, and we are also negotiating for financial support from institutions and companies” so Jarmila Černá from VŠB - Technical University of Ostrava describes the first steps of the Ostrava team in their role as the national coordinator.

2018: 100 YEARS OF CZECH SCIENCE

The Night of Scientists will take place on 5 October 2018 from 5 p.m. to 10 p.m. Each year it is linked with a new original theme. This year this theme easily suggested itself. The 100th anniversary of the Czech Republic clearly determined the theme for the Night of Scientists: a 100 years of Czech science. Visitors can once again look forward to unexpected interlinks of this theme and genuine insights into the distant past, which we know only from our lessons on history. A detailed program, as well as other news about this year, can be soon found on our official website www.noc-vedcu.cz (Ostrava's mutation www.ostravs-kanocvedcu.cz).

TEXT: Petra Polesová¹⁶
PHOTO: VŠB-TUO Archive





faculties

And what innovations have our
faculties prepared for you?

The Geological Pavilion of Professor František Pošepný offers a unique view of a beautiful worldwide stone empire

For students of VŠB - Technical University of Ostrava is this Geological Pavilion is a well-known centre. But the public often does not know that this pavilion is accessible and opened to all, and it not only provides an exhibition of approximately 16,000 pieces of exhibits, but also other activities which all age categories can enjoy.

The Geological Pavilion of Professor František Pošepný in Ostrava belongs to the Faculty of Mining and Geology at VSB-TUO, housing all the geological collections of this university. At present, there are a total of over 78,000 exhibits. The oldest part of the collection comes from the year 1849. A collection of minerals was acquired for teaching at the Mining Academy in Příbram at that time. This small mineralogical collection was gradually expanded, thanks to enthusiastic teachers and staff. The same principle of obtaining exhibits is still applied today. In 1945 the school, at that time already known as Vysoká škola báňská, moved from Příbram to Ostrava. Of course, with its entire collections. These were placed among geological departments in Silesian Ostrava, but there was not sufficient space for their proper display. Only a small part of it was installed. Only after the construction of the VSB-TUO site in Ostrava-Poruba was finished, in which a new pavilion was built, did these collections gain an appropriate location.

The collections were divided into 20 exhibitions, e.g. the collections of mineralogical, petrographical, regional, deposits and more. The pavilion was opened in 1989. „It was originally intended for university students and teachers. Today,

it is open for each student or person interested in inanimate nature. Not only students from the Faculty of Mining and Geology visit this pavilion, but also students from other faculties of our universities. In addition, we are often visited by students of secondary schools and pupils of primary schools with their teachers to widen their knowledge of natural sciences,“ said the head of this workplace, Ing. Martina Polášková, who was our guide. Our lecturers not only guide children around this pavilion, but they also prepare lectures or various worksheets for them. In addition, a new classroom was built in the pavilion for school excursions, where pupils and students can test themselves on which minerals they can already recognize, try out various features of these minerals or play mineralogical picture matching and dominos. There are also located here models of volcanoes and caves. Simply, children are not bored here. For young and lighted geologists the staff of the pavilion regularly at the end of April organizes a competition called the Geological Hammer. Students can participate in this competition in three categories, divided into the pupils of primary schools, the students of multi-year grammar schools, and students of other secondary schools. Anyone can really take part in it. And it is obvious that this competition is popular. „At the beginning, we expected to have ten teams with one to three students. Today, we are welcoming an average of ninety students for one grade,“ says Martina Polášková. Any students can enrol, from schools in Ostrava and elsewhere. These participants must first do tasks when sending in their applications. Then they are invited to visit the Geological Pavilion, where the next part of

the competition takes place in the form of tests, the recognition of minerals or other tasks.

We started our tour on the ground floor at the „incremental“ part of the collection. As employees of the faculty, its graduates, current students and other soulmates keep supplying interesting samples, the latest ones are located here. Our next steps, led mainly by our own curiosity, took us into a room with collections of radioactive materials. Here you can find examples from almost all uranium basins within the Czech and Slovak Republics. „In this room, we can remain for a precisely a short period only, as there is radiation, although it is of a modest level. Otherwise, the room is secured from radiation leaks into the surrounding area by special plaster and lead doors. In addition, a powerful fan ventilates the radon gas, which is released from the samples,„ so there is no danger,“ reassured us Martina Polášková. The stairs up led us to the first floor of the collections, with exhibits of mineral deposits from the Czech Republic, Slovakia and the world.

