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Newsletter of the German Section of the Society of Petroleum Engineers | Volume 30 | Issue 1 | March 2020



Beyond the Borders  
An SPE young professionals initiative



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## IMPRESSUM

Beyond the Borders:  
Romania event

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Im Bahnwinkel 10B  
45896 Buer

Section Chair:  
Prof. Dr. Tobias Backers

## EDITOR

**Daniela Marum**

[Baker Hughes](#)

Daniela.MartinsMarum (at)  
bakerhughes.com

**Michal Kruszewski**

[Fraunhofer IEG](#)

michal.kruszewski(at)ieg.fra  
unhofer.de

**Kai Stricker**

[Karlsruhe Institute of  
Technology](#)

Kai.Stricker(at)kit.edu

## SPONSORING

**Dr. Andreas Hartmann**

Andreas.Hartmann(at)  
bakerhughes.com

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# Calendar of Events

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Date	Type	Event	Location
June 4	SPE Distinguished Lecture	How Resilient Are We? An Examination of the Vulnerabilities of Upstream and Downstream Infrastructure to Natural Disasters and its Mitigation Effort	Hannover, Germany
June 24 – 25	SPE Conference	SPE International Oilfield Scale Conference and Exhibition	Aberdeen, Scotland, UK
Aug TBD	GSSPE BBQ	GSSPE Summer BBQ	Celle, Germany
Sep 10 – 12	GSSPE YP	Beyond the Borders – a SPE YP initiative (From Easy Oil into the Digital Age)	Hamburg, Germany
Sep 14	SPE Conference	SPE Norway Subsurface Conference	Bergen, Norway
Sep 15 – 17	SPE Conference	SPE/IADC Middle East Drilling Technology Conference and Exhibition	Abu Dhabi, United Arab Emirates
Sep 22 – 24	SPE Conference	ENGenious Symposium & Exhibition for Upstream Innovation	Aberdeen, Scotland, UK
Oct 5 – 7	SPE Conference	SPE Annual Technical Conference and Exhibition	Denver, Colorado, USA
Nov 4 – 5	SPE Workshop	Production Optimisation in Gas and Oil Assets	The Hague, The Netherlands
Nov 5 – 6	GSSPE Congress	Student Technical Congress	Karlsruhe, Germany
Nov 9 – 12	Conference	Abu Dhabi International Petroleum Exhibition & Conference (ADIPEC)	Abu Dhabi, United Arab Emirates
Dec TBD	SPE Conference	SPE Europec featured at 82nd EAGE Conference and Exhibition	Amsterdam, The Netherlands
Mar 2021 9 – 11	SPE Conference	SPE/IADC International Drilling Conference and Exhibition	Stavanger, Norway
2021 TBD	Conference	9 <sup>th</sup> International Geoscience Student Conference (IGSC 2020)	Aachen, Germany
Sep 2021 7 – 10	SPE Conference	SPE Offshore Europe Conference and Exhibition	Aberdeen, Scotland, UK



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#### Herrenknecht Vertical GmbH

Personalabteilung | Kennziffer: HV175  
Im Heidenwinkel 5  
77963 Schwanau  
Deutschland

[hr@herrenknecht-vertical.com](mailto:hr@herrenknecht-vertical.com)  
[www.herrenknecht-vertical.com](http://www.herrenknecht-vertical.com)



# Words from GSSPE Chair

Tobias Backers, GSSPE Chair & Ruhr-University Bochum

In this issue of the German Section of the Society of Petroleum Engineers (GSSPE) Newsletter, you will find a reprint of an editorial for the OIL GAS European Magazine that was published about a quarter of a year ago. Actually, the idea was to use the text with some modifications as the editorial for this issue of the GSSPE newsletter as well. The topic of embracing renewables and in particular geothermics into our SPE-world is something we feel very important for our industry, our society, and our section in the long run.

But then our world changed abruptly and drastically. A novel virus forced mankind into a novel situation. Massive threat to health and lives of people globally, shut down of social and cultural life as we used to live it before in countless countries, limitations on travel, trade and consumption, so far unexperienced strains to our health care systems,... just to name the obvious.

Reducing infection rates is of utmost priority currently. For this reason the aforementioned restrictions were put into power by the sensible country leaders in hope to embank SARS-CoV-2 (Corona). If people do not meet, they cannot pass on the virus to others, and therefore slow down the pandemic spread.

GSSPE tries to help reaching this goal in the small scale, too. The March board meeting was held digitally instead of physically, and a presentation in Hannover will be held as a webinar. The upcoming general meeting, planned for June, potentially needs a new digital format or has to be postponed. Even the 2020 Student Technical Congress, the yearly November GSSPE flagship event, is under discussion. We will adjust to the novel situation until the threat is over.