On this floor, we can find the collection of Professor František Pošepný that displays mineralogy from an ore deposit in Příbram, collected in the second half of the 19th century. For any layman, it is difficult to assess it, but apparently, it is one of the most valuable parts of these collections in the pavilion. Such beautiful samples would be hardly found in Příbram today. Right next to this collection we can see the expositions of Professor Jaroslav Havelka, that he personally installed in this pavilion, and later in his life he donated his personal

collections to the university. So we can admire beautiful agates from the foothills of Krkonoše or jaspers from Krušné hory. On the next floor, we admired beautiful minerals, e.g. pyrites ammonites, emeralds, barytes, or coloured quartz varieties. Various fossilized wood or other fossils were also worth seeing, for example, trilobites, ammonites, or prehistoric plants. Although we dwell in a relatively quiet part of the continent, in the pavilion we can also find in the form of volcanic cylinders evidence of former volcanic activity in the region of Jeseníky. Simply, everyone will find something to enjoy. All the exhibits in these collections are labelled with names, but also with the locations where the geologists found them. For those who want to learn more, there are also various additional visual materials. Another notable fact here is also the direct connection with the Moravian-Silesian Region. „We have an interesting collection from the Ostrava-Karviná District which in layman’s terms represents the raw material - hard coal, extracted in our region,“ pointed out the head of the department. It is really important to preserve this almost historical evidence of mining activities provided in our area for future generations. Another interest collection is the one from area of Jeseníky, dedicated to previously the extracted ores of lead, zinc and copper. Our region also has a new Geology Park. It is about the regional geology of this area, which is located at the intersection of the two geological units - the Bohemian Massif and the western Carpathian Mountains.

This pavilion is not only visited by students of primary, secondary schools, and universities, but also by students attending the University of the Third Age, and last but not least by elderly visitors from the general public. “The Faculty of Mining and Geology for 26 years has provided of the University of the Third Age. Our Faculty started to offer this form of lifelong education as the first at VSB-TUO. It started with a handful of people, but today there are almost 200 participants studying this programme,” Martina Polášková adds information. There are several study groups, and they are smaller in size, in order to improve the contact among the students themselves, but also among students and teachers. Our



Professor František Pošepný

The Geological Pavilion was named after Professor František Pošepný. For the general public, he is a perhaps an unknown person, but geologists recognize him as a founder of modern deposit geology.

Professor Pošepný worked for many years as a geologist in Austro-Hungarian monarchy. He described a great number of deposits, and at that time he also worked for the Mining Academy in Příbram, where he not only lectured but also devoted his time to the ore deposits in Příbram, which he described in a wide range and with great knowledge

seniors can choose from six two-years programmes this academic year: Society and Natural Science, The Foundations of Geology, Applied Geology, Man and the Environment, Geo-Montane Tourism, or Information, Communication and Multimedia Systems. Students of the University of Third Age in the framework of their studies regularly visit places linked with their lectures. For the academic year 2018/2019 the following 1 year subjects will be reopened: Society and Natural Sciences, Geo-Montane Tourism and The Foundations of Geology.

Mineralogical meetings are scheduled events that are organized by the Geological Pavilion twice a year, in the springtime and autumn. “These mineralogical meetings have gained fame throughout the whole country. When we started, some 200 people came. Today, we welcome over 1,500 visitors. We have exhibitors from all over the Czech Republic, Slovakia and Poland. Various minerals, rocks or products from these products of nature are displayed. A great deal of interest is also about fossils and jewellery manufactured using minerals. A wide range of complementary books on materials and articles are available here, which are specific to the subject of geology and mining. This event is often attended even by people engaged in esotericism, as they find applications of various minerals in amulets and medicinal stones,” says our guide.

The geological pavilion also takes part in events such as Earth Day and World Water Day. It is also a partner of the Week of Science and Ostrava’s Night of Scientists. In cooperation with the Popularization Department of VŠB-TUO, this pavilion also organizes a mineral club for secondary school students. Children are here divided into two groups - beginners and the advanced- spend the time deepening their expertise in the area of mineralogy, and they also spend a meaningful time with their friends, who share similar interests. Our doctoral students from the Faculty of Mining and Geology are actively involved in the various activities of the pavilion. They help to organize the Geological Hammer event, provide lectures for visitors, and assist with other events. We could not do without their help in so many activities, and they also gain valuable experience for a future professional life. If the geological pavilion has caught your attention, you can find more details about it and its activities on the web page <https://geopavilon.vsb.cz>, or contact the pavilion staff directly.

TEXT: Barbora Urbanovská¹⁶,

Šárka Sikorová

PHOTO: Archiv of HGF

The formal presentation of the VECTOR 04 prototype

On 10. May 2018, at 10:00 in the auditorium of VSB-TUO for the fourth time a new racing prototype from the designers of the student team workshop Formula TU Ostrava was presented. This event in the Formula Student community, comprises 500 teams from all over the world, known as the so-called Rollout. Every year student teams measure their strengths at racecourses in a total of three categories. The first group is designed for the formula with an internal combustion engine, which includes our Ostrava team. There is also a category dedicated to electrical single-seaters and a relatively new category for unmanned aerial vehicles that thanks to the cameras and sensors can guide themselves through a circuit marked by skittles. The results from these races are further reflected in the placing of individual teams in the world rankings.

Despite the fact that a vehicle is mainly designed for full deployment on a racetrack, an important aspect of the Formula Student is not merely an automobile race, but a highly educational project focused on designing a car and the working of the team. Students can

try out in practice what it means to develop a racing prototype. During these races not only the outcome of the young designers' work is tested in narrow chicanes and slaloms, but also the designers themselves, because in addition to the racing the committee also evaluates the so-called static disciplines. There the Cost Report is assessed - the cost of studies in which all parts of the car are quoted, a Business Plan - students in this discipline present their business plan, which should prove that the designed formula can make money in the real world. From all the static disciplines the part most rated is the Design Report - defending the car's design in front of people from the automotive industry - design engineers from companies such as Porsche, Maserati, or Skoda Auto.

Thus a team must prove that they are technologically progressing forward and trying to innovate their work. As a former strategist of the Formula 1 Ferrari team and the head of the Formula 1 Brawn GP, Ross Brawn said: "There are only two innovative forms of motorsport - Formula 1 and Formula Student." For the technological level at which we find ourselves, we owe it first to our

sponsors, among which inter alia belong Brebeck composite, Brose, Skoda Auto, Moravia-Silesia Region and many others. In cooperation with numerous partner companies, we have developed for this year e.g. equalizing bars using the 3D metal printing technology, and a DRS system, which can lower the rear wing, thereby reducing resistance on the straights. This optimizes the speed on the straights, which there is no need for such a large aerodynamic downforce as needed in the curves.

All of this is possible only thanks to the trust that VŠB - Technical University of Ostrava puts in this project, and thanks to the diligence of several committed students, for which sitting at the desks during lectures is not enough in their hunt for new knowledge, and who are grateful for the opportunity to contribute to this ambitious project under the auspices provided by Faculty of Mechanical Engineering at VŠB - Technical University of Ostrava.

TEXT: Formula TU Ostrava Team
PHOTO: Petr Sznepka



We are Lifting the Load to the Heavens



Students of „Transport Machinery and Material Handling“ in the framework of its lectures together with its lecturer doc. Ing. Leopold, Hrabovský, PhD have drafted, designed and assembled two models. Specifically, they are a model of a lift and a crane.

Lifting models are represented by the two fundamental principles of lifting drives - electrical and hydraulic, and the three most commonly used ways how to move a cab. Electrical lifts use steel cables with finite lengths. At one end of the cable in both variants the cab of the electric lift is anchored (with a frictional disk or a cable drum). For an electric lift with a frictional disk the cables are led in the grooves of friction (driving-) disks and the other loose ends of the bearing cables are attached to weights. Cab movement is possible as the result of fibre friction, which is manifested between the cables belted along a relevant

length of the friction disk. In the case of an electrical drum, the other end of the carrying cable is reeled around a cable drum (without any need for weights).

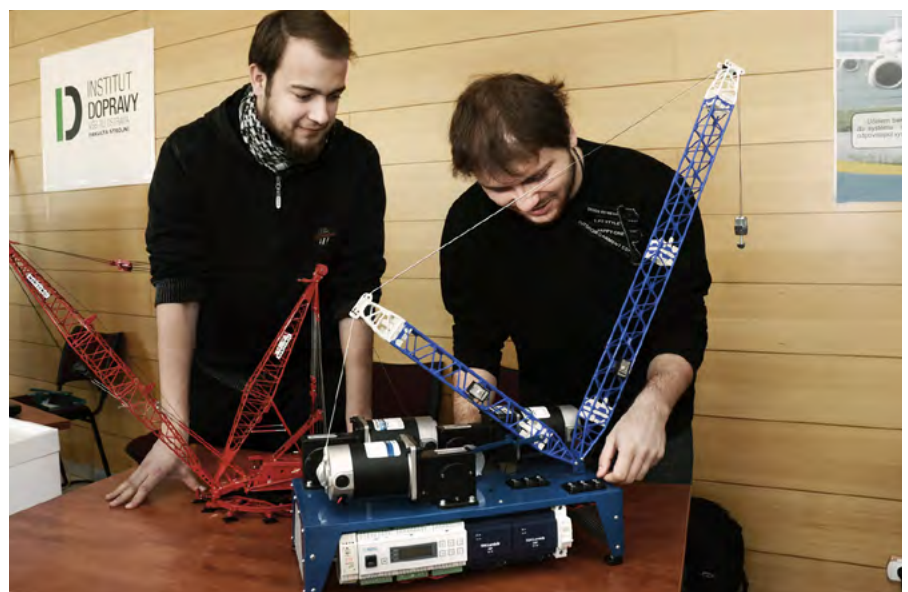
In the case of hydraulic lifts, there is no need to use the steel cables, as the movement of the cab is done by sliding a piston attached to the lower surface of the cab, from the piston rods. The medium which allows you to extend the piston is hydraulic fluid. The cab of these lifts in the model can be operated in an automatic mode, or in a manual mode, and students can, for example, stop the mode in their end positions using appropriate sensors.

The crane model is of a derrick type, where hoisting a load is done by reeling one loose end of the hoisting cable on a cable drum. At the other end of the hoisting cable there is fitted the crane hook, on to which the load is hoisted. The radius of the crane, i.e. the change in the horizontal distances of the crane hook from the horizontal pivot, against which it pivots (i.e. a variable angle of arm inclination) with a permanent

length (it is not retractable, such as for automotive cranes) is attached to the chassis; it produces an undesirable shortening or extending of the carrying cable length. Extending or shortening the carrying cable when changing the radius of a load (changing the angle of tilt of one or both arms) spontaneously changes the height in which the load is situated. The crane model is equipped with a stepper motor, which is controlled using special software so that the cable from the drum winds or unwinds a certain length of the cable so that the load is always situated at the same height (at any angle of tilt for the two crane arms). This crane is very often used in port warehouses and docks. The lift of the load is done on the model via stepper motors.