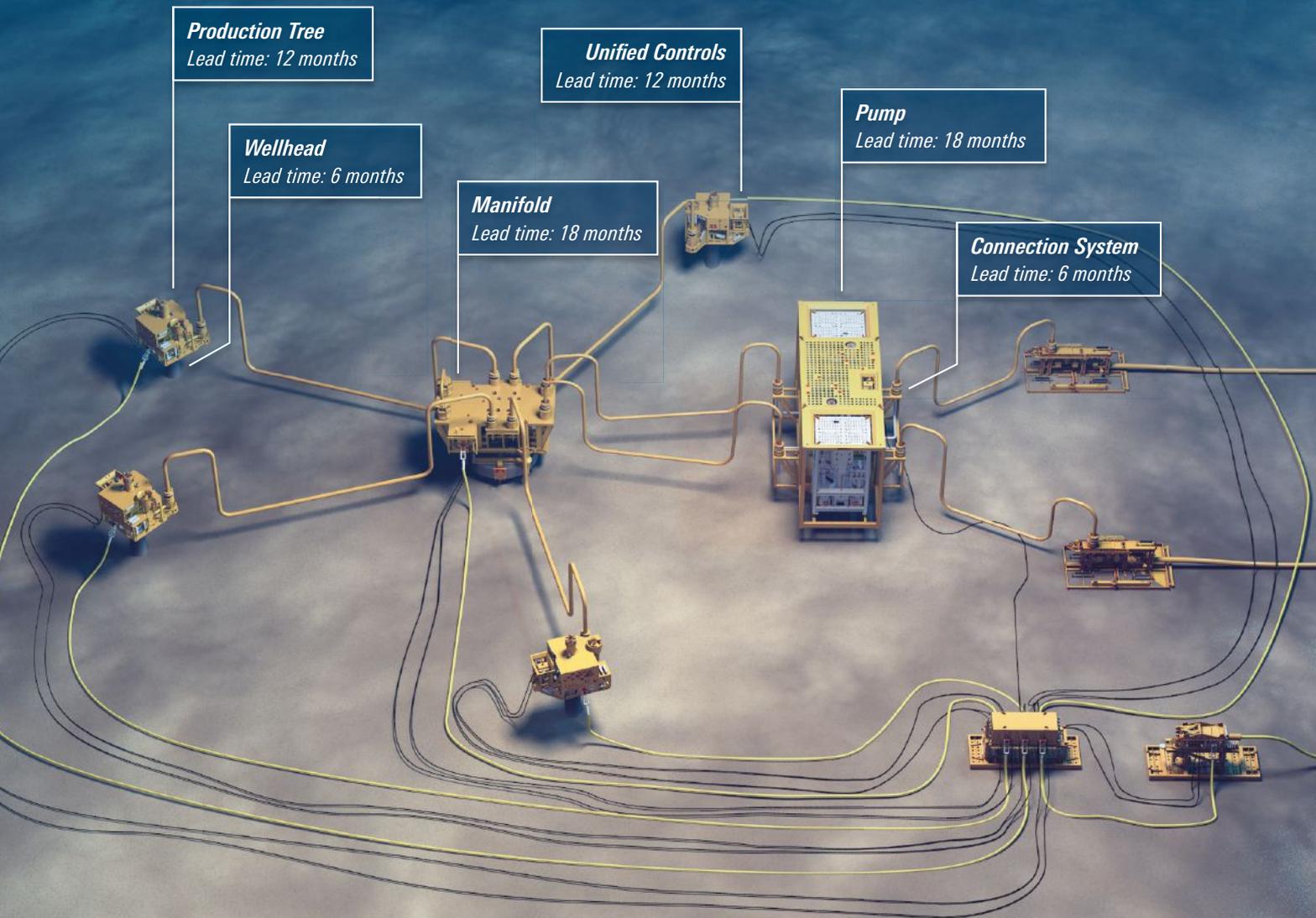
The German Section of the Society of Petroleum Engineers has to reflect on its habits and mechanisms in its 30th year. Whereas GSSPE's mission is clearly stated - as you can read in the editorial reprint from Oil GAS European Magazine on the next page - the way how to accomplish the mission is absolutely not. I agree that in the light of the threat to the lives and health of many, this is not a prominent task to solve currently, but one should start to think how to proceed in the future and to revisit our habits for post-corona times to serve public benefit.

For the time being, I encourage the individual members of GSSPE to contribute to the fight against Corona. Be sensible and reflect your personal habits, and if you feel prepared for it, provide some service to society.

Stay in good health,

Tobias Backers

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# Visit of the Gubkin University SPE Student Chapter to RWTH Aachen University Student Chapter

Alexander Jüstel, Luis Alberto Pizano, RWTH Aachen University



Dean of faculty 5 at RWTH Aachen University Prof. Kukla (center) with the Russian Delegation and the SPE Student Chapter at RWTH Aachen University.

Based on a long-lasting cooperation between the SPE student chapters of RWTH Aachen University and Gubkin National State University for Oil and Gas in Moscow, Russia, a delegation of 12 young and motivated students from various fields visited the SPE Student Chapter from November 26<sup>th</sup> to the 29<sup>th</sup>, 2019. After the Russian delegation arrived at RWTH Aachen University in the afternoon of November 26<sup>th</sup>, they were welcomed by the Dean of faculty 5, Georesources and Materials Engineering, at RWTH Aachen University, Prof. Peter Kukla. They were given a brief introduction about the faculty and its different focuses as well as a short introduction to Aachen. He wished the students a stay full of great experiences.

To enhance the cultural exchange between the guests and the locals, the Aachen Christmas market was visited. The Russians had the opportunity to taste one of the most renowned products of this part of the year, the famous “Glühwein”. After filling up their stomach with sweets, they were taken to the monthly SPE Student Chapter Stammtisch at Bar Zuhause. There, local student members of the student chapter exchanged their experiences and made new friends with our Russian guests.

The second day of the trip began with an introduction speech by the SPE Faculty Advisor and head of the Department of Computational Geoscience and Reservoir Engineering (CGRE) at RWTH Aachen University, Prof. Florian Wellmann. The discourse dealt with the surroundings of Aachen, the different institutes within faculty 5 and a brief overview of the research being carried out at the CGRE department in geomodelling.



Introduction by the faculty advisor to the SPE Student Chapter at RWTH Aachen University, Prof. Florian Wellmann.

Following this, the students were taken to a lab demonstration of the Laser-ablation ICP-MS hardware for determining composition of fluid inclusions (that can be eventually applied to oil samples).



Presentation by Dr. Tobias Fusswinkel of the functionality of the Laser Ablation ICP-MS machine at RWTH.

Afterwards, some undergraduates went for a city tour in Aachen, where they saw the magnificent views from Lousberg, while the other part of the group went to visit the neighboring city of Maastricht in the Netherlands.



City Trip to Maastricht.

The day was concluded with a company presentation by Europe's largest independent gas and oil producer Wintershall Dea, active for instance also in Siberia, Russia. For more information on this event, please see the respective article.



Wintershall Dea Company Presentation.

The 28<sup>th</sup> of November was spent in the neighboring full-of-history city of Cologne. After a visit to the Cologne Cathedral and the TV Tower and a wonderful view over Cologne, the group headed to one of the many local

breweries where they tried local beers and traditional German food (e.g. Schweinshaxe). As a cherry on the pie, they also went to the chocolate museum by Lindt where they tasted several delicious products.



Visit of Cologne with Joschka Röth.

The evening was concluded with a visit to the Christmas Market and a local bar. Here, the Gubkin Students surprised the SPE Student Chapter at RWTH Aachen University with some Russian delicacies as presents, such as caviar. The rest of the night was enjoyed, including the rough planning of the next visit.

On Friday, November 29<sup>th</sup>, the delegation left early for Karlsruhe where a handover to the local student group of SPE took place.



Good-bye photograph at Café Extrablatt with the Russian Delegation.