More info on the communication channels: www.id.vsb.cz | www.facebook.com/sypaci | www.instagram.com/sypaci_vsb

TEXT: Leopold Hrabovský^{'00}
PHOTO: Archiv of FS



Equipment to search for people in crisis management situations

At VSB-TUO an entirely new method and equipment to search for people in emergency situations has been developed. This technology allows tracing people in e.g. such as in ground landslides, in the case of avalanches, earthquakes or trace victims of kidnapping in built-up areas. Behind this, you can find a research team from the Department of Telecommunication Technology at the Faculty of Electrical Engineering and Computer Science, under the leadership of Ing. Martin Tomis, PhD¹⁷

This solution is unique as it does not need to pre-mark a wanted person, as is the case in commercially- used solutions, such as e.g. in the case of skiers using the Recco system, which is a passive radio sensor with a very limited range, located directly in the clothes by the producer.

In the event of crisis situations the victim cannot be marked in advance, and at the same time, they need to be traced very quickly. As a solution to take advantage of there is the widely available mobile phone network. A newly developed method and device allow disrupting the wireless mobile phone communication of a person sought, and all other persons in the search area, within the mobile operator network. By using forced communication with a mobile phone a certain wanted person can be traced, at a many times greater distance than that of other existing solutions.

This solution is efficient also in cases where there is a break or a failure in the connection between the mobile phone operator networks (the search for people covered e.g. by an avalanche or underground or in caves, in the event of the base station error of mobile operators, etc.). A mobile phone can be also damaged, but if its high-frequency part operates properly, it is possible to locate this phone using the newly devel-



oped positioning method even without a functional mobile network. This newly developed method and equipment also allow to drop-call a mobile phone for the purpose of clarifying its localization or to communicate directly with a wanted person, even in the case there is no mobile network working.

The searcher consists of a software part and a high-frequency direction finder. To localize people from the air a drone can be used, which significantly increases its range and improves its precision during the search. This whole device is portable and can be used even in hard- to-access terrain.

The designed model of the finder is fully functional and it has been tested several times in practice. To design this final product for end users, and start production and launch the product on the market, the research team is currently searching for a business partner. This new method, protected by a proper patent, can find its use among rescue ser-

vice corps, i.e. Fire Rescue Service of the Czech Republic, the providers of health services, or the Police of the Czech Republic, selected forces and parts of the armed services, other armed bodies, and other rescue bodies.

„The development of this device includes a program for applied research, experimental development and GAMA innovations, The Technology Agency of the Czech Republic, PRE SEED fond of VŠB–Technical University of Ostrava, reg. no. TG01010137, the Department for Commercialization of Science and Research, as well as the Innovation Support Centre significantly have cooperated with us in protecting the intellectual property, helped us with managing this project, and they are prepared to cooperate in the process of the commercialization of this technology and provide possible legal support.“

TEXT: Lenka Kolarčíková
PHOTO: Archiv of FEI

Experimental Building Centre on the Campus of the Faculty of Civil Engineering at VSB-TUO

The Faculty of Civil Engineering at VŠB -TUO has been preparing professionals with a comprehensive knowledge of building engineering for more than twenty years, as there is still lack of people on the market. Although this faculty is quite young, the quality of education in their programmes increases each year. For a long time, our university environment is not only filled with lectures, science and research, but there is also interconnection with our commercial sphere, which generates the means to further improve the quality of studies and the Faculty itself.

On the campus of the Faculty of Civil Engineering, you can find several smaller constructions or rather models, e.g. the cross-section of a road surface, or rails with a point, which help students to learn in practice how these things work in real terms. Two important buildings are also a part of our Faculty.

The first one is a low energy passive wooden structure, which was opened in 2012, and serves as one of the most modern training centres in the Czech Republic. This project originated in close cooperation with the Moravia-Silesia Wood Processing Cluster (today National Wood Processing Cluster) and VŠB – TU Ostrava. Inside you can find many modern technologies installed, e.g. an educational set of heat sources and heating systems and more. It serves not only for further scientific research but also for students who want to see how these systems operate and function in practice.

The second important building, which was completed on the campus of the Faculty of Civil Engineering in 2018, is the Experimental Building Centre. This workplace is quite unique, as it has no

parallel in our republic, and therefore we shall describe it in more detail.

With a slight overstatement, we can say that this building is the child of three deans. Its construction was taken into consideration during the time our six-floor, the two-wing building started to be built in 2006, when the Faculty of Civil Engineering was led by Ing. Alois Materna, CSc., MBA. (2002–2010). At that time this building received its planning permission, yet it was not constructed during the first phase, due to the financial situation at that time.

The second attempt to obtain funding for the construction took place at the turn of 2009 and 2010 when the construction of the testing centre was planned as a necessary investment in the forthcoming project OP VaVPI „Progressive Building Materials and Technology“. Also, this attempt was unsuccessful, when the project was not supported to be funded.

The Investment Department of the university managed to win the funds for the construction only on the third time

from resources of the Ministry of Education, Youth and Sports in 2012, when the Faculty was led by Prof. Ing. Darja Kubečková, PhD.‘00 (2010–2014).