This trip was once again a great experience for both parties. We hope to see our old and new Russian friends again soon. We would like to thank Ilhom Atabaev, student member of the SPE Student Chapter at RWTH Aachen University, for investing countless hours during this trip, as well as Joschka Röth who led the trip in Cologne.

# Visit of the Gubkin University SPE Student Chapter to SPE Hochschulgruppe KIT

Frédéric Pistor, Lukas Müller, Karlsruhe Institute of Technology



Group picture of the students from Gubkin Russian State University of Oil and Gas as well as the Karlsruhe Institute of Technology at the Landau oilfield of Wintershall DEA in Landau.

From the 29<sup>th</sup> Nov to 2<sup>nd</sup> Dec the SPE Student Group of Karlsruhe Institute of Technology (KIT) had the pleasure to host students of the Gubkin Russian State University of Oil and Gas in Moscow as a return trip to our visit from 2018.

## 29<sup>th</sup> of November

Arriving at our geological institute our guests were treated to a presentation on our university and institute by our dean Prof. Dr. Frank Schilling, who was able to introduce our general concept of research and education. After a quick snack, the group was given a detailed introduction into our research facilities by different members of our geochemistry, structural geology and geothermics department. Our drone-based cartography as well as our general introduction into geothermics seemed to receive high interests from the Russian students. After the long trip from Aachen and our introduction, we all had a very nice group dinner with Burgers & Beer at our favourite student hangout.

## 30<sup>th</sup> of November

The following day offered a field trip to the oilfield of Wintershall/DEA in Landau (about a 30 minute drive from Karlsruhe) where we hoped to get an impression of the company and how oil business works around Germany. Alexey Kolesnik, reservoir engineer at Wintershall/DEA, exceeded our expectations while giving us a detailed overview of their different sites and

the history of the company with the Upper Rhine Graben. We learned a lot about exploration methods and the difficulties of drilling, as well as an overview about public acceptance of the oil industry in Germany. After the presentation we were treated to a visit around the facility and even got to visit a drilling site right in the center of Landau. Special treat for our visitors was of course the Russian speaking presenter!

Afterwards we “forced” our visitors on a quick geological field trip to Frankweiler, from where out we had a great look at the Upper Rhine Graben structure and, as the weather meant well with us, also an amazing overall view on Karlsruhe and Landau.

Returning to Karlsruhe, we visited the Karlsruhe Christmas market in the evening, introducing our guests to the pleasures of German “Glühwein”.

## 1<sup>st</sup> of December

Due to it being a Sunday, company visits were hard to get by, so instead we organized a full-day cultural program.

With our student chapter’s president marking the local guide, we visited all important locations around Karlsruhe, including loads of historic and modern sites around the city. The tour ended at ZKM, a famous modern museum about recent technological advances and media. Afterwards we moved across the city to have dinner at the medieval themed Christmas market in Karlsruhe Durlach.



Group picture in front of the castle of Karlsruhe

## 2<sup>nd</sup> of December

On our last day with our visitors we had the opportunity to visit the company of Dr. Carsten Rheinhold, Rheinpetroleum, who gave us a quick geological introduction to the possibilities of oil exploration in the Upper Rhine Graben. His talk as an executive director of the smallest independent oil producer in Germany gave a sharp contrast to what we were presented with at Wintershall/DEA, introducing us to the troubles a small company has to come by. With a company provided lunchbox we were afterwards able to visit a drill site of Rheinpetroleum to the North of Heidelberg.

Afterwards, our last stop was our third Christmas market on the list in Heidelberg, where the students from

Moscow had a last opportunity to gather some gifts for family and friends and take some pictures in the historic city of Heidelberg, before we headed back to Karlsruhe just in time to make our goodbyes and catch their train.



Drill site of Rheinpetroleum.

Overall, we had a great time with the students from Gubkin University and hope to be able to return to Moscow once again in the nearby future! Many thanks go out to our presenters Alexey Kolesnik (Wintershall/DEA) and Dr. Carsten Rheinhold (Rheinpetroleum) for the well thought out and informative talks about Oil Industry around Karlsruhe, as well as our institute of applied geosciences for the great support we were given

# Geo Data Company Presentation

Alexander Jüstel, RWTH Aachen University



Christian Kiesl introducing the company GEO data.

On Tuesday, January 21<sup>st</sup> 2020, the SPE Student Chapter at RWTH Aachen University welcomed Christian Kiesl

and Boris Nadolny of the company GEO data (<http://www.geo-data-logging.de/index.php/de/>). The

two representatives were invited to introduce themselves, their company and what their daily business looks like.

Christian Kiesel started out by providing general information about GEO data, the different countries where the company is active and the different business units within the company.

Boris Nadolny continued to elaborate on the work as mud logger during drilling operations and how this is a perfect entry level job for Geoscientists. During day and night shifts, the mud logger takes samples, evaluates sediments and fossils and provides information on the current stratigraphic depth of the drilling operations. GEO data is present in Germany and abroad to provide customers with high quality service. Mud logging is also an essential part during drilling operations for geothermal energy exploration.

After an extensive Q&A round, Christian Kiesel continued on explaining the work the company is doing in the field of environmental consulting and laboratory investigations. He introduced the different tasks geologists have to perform in the field and in the office as well as showing some of the completed projects the company was working on. In addition, Christian Kiesel pointed out that the whole value chain of investigations can be performed in-house to provide clients with the best service possible. This part was also concluded with a Q&A round.



Christian Kiesel elaborating about Environmental Consulting at GEO data.

The work GEO data does represents the spectrum of knowledge that students of the major Applied Geosciences acquire during their master studies at RWTH Aachen University. The field of mud logging would be very interesting for student specializing on “Energy and Mineral Resources” (EMR) whereas the environmental consulting part suits students with the specialization “Geophysics-Hydrogeology-Engineering Geology” (GHI, GIN).

The SPE Student Chapter at RWTH Aachen University and all participants would like to thank Christian Kiesel and Boris Nadolny for their extensive elaborations about their company. The evening was concluded with food and drinks in Pontstraße where the students had the chance to get some personal insights of the work the two representatives have done. They also provided valuable tips for the students regarding future job opportunities.

All in all, it was a very enriching evening that we would like to continue at some point.

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# Visit of the Geological Survey NRW

Alexander Jüstel, RWTH Aachen University



Participants of the Field Trip to the Geological Survey NRW. Image: Gesa Fuchs

On January 17, 2020, a total of about 25 bachelor students majoring in Applied Geosciences and Georesources Management at RWTH Aachen University visited the Geological Survey of NRW in Krefeld. This extracurricular excursion was initiated by the Praxisinitiative Aachener Geowissenschaftler and carried out by members of different student associations and the student council.