After many complications from the side of the contractors this construction was completed in 2015, and after a trial run its final inspection was made in March 2018, and the Faculty of Civil Engineering has been led from 2014 by the current Dean Prof. Ing. Radim Čajka, CSc. The latest technological equipment that was installed in 2016 and 2017 was paid from the budget of VŠB - Technical University of Ostrava. The main objective of the school management at the moment is to obtain the status of an accredited workplace for this centre, which would make it possible to carry out professional services in the testing for construction companies, in the context of economic activities.

At first glance, this is a simple industrial building, which does not differ significantly from other similar types of buildings. The most expensive and most valuable part can be found only inside.





The centre is inter alia equipped with a crane track and the versatile modular assembly of a frame structure. It is designed for tensile tests and pressures up to force 2,000 kN. There are also installed a universal hydraulic testing system, a laboratory press for a pressure of 4,000 kN, a laboratory press of up to 600 kN, and a measuring control panel with sensors. Thus this equipped workplace will serve in particular to ensure the experiments and testing of building structures and materials in the framework of research tasks. It will also be used by commercial companies and industrial partners. As it will be a place to provide significant tests, whose results will often be the subject of confidentiality, and the form of teaching students is now being discussed. At this moment students use this site to process the experimental parts of their dissertations on optimising the constructional connections of ridge beams for large-area halls. The newly-built laboratory allows you to implement and evaluate a broad portfolio of experiments in the development and optimisation of advanced materials and structures from wood, steel, concrete or composites. The main specialization of this laboratory is focused in particular on the implementation of major experiments with building constructions and elements for the purposes of validating advanced numerical models and simulations, taking into account their actual behaviour and the potential disturbance of the materials. Top equipment in this laboratory also enables us to run sophisticated and specialised studies in the fatigue, durability and life of a structure.

In the above text, we have already mentioned that the static and dynamic testing of building structures will be ensured by the main hydraulic test presses assembly that currently belongs among the best on the market. It is a universal testing system that within the framework of individual configurations allows for static and dynamic testing. In the case of static tests, loads of up to 2,000 kN are allowed. The test frame consists of modules that are set up on the basis of the dimensions of the test samples, and are up to 10 meters. The main testing system is also equipped with a universal busbar system, measuring the centres of deformation, reshaping and temperature. This experimental hall is also equipped with laboratory presses for the testing of basic material properties under a pressure up to 4,000 kN and a tensile strength of 600 kN.

An integral component of the Experimental Building Centre is also a chemical laboratory which will specialise in evaluating promotion and corrosion formation in metallic materials, and the influence of chlorides in concrete.

Although the Experimental Building Centre has been in operation for only a short time, the first major project called KoNaNos (for the Complex Design of Beams from Advanced Concretes) has been carried out in it. This project is being completed involving a team of people from the Department of Building Constructions under the leadership of Ing. Pavlína Matečková, PhD. Other partners of the project are company ŽPSV a.s., and the Institute

of the Physics of Materials of the Academy of Sciences of the Czech Republic, v.v.i. It is a project financed with funds from the European Union (Operational programme Entrepreneurship and Innovation for Competitiveness, OP PIK). The former is represented by doc. Ing. Vlastimil Bílek, Ph.D., and for the later UFM it is by doc. Ing. Stanislav Seitl, PhD.

This project is aimed at the comprehensive designs of beams using advanced concretes. The prepared experiments will serve not only for examiners, but will also verify the maximum capability of the test presses. The designed and tested beams are created using high strength concretes with the strength up to 130 MPa, in combination with pre-tension reinforcement.

In the stage of preparation within the framework of the contract, there are research tasks from an air conditioning producer to optimize the designs of the load-bearing components for clean areas, The Experimental Building Centre, which is built within the campus of Faculty of Civil Engineering at VŠB - Technical University of Ostrava, has entered into its first year of activity with big ambitions and it opens its imaginary arms wide to other parties interested in further cooperation.

TEXT: Marek Hýža, Oldřich Sucharda¹²
 PHOTO: VŠB-TUO Archive, Martin Ferko

Czech roads? The same quality as in Germany: a problem is the timing of laying



There is no sight of snow and a lovely sunshine entices us for trips. But Czech roads are not friendly to motorists after the winter again. What are the reasons for the poor state of certain roads? It is good to say one thing at the very beginning. You will not usually find the fault in the materials used for their construction.

The Department of Transport Constructions at the Faculty of Civil Engineering of VŠB - Technical University of Ostrava is really attractive for students. Students who decide to study at this Faculty have no problem to find work in that field. „Even during the crisis, there was a huge interest in graduates of the Department of Transport Constructions. Each house must have an access roads. Students are being prepared for this transport industry discipline using a wide range

of activities including the design, construction, maintenance and administration of various transport structures and constructions. In the field of transport engineering the preparation of students focuses on building safety components, IT in transport, safety audits, the management and organization of transport, modelling and simulation in transport, the reduction of the negative effects of transport on the environment, etc.“ says Dr. Denisa Cihlářová¹⁰. about the study programme. In the course of studies, our students gain precious field experience for their future.