The students were welcomed by the head of the Geological Survey NRW Dr. Ulrich-Wilhelm Pahlke and were given a first introduction about the tasks and working areas of the Geological Survey. In different talks related to geothermal energy, geoinformation systems & 3D modelling, natural hazards in the subsurface of NRW and hydrogeology, the students were told which knowledge they will have acquired during their studies will be particularly helpful for the practical work at the Geological Survey. The students were also given an introduction into the online services of the GD where one can download open geo data for maps and thesis work. In addition, the participants were shown how to figure out what the natural hazard potential of their place of living is. During a walk across the premises of the GD, the students were guided through the laboratory

where work is conducted on drill cores and through the drill core repository. The day was concluded with a Q&A round with former student of RWTH Aachen University. The most valuable tips for the students were to learn how to work with geoinformation systems (e.g. ArcGIS, QGIS), to keep in mind that a mapping field trip is not only on the surface anymore but also continues in a third dimension into the subsurface. With respect to job opportunities, the GD NRW offers internships and the possibility to write your master thesis within a project. This will make it easier when applying for jobs with the Geological Survey. To use the offers of internships was highly recommended by the former RWTH students.

The organizers and all participants would like to thank the Geological Survey NRW, all presenting staff and especially Ms. Gesa Fuchs for organizing this amazing day for the students. Everyone has gained valuable knowledge and experiences through this exchange and we hope to do this once again in the near future.

For requests regarding internships or a master thesis, please get in touch with Ms. Dipl.-Geol. Dr. Dölling (+49 2151 897-598, [info@gd.nrw.de](mailto:info@gd.nrw.de)) of the department for Public Relations.

# Field report for the field day

## “Visiting an active drill site for a groundwater control well at the margin of an active lignite mine, RWE Power AG”

Alexander Jüstel, RWTH Aachen University

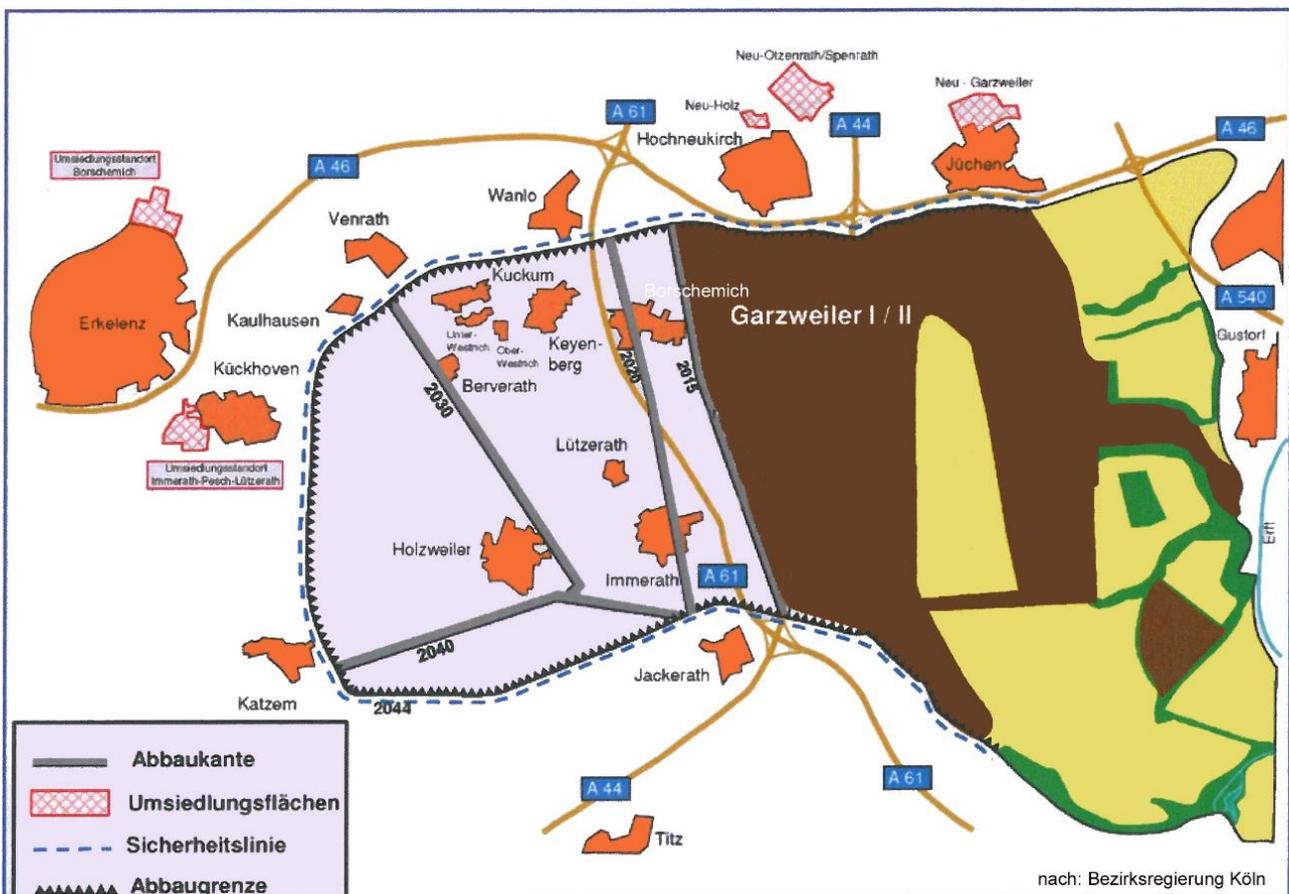


Fig. 1: Overview Map of the Garzweiler Lignite Mine from 2015 with its planned mining limits in the west (before the current coal law was introduced) and the renaturated areas in the east (BUND, 2017).

### Introduction

The Garzweiler I/II Lignite Mine operated by RWE Power AG located 45 minutes north of the city of Aachen has been active for more than 100 years and comprises an operational area of approximately 3.200 ha (RWE Power AG, 2020) (Fig. 1). Besides the lignite mines Inden and Hambach, it is one of the three large lignite mines in the Rhenish Lignite Area. Currently, there are six bucket-wheel excavators mining 60,000 to 200,000 m<sup>3</sup> material per day as well as six spreaders with a capacity of 110,000 to 240,000 m<sup>3</sup> material per day (RWE Power AG, 2020). The mined material includes the overburden, the interlayers between the coal seams and the actual coal

seams. Each bucket-wheel excavator measures around 100 m in height and more than 200 m in length with a wheel diameter of 20 m (Fig. 2). The mine is progressing from the east towards the west (Fig. 1) and mining will terminate in the next 15 to 20 years. The mine is divided in two parts (I and II) were only part II is still active. The area to east has successively been filled up with overburden and has undergone renaturation.

### Geological Setting

The lignite deposit is located within the Cenozoic Lower Rhine Basin, a rift basin located at the NW end of the European Cenozoic Rift Basin (Prinz et al., 2017).



Fig. 2: View of a bucket-wheel excavator within the Garzweiler Lignite Mine.

The present deposit is part of the Middle Miocene Ville Formation, representing sediments deposited in an alternating shallow marine and terrestrial environment. The stratigraphic pile consists of the marine Neurath Sand and Frimmersdorf Sand with a total of three lignite beds termed Garzweiler Seam above the Neurath Sand, the Frimmersdorf Seam between the two sand units and the Morken Seam below the Frimmersdorf Sand adding up to a total lignite thickness of approximately 40 m (Prinz et al., 2017).

### Content of the Field Day

As the deepest part of the lignite mine is approximately more than 200 m below the surface, it is necessary to lower the groundwater level within the mine and the adjacent areas to prevent flooding of the area.

The field trip led the group to the edge of the lignite mine before heading to a drill site for a groundwater control well at the margin of the lignite mine. The target of the 40 t drilling machine was to drill to a vertical depth of around 200 m below the surface (Fig. 3). For the operation in the mostly unconsolidated sediments, the rotary drilling method with flush was used. A water-based drilling fluid was used to prevent borehole collapse and to transport cuttings into an adjacent drilling fluid pit. Before entering the pit, samples of the cutting were taken every meter and compared with the proposed lithology derived from a subsurface model. At the time of the visit, the drill bit had not reached the first lignite layer still drilling through the overburden, namely the Kieseloolith Formation of Zancian and Messinian age consisting of mud, sand and pebbles. One big hazard when drilling with lignite in the subsurface is the presence of large air-filled cavities causing mud loss. These cavities have to be filled up with gravel to stabilize the subsurface before drilling can continue. Based on the taken samples during drilling campaigns, the current subsurface model of the area will continuously be updated and refined.

Once the drilling has commenced, the well will be used to extract groundwater in order to prevent flooding of the nearby lignite mine. The produced water will be transported via pipeline to a nearby collection site.



Fig. 3: Drilling machine for a groundwater well.

### Concluding Remarks

Several protests against lignite mining have occurred in the Rhenish Lignite Area in the last couple years, i.e. against the deforestation of the so-called Hambacher Forst. However, the three mentioned lignite mines in the Rhenish Lignite Area contribute with a share of approximately 40% of electrical power production to the energy security of North Rhine Westphalia. There is no doubt that coal mining and the coal-fired electrical power production has to be phased out to reduce CO<sub>2</sub> emissions but it has to be conducted in a proper and sustainable manner. Therefore, the Rhine Area is supposed to become a “Model Region for secure energy and resources supply” (Land NRW, 2019). One aspect of that is utilizing the already existing infrastructure of the coal mines, such as the district heating system, to inexpensively tie new technology to already existing systems. This could be the case where district heat is produced with deep geothermal energy from karstic Paleozoic carbonates of the Rhenohercynian Basin (Devonian) and the Subvariscan Foredeep (Carboniferous) in the Weisweiler area.

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STC'20

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TECHNICAL  
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# SAVE THE DATE

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5 - 6 November 2020  
Karlsruhe — Germany

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Petroleum & Drilling Engineering  
Geoenergy-related Geosciences  
Geothermics



German Section

# Beyond the Borders

## An SPE young professionals initiative – 2019-09 Romania event

Ruben Ensalzado, Baker Hughes



Group picture of the Beyond the Borders event in Romania (19.-21.09.2019)

### Background

The “Beyond the Borders” (BtB) program is a young professionals (YPs) initiative from SPE sections of France, Italy, and Romania. Its first edition was in Jun-2018 in Paris, hosted and organized by the SPE France Section themed “Oil & Gas 4.0”. The program continued in Sep-2018 with the second event in Bucharest organized and hosted by the SPE Romania Section themed “Technical Partnerships”. The last event from 2018 was held in Oct-2018 with the theme “International Negotiations” in Milan, organized and hosted by the SPE Italy Section.

In 2019, the program continued with two new appointments. In Jun-2019, BtB was held in Paris, France, hosted by the local SPE section; the event was themed “Wellhead to Downstream” and gathered more than 20 YPs of 9 different nationalities.

This initiative aims to contribute to the professional and personal development of the YPs, international networking and exchange among sections, by means of a series of 2- to 3-day events with complementary themes, gathering a group between 20 to 25 YPs from the participating sections. The events include activities such as conferences, workshops, industrial visits and exchanges with student chapters and senior professionals.

### BTB 2<sup>nd</sup> Edition, Bucharest Sep-2019

In the second appointment of the year, Rubén Ensalzado (Program Manager from Baker Hughes) attended on behalf the SPE German Section. The theme for this second meeting in Romania was “Business Transformation for a Sustainable Future” and focused on providing information about these topics and its impact to the Energy industry.

**Agenda**

DAY	LOCATION	Main activities
19.09.2019	Bucharest	Welcome, SPE Panel
20.09.2019	Bucharest & Dealu Batran	Field Trip, SPE Workshop
21.09.2019	Sinaia	SPE Cares, SPE Debates

**Day 1**

EVENT	DESCRIPTION
Welcome Lunch & Network	
SPE Panel Discussion	Business Transformation for a Sustainable Future

The event started with a Welcome Lunch to allow YPs meeting new participants and catching up with colleagues from previous editions.



Senior professionals from the industry.

After finishing lunch, the main technical session of the event started: a four-way panel session with senior professionals from the industry: Alexandru Coman (Halliburton), Vlad Bordei (EY), Catalina Mitroi (Deloitte), and Christian Jespersen (OMV Petrom). They provided interesting perspectives in fields such as sustainable development goals (SDG), artificial intelligence, business transformation, change management, and sustainability.