In the framework of their bachelors' or masters' thesis, they can choose any type of transport means and focus on it. Another possibility is the various projects for towns and cities that can include them in their plans. „Students

in the framework of their final works process different degrees of project documentation for shifted tracks, the bypasses of specific roads, or they may deal with a proposal to modify certain intersections, or they can also choose any topic from the field of technology and materials. Most of these works then find practical application,“ further describes doctor Cihlářová.

The Department of Transport Constructions educates the future planners of transport constructions, the employees of road laboratories, supervising engineers, roads constructions cost estimators, and transport engineers. During the course of their studies, this gives them a general overview of the current situation in the context of the transport infrastructure of the Czech Republic.

In the Czech Republic, the systematic management of roads does not work effectively. „It is an annual cycle. In the first stage data collection is carried out, i.e. diagnostics, which includes the monitoring of transverse and longitudinal unevenness, faults (cracks, deformation), the depth of road pot holes and anti-skid characteristics. Depending on the type of road it is handled by the Road and Motorway Directorate of the Czech Republic, and regions or villages. In the second phase, data are further processed and measures proposed. It is determined which of the roads need only normal regular repairs, and which will have to undergo entire reconstruction,“ Dr. Cihlářová describes the system of road management. Today, these reconstructions are carried out only if the status of any road is in serious disrepair. You will not notice it in the towns and cities, but in villages, it is a permanent problem as there is no money for repairs.

The surface, even when done well, can last on average for four years. „If the surface repair is neglected, it accelerates the road structure’s degradation. During the first winter season a small crack occurs, which due to melting and freezing cycles increases, and it becomes a pothole,“ continues Denisa Cihlářová explaining the situation. It is not recommended to lay veritable asphalt layers if the temperature drops below 10°C to 5°C, depending on which layer you want to lay. In the Czech Republic it is entirely normal to see „finishers“ who are finishing layers when it snows. It is the problem of budgets, which are often known only after the first quarter of the given year. Only then it is possible to use the means, in a tender procedures in compliance with the times laid down by the Public Procurement Act. „This has obviously a great impact on the quality of the work carried out in unsuitable periods of the year. It is also the main reason for making quick, small repairs, even if it is necessary to carry out greater ones,“ adds doctor Cihlářová. Most European countries use for dimensioning their road construction the same principles, where the set of input data include the traffic load, the carrying capacity of the subsoil, climatic conditions and designed level of infringement. The standards and materials to work with are similar. In the Moravian-Silesian Region for the construction of the unbound layers of a road construction, high-quality Silesian graywacke is mainly used. Bad practices

in the production, transport and laying of the bituminous mixtures, as well as wrongly specified requirements in the procurement procedures then often lead to a situation where these failures in the road construction are immediately ascribed to the bituminous mixtures. And yet the asphalt mixtures are great building materials that are far more resilient against various negative impacts than other materials.

„Thickness and the whole road construction depends on how many vehicles use the road and how heavy they are. These procedures are respected and designed correctly,“ adds Denisa Cihlářová. The only problem, in this case, is the overloading of a road, which is not adapted to it. As an example, she mentions the closure of the road I/11 Opavská in Ostrava-Porubě. The re-route led along Spojovací Street, which was designed for transport accessibility to the village Plesná and to the shopping centre, see the figure.

The more difficult work our builders have is to repair deep damage when there is a disturbance of the subsoil. „If you repair only the top covering layer, but the fault is located more deeply, the problem soon reoccurs. Any maintenance must be comprehensive and effective,“ says Dr Cihlářová. This maintenance must also be a well-targeted: „First road diagnostics must take place, the cause of the fault determined, and then we can propose a suitable solution

in order to eliminate the cause.“

Most of us regularly complain about patched roads. However, the experts take it as one of the options for the repairs: „It always depends on the technical conditions that determine for us the way it will be repaired. If these do not reach a certain percentage, these repairs are only local. If the values rise up, a good piece of road must be milled. It also depends on whether it is a road of first, second, or third class, a high-speed road or a highway.“ All these processes shall be carried out according to the diagnosis of the road.

For this year the Road and Motorway Directorate of the Czech Republic is planning to spend 11.4 bill. of CZK on the repair and maintenance of motorways. According to its director, Jan Kroupa around 7.5 billion crowns will go to the repairs of first class roads, and the rest to the repair of our motorways. It is more than the previous year, but it is impossible to say whether this amount will be enough given the state of the roads. We drivers only steel our nerves before setting out to any trip and should stop complaining about the road closures, on which the repair work is being carried out. We should be pleased that our road builders do not leave everything to the last minute.

TEXT: Šárka Sikorová
PHOTO: Archiv of FAST and ŘSD



The fateful number eight in the history of VŠB-TUO

The most significant event with the number eight this year is undoubtedly the 100th anniversary of the declaration of an independent Czechoslovakia, on 28 October 1918. The origin of the Czechoslovak State was an important milestone in the development of the VŠB in Příbram. It meant the end of Czech-German discrepancies among faculty members and at the same time the end of attempts of German professors and German students to divide the school. In view of the fact that it was a school under the German language, the amended provisions concerned establishing the Czech language as the official language of teaching. With the change of language, the renaming process of the university was closely related, as it bore the official German name Bergschule in Příbram. During that process, VŠB in Příbram was shifted from the authority of the Ministry of Public Works to the Minis-

try of Education.