Selfie of the participants.

To close the day, the group shared a tasty dinner with the hosts section. During the night, the group engaged in conversations related to the panel and enjoyed a good networking session.

**Day 2**

EVENT	DESCRIPTION
Field Trip	Dealu Batran Steam Injection – Surface Facilities & Wells
SPE Workshop	Lean Six Sigma Training – Application in Oil & Gas
Official Dinner	-

In the second day, the group visited steam injection field facilities from OMV Petrom. The host section provided the group with personal protection equipment and held a HS&E talk before proceeding to the facilities.

During the field trip, the group visited a steam stimulated production facility and learned about the operational details of steam production for this application. Staff from PETROM and the hosted section guided the visit and answered all questions from the group.



Group picture during the field trip.

The day followed with a visit to OMV Petrom Headquarters, Petrom City, in the outskirts of Bucharest.

The host section organized lunch for the attendees and provided an excellent opportunity to walk around the building and enjoy its architecture, talking with peers enjoying a relax atmosphere.

In the afternoon, Alexandra Nistor facilitated the workshop “Lean Six Sigma Training – Application in Oil & Gas”, an introduction to these topics with a practical approach. Alexandra works as a Senior Project Manager in OMV Petrom, and she shared her path during a business transformation journey inside the company.



OMV Petrom Headquarters building, Petrom City, in the outskirts of Bucharest.

For some attendees, this workshop served as a first opportunity to learn about lean and lean six sigma methodologies, with practical applications in Oil & Gas. Alexandra debunked some myths related to these concepts, e.g. that they are only applicable for manufacturing, and encouraged the YPs to engage in lean practices whenever they can.

To close the day, the YPs were invited to an official dinner with employees from OMV Petrom and other SPE members from the host section.



Dinner together with employees from OMV Petrom and other Romanian SPE members.

**Day 3**

EVENT	DESCRIPTION
SPE Cares	Cleaning the Sinaia Trekking trails
SPE Debates	Debate – Future of Oil & Gas



SPE Care activity: The participants picked trash in Sinaia.

During the third day, the group headed to Sinaia for the SPE Care activity: trash picking in surroundings a popular trekking and biking area in the Bucegi Mountains. The

host section equipped the group with protection gadgets and trash bags and divided the areas for maximum impact.



Debate with the topic "Future of Oil and Gas"

SPE Care is a global volunteering initiative of the Society of Petroleum Engineers (SPE) aimed to promote community service worldwide while bringing together students, young professionals, and experienced professionals. We can shed a positive light in the oil and gas industry and make a difference in our community outside our careers.



Final group picture of the Beyond the Borders event

For the second event of the day and closure, the hosts organized a debate themed "Future of Oil and Gas". The group was divided in 4 teams and scheduled into two sessions, to debate two statements in the topic "Renewable Energy Vs Fossil Fuels". The objective of the session was to expose the YPs to rapid argument elaboration and teamwork with people from different backgrounds and nationalities.

The host section organized prizes for the winning groups and for individual performance, closing in great way an entertaining and instructional trip.

# Young Professionals – overview 2020

Joschka Röth, RWTH Aachen University



**Joschka Röth**  
Chairperson



**Renas Ibragim**  
YP officer



**Kerstin Kogler**  
YP officer



**Edna Michelle Bisso Bi Mba**  
YP officer



**Opeyemi Bello**  
YP officer



**Rasoul Foroutan**  
YP officer

Current GSSPE YP Officers.

## Who are we and what are we doing?

We are a team of six YPs from various fields (drilling engineering, petroleum engineering, reservoir engineering and geology). We host several professional events and luncheons as well as networking events throughout the year. Participating in YP events gives you a chance to meet and discuss with other YPs within and across disciplines from different companies and institutions.

For example, we are currently preparing online meetings as substitutes for the events that had to be cancelled due to the current virus outbreak (Lunch'n'Learn at the DGG Annual Meeting in Munich; Youngtimer Garage at the DGMK/ÖGEW Spring Meeting at Congress Union Celle). In both cases, we invited senior professionals as speakers who will share their career experience with the YP audience in a relaxed online format. More details will be announced soon.

## Why are we doing it?

Organizing such events requires a lot of preparation and is often time-consuming. A financial benefit does not exist, but we see many other advantages: We are volunteering because

- we are motivated to support students during their transition into the workforce,
- we like to unite YPs, senior professionals and students,

- we provide a platform for communication, exchange of knowledge and experience on a wide range of topics,
- we like to establish and maintain a vital network from diverse professional and cultural backgrounds,
- we are positively influencing our own generation, our leaders and our successors,
- we like to communicate with other YPs across the borders,
- and we want to open our minds and make these borders disappear.

## What is new?

After our successful YP workshops in Bremen 2018 and in Lüneburg 2019, we thought about modifying the concept. Fortunately, such a wonderful concept existed already: Since 2018, YPs from various disciplines from many different European countries hold meetings to discover the industry and the culture of the respective host country. This YP initiative is called **"Beyond the Borders" (BtB)** and is supported by the Society of Petroleum Engineers. #BtB2020hamburg  
We will host the first German BtB event at the Wintershall DEA headquarter in Hamburg and at Baker Hughes in Celle from 10th to 12th September 2020.

For **#BtB2020hamburg** we selected the theme **"From easy oil into the digital age"** and the program will include field trips and cultural events. We are expecting international and multidisciplinary participants from all

across Europe. And we are very happy, that **Shauna Noonan (2020 SPE President Society of Petroleum Engineers)** will join us in Hamburg as a keynote speaker. YPs from Germany are welcome to join this event.

Please save the date. Details will be announced soon. And if you are generally interested in joining or supporting our activities, please just contact us. [yp-gsspe@web.de](mailto:yp-gsspe@web.de)

More info soon ...