The fated years in the history of our state undoubtedly include 1938, when Czechoslovakia should have celebrated the 20th anniversary of its origin. At the Munich Conference on 29 September 1938, without the participation of any representative of our country it was decided to take away the frontier territories of the Czechoslovak state and surrender them to the German Reich. These events may not have any immediate effect on the functioning of VŠB, however, they affected one member of the university staff, a well-recognized scientist in chemistry and the head at the Institute of Inorganic, Analytical Chemistry and Testing Prof. Dr. techn. Ing. Jaroslav Šplíchal. He was a sensitive man with strong patriotic feelings, with a strong sense of justice that could not bear the Munich treachery on the Czech nation. These circumstances, intensi-

fied by decades of nervous disorder, led to his voluntary withdrawal from the world on 8 December 1938.

The seizure of power in Czechoslovakia by communists on 25 February 1948 belongs to other ominous milestones with number eight in our history. The whole communist coup, that significantly influenced the development of our country for a further forty years, had a direct impact on VŠB. At the end of February 1948, the Action Committee of the National Front was established, consisting of representatives of employees and school students. The only purpose of this body was the so-called cleansing of public life (stated using an expression of that time), which in the conditions of VŠB meant the removal of those teachers and students who disagreed with the accession of the communist regime.





On the basis of the committee decision three full professors were deprived of their jobs (Ing. Josef Hummel, Dr. mont. Ing. Bohuslav Stočes, Dr. mont. Ing. Petr Synek), one adjunct professor (Dr. mont. Ing. Bořivoj Černík) and one senior lecturer (JUDr. Vojtech Poláček). This final decision of the committee that was impossible to appeal against included a further eleven assistant professors and an overall of thirteen students who were excluded not only from studies at VŠB but at the same time from all universities in Czechoslovakia.

The last and dramatic anniversary concerning number eight took place on 21 August 1968. This year we will remember the 50th anniversary of the occupation of Czechoslovakia by the Warsaw Pact armies. This invasion marked the end of attempts to introduce political, economic and social reforms in Czechoslovakia. VŠB was involved in the democratisation process with a series of challenges, resolutions, articles in the daily press and public appearances. It expressed its requirements in the context of preparing the revised Higher Education Act and a proposal for an action programme of the Ministry of Education, in which inter alia proposed to legislate academic freedoms, namely the freedom of research, expression and assembly on the premises of the university, and the election of the academic officials, which should be solely in the hands of universities.

One of the aspects of the ongoing democratisation changes in the society was the set up of a rehabilitation commission at the faculties of VŠB in April 1968, whose task was to investigate matters of the political persecutions of employees and students of the university in 1948. Back in March 1968, the Department of Marxism-Leninism was divided, and two departments were established, namely the Department of Sociology and Political Science, and the Department of the Philosophy and Methodology of the Sciences. The establishing of these new departments was linked to the introduction of new social science subjects into the curriculum (and in November 1969 both departments were disbanded). Survivors of the period, who graduated in 1968, may recall that there was some adjustment applied to the oaths of the graduates. The wording of the „fidelity to the Communist Party“ was left out. The manifesto Two Thousand Words received a good reaction at VŠB, as some of the members of the Department of Steelworks at the Faculty of Metallurgy put their signature to this document (later they were forced under the pressure to recant their agreement). In the period 1968-1969, an important role was played by the Students' Movement formed in May 1968, within the Union of Higher Education Students of Bohemia and Moravia, which had its basic organization in Ostrava at VŠB and at the Pedagogical Faculty. In October 1968, the City Stu-

dent Centre as the authority of SVS, had a role to coordinate student movements in Ostrava. This Association with its activities was significantly involved in the defence and preservation of the reform results. Its socio-political role increased particularly after 21 August 1968. On the day of the occupation, these university students belonged among the first demonstrators to call in front of the secretariat of KV KSČ in Ostrava for an explanation of the whole situation. VŠB students and students from the Pedagogical Faculty inter alia participated in organizing a series of important events, to which belonged a three-day student strike in November 1968, and a demonstration associated with a tribute to the tragic action of student Jan Palach in January 1969.

Normalization measures brought the end to all hopes. At the universities, it was associated with the release of a revised Higher Education Act in 1969 and by party screenings, which resulted in almost one hundred scientific research employees and teaching staff leaving VŠB.