[yp-gsspe@web.de](mailto:yp-gsspe@web.de)

# BEYOND THE BORDERS AN SPE YP INITIATIVE FROM EASY OIL INTO THE **DIGITAL** AGE

Hamburg – Germany  
10 – 12 September 2020



German Section

# SPE eLearning – the right thing to do now

Ingo Forstner, BVEG

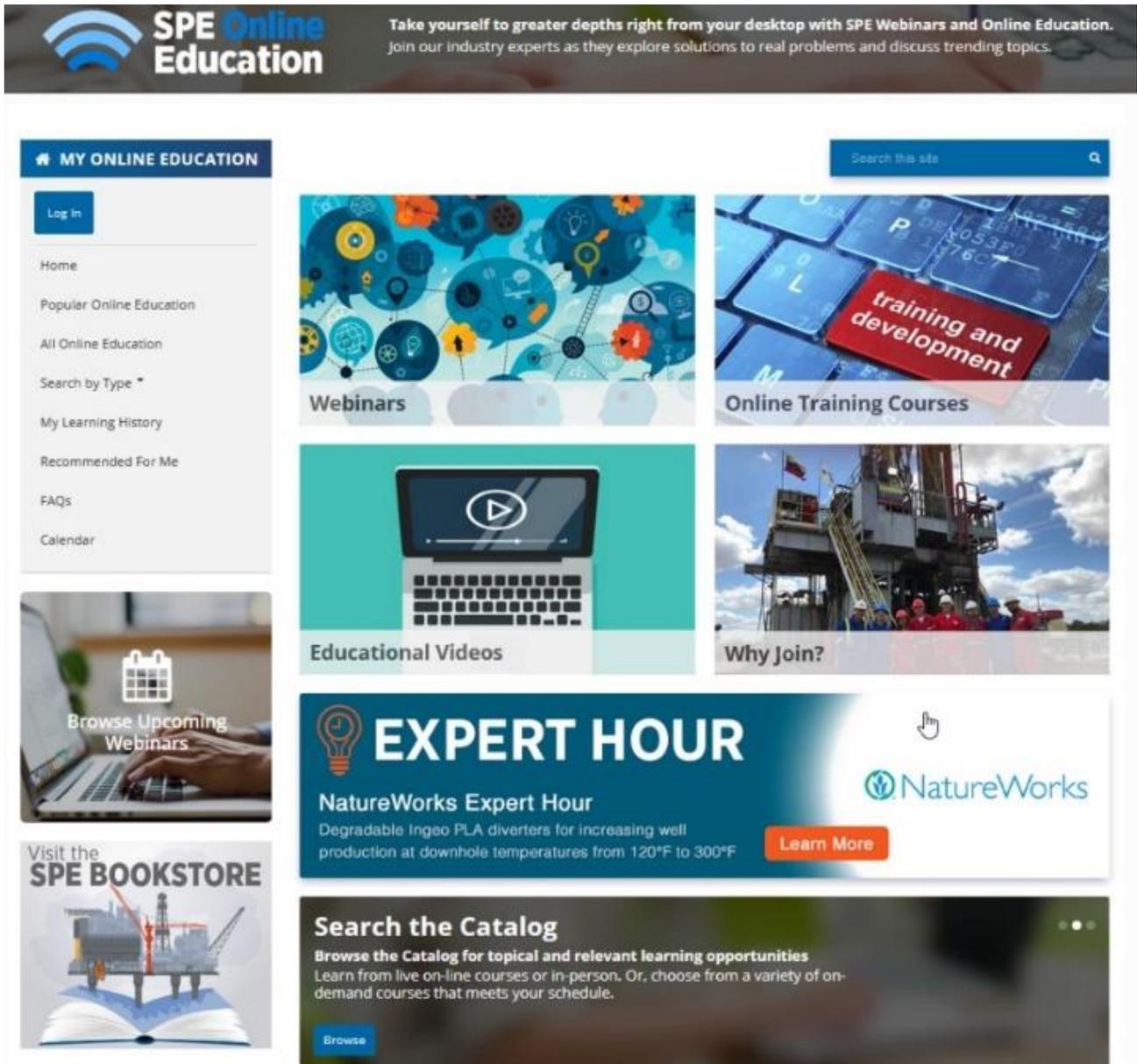


Figure 1: webevents.spe.org website

Dear fellow oilpatch professionals and professionals-to be,

When I was asked if I have a good topic to write about in our newsletter a few months back, SPE's e-learning seemed like a good idea. But as something for the back-burner for most of us. As something to do once-in-a-while or when you have a specific topic to investigate. As nice-to-have for our members, however not priority one.

How things have changed. As I write this in mid-March, Germany's borders and schools are closed and life grinds to a halt. Business travel is suspended, international travel anyhow, most shops are closed, and we are told to stay home. Period. What a change in lifestyle within a few days. We are all struggling to adopt to a life with little change in scenery and drastically reduced means of recreation and interaction with others. At the same time, not only stock markets, but also the price of oil has dropped greatly and that will have an impact on the global industry's bottom line even without a deadly virus around. And nobody knows how long this will last. Challenging times.

While I cannot recommend you smartly on how to deal with this scary virus other than what is in the news, I do have a recommendation of what to do when you are locked at home: educate yourself. Professionally. There are various options, and even more developing quickly.

**PetroTalk: Artificial Intelligence and Machine Learning in Industry and Academia**

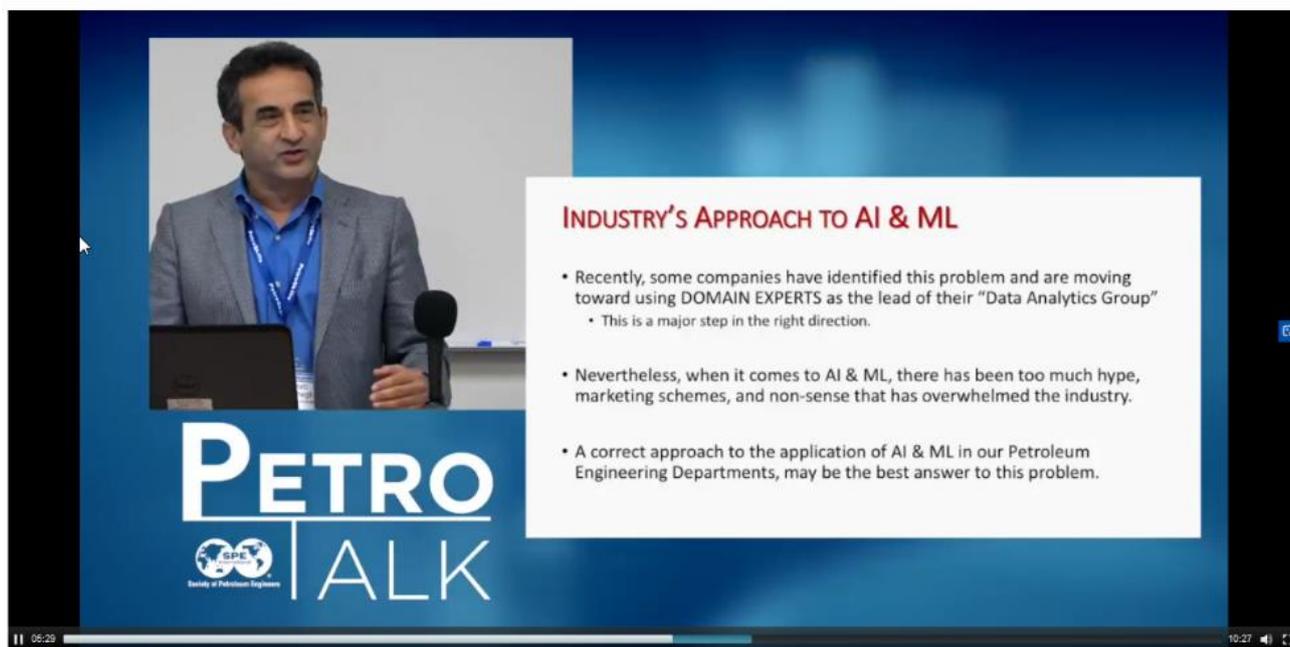


Figure 2: Screenshot of a [PetroTalk](#)

One comprehensive, long underused provider of quality content is [SPE international](#). There are many hundreds of modules, ranging from corporate responsibility to Petroleum Geomechanics to Negotiation and Conflict resolution. All sorts of topics relevant for us, whether soft or hard skill, technical or non-technical. And in different formats, too. There are hour-long webinars, live broadcasted with interesting Q&A in the end, and canned recordings of them if you missed them. These are from various sources, many presenters are Distinguished lecturers. There are videos, called Petrotalk, maybe 10 minutes and easy to digest because of interesting presenters and professional high-quality cutting. And there several other formats such as interviews on technical and non-technical topics.

Admittedly, they could do with a couple clicks less before you get to the content, but for us members most of it is free after all, a great offering. And the extra clicks are there, because there are so many choices, so much content.

Now that you are probably grounded at home. And looking into a possibly insecure professional future. Wouldn't it be good to make good use of your forced spare time and educate yourself further? Besides doing your tax returns and sorting out the attic, SPE eLearning may be a great, satisfying way to spend extra time (especially compared to doing taxes).

These offerings are currently in the process of even being expanded. The Distinguished Lecturer travels are obviously being suspended right now, but SPEI is working hard on having them broadcasted instead in even greater numbers than in the past.

In Germany, we also cannot meet in person any more for at least the near future. But we are also building our own SPE offerings online. The first webinar of this kind will be Dr. Thorsten Hinz of ExxonMobil talking about "[Outlook for Energy – A Perspective for 2040](#)" on 23<sup>rd</sup> April. An interesting topic for any of us, especially with climate change being such a present challenge. Those of you who have listened to him during our STC 2019 sustainability panel know that this promises to be a lively talk about a fundamental and important topic.

So, what are you waiting for? [Dive right in](#). And meet me [virtually](#) on 23<sup>rd</sup> April.

# SPE's mission revisited

Tobias Backers, GSSPE Chair & Ruhr-University Bochum

German Section of the Society of Petroleum Engineers GSSPE may become a knowledge hub for the energy revolution. Officially founded in 1957, the Society of Petroleum Engineers SPE is the largest individual-member organisation serving professionals worldwide in the upstream segment of the oil and gas industry today. With more than 156.000 members in 154 countries, which participate in 201 sections and 396 student chapters, SPE is a not-for-profit society whose members are engaged in energy resources development and production.

The **German Section of the Society of Petroleum Engineers** GSSPE was established in 1990; 2020 will mark its 30th anniversary. With more than 700 members in total and about some 380 students GSSPE is mainly active in spreading technical knowledge and supporting their associated students and young professionals.

The Society of Petroleum Engineers' mission as formulated today is "to collect, disseminate, and exchange technical knowledge concerning the exploration, development and production of oil and gas resources, and related technologies for the public benefit; and to provide opportunities for professionals to enhance their technical and professional competence".

This mission, as formulated some decades ago, has become more relevant than ever before! The statement may sound surprising, as we are to exit the hydrocarbon dominated era. However, the knowledge of how to explore for structures that may have beneficial reservoir conditions, how to drill a well into the earth's crust, how to develop a reservoir, or how to technically manage wells may be key to future developments of sequestration, energy storage and alternative energy supply.

1<sup>st</sup> July 1859 the Hunäus-well in Wietze, Germany, was the first successful well exploring oil; ever since the knowledge of how to find and produce hydrocarbons was increased and refined. Hence, the hydrocarbon industry builds on more than 160 years of experience. This accumulated vast experience and knowledge in well-based mining should be serving to **overcome the challenges of the energy transition**. This requires not only **offering the knowledge**, but upfront **listening to people** interested in developing e.g. geothermal power, sequestration and subsurface energy storage. The hydrocarbon industry has overcome a lot of the challenges in finding and producing hydrocarbons, but the specific challenges that must be met when aiming at e.g. producing geothermal energy or storing energy can only be addressed by the experts in that field.

Only together the start-up 'renewables' and the experienced senior 'hydrocarbons' can face the modern worlds demands. Therefore, **GSSPE** should define itself not only by completing SPE's mission sensu-stricto, but by opening up even more than in the past and understand itself **as a servant to delivering reliable and climate-friendly energy**.

SPE International has been accumulating and documenting knowledge over the decades; OnePetro and PetroWiki serve as modern **hubs for technical knowledge** in the oil and gas industry today. In future, these information sources may become increasingly relevant for other well based mining activities such as geothermal, power-to-x, or sequestration applications.

GSSPE can serve as local **hub for dissemination and exchange** and therefore play a vital role in transmorphing Germany into a country with sustainable energy use. This will also conserve, deepen and broaden the expertise in all related industries.

Therefore, I encourage the German oil and gas industry, and **GSSPE** upfront, to **reach out** even more to the geothermal, storage and sequestration experts. In return, we should **join in** to develop climate friendly and technically advanced solutions and strategies for the future of energy. If you would like to be an active part of a clever evolution and diversification of the energy supply, and support GSSPE in serving as a knowledge hub for all energy related subsurface activities and topside technology, join in GSSPE and help us shaping the future.

*Already published as editorial for the OIL GAS European Magazine.*

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\* on 30.03.2020