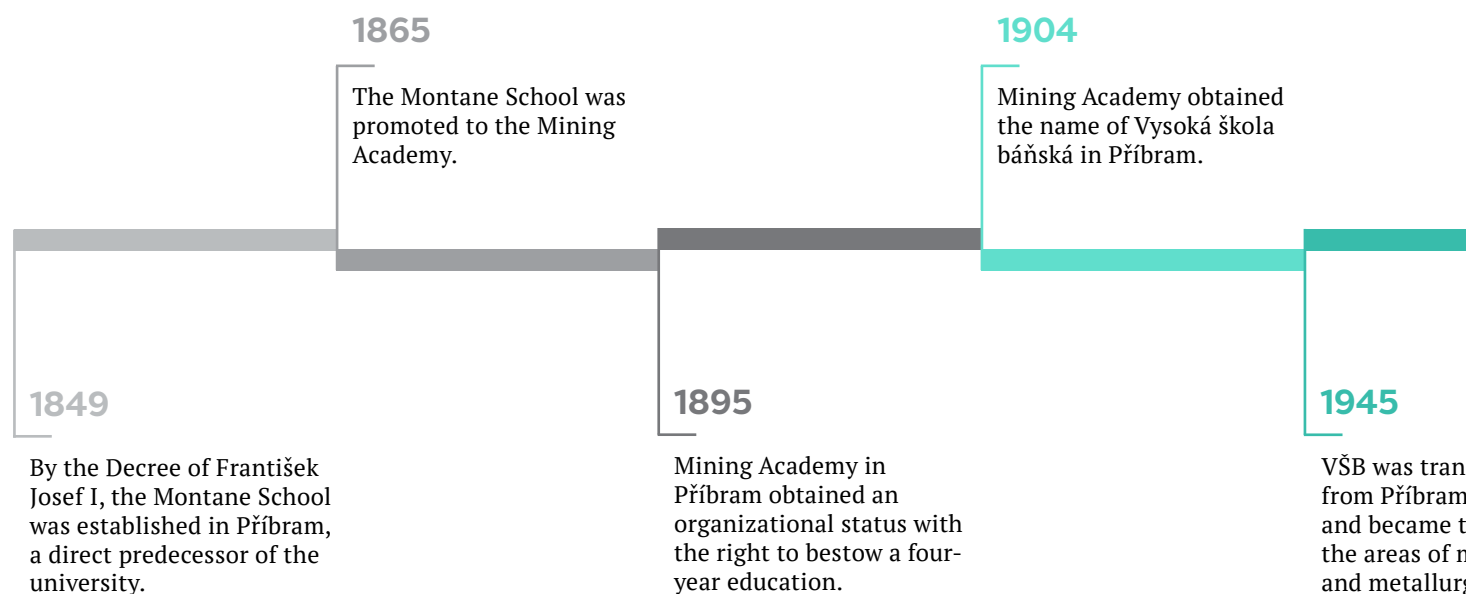
TEXT: Petr Kašing
 PHOTO: VŠB-TUO Archive,
 The archives of Ostrava
 Josef Polák

The history of VŠB-TUO



We have compiled for you a list of significant milestones, which have determined the direction of our university has taken.

Have a look at what distance we have made step by step.





History of the VŠB-TUO Alumni

2014

The first whole university reunion and the Golden Graduation Ceremony.

2018

We will celebrate 8,000 graduates in our network.

2011

Creating a network of graduates.

2016

Launching the Graduate Cards.

1951

For the first time VŠB was divided into faculties, and since then their number has increased to seven faculties.

2015

The National Supercomputer Centre was put into operation (The supercomputer Salomon was in its time the 40th most powerful in the world).

1995

the process of transforming VŠB into a university of a polytechnical character was completed by changing its name to VŠB – Technical University of Ostrava.

2019

We will celebrate 170 years of this university's history.

sferred

the centre in
mining
gy.

OSTRAVSKÁ NOC VĚDCŮ 2018

100 LET ČESKÉ VĚDY



5/10/2018

Bližší informace naleznete na ostravskanocvedcu.cz.

POZVÁNKA NA ZLATOU PROMOCI

Srdečně zveme absolventy ročníku 1968 na Zlatou promoci, která se uskuteční 21. 9. 2018 v Nové Aule VŠB-TUO v Porubě.

Připomeňte si svá studentská léta, přijďte se podívat, jak se univerzita proměnila za 50 let, setkejte se při této výjimečné příležitosti se svými bývalými spolužáky a oslavme společně krásné zlaté jubileum.

Den před slavnostní promoci, 20. 9. 2018, budete mít zároveň možnost prohlédnout si univerzitní kampus a dozvědět se mnoho zajímavostí. Program a bližší informace budou účastníkům upřesněny.

Doufáme, že se s Vámi sejdeme ve velkém počtu! Ozvěte se nám, jste-li absolventem nebo máte známé, kamarády či rodinné příslušníky, kteří ukončili studium na VŠB v roce 1968. Pomozte nám získat aktuální kontakty. Mnoho nám jich stále chybí.

Kontaktujte nás na alumni@vsb.cz.

Získejte i vy svůj styl

ALUMNI KARTA může být i vaším esem v rukávu. Staňte se členem sítě alumni a užívejte si svoji absolventskou kartu plnou benefitů.

PROFITUJTE ZE SVÉHO ČLENSTVÍ.
Mít kartu ale neznamena jen čerpat výhody, jde o styl.
Mějte styl – **ALUMNI STYLE.**

**A JAKÝ JE VÁŠ TRUMF?
ZÍSKEJTE I VY SVŮJ STYL!**

alumni ABSOLVENTI
VŠB-TUO

alumni

ABSOLVENTI
VŠB-TUO

JEN
DIPLOMEM
TO KONČIT
NEMUSÍ...



English version
of Alumni
VSB-TUO
magazine
available at
alumni.vsb.cz

 alumni.vsb.cz

 facebook.com/alumniVSBTUO