

INTERNATIONAL YOUTH SCIENTIFIC & PRACTICAL CONGRESS

OIL & GAS HORIZONS XII

WWW.OILANDGASHORISONS.RU

16-19 NOVEMBER, 2021



Gubkin University
SPE Student Chapter

ABOUT «OIL AND GAS HORIZONS» CONGRESS

XIII International Youth Scientific and Practical Congress “Oil & Gas Horizons” will take place at National University of Oil and Gas «Gubkin University» from 16th till 19th of November 2021. The organizer of the event is Gubkin University SPE Student Chapter.

THE AIMS OF THE CONGRESS:

- Discussing the topic «Arctic Offshore Oil and Gas Industry» with the specialists of leading petroleum companies, establishing industry's tendencies and its further development;
- Organization of a large scale Student Paper Contest with 15 different technical sessions;
- Collaboration between participants, experts and professors of Gubkin University;
- Development of the Congress as a platform for knowledge and experience sharing within the petroleum industry.

THE OBJECTIVES OF THE CONGRESS:

- Experience sharing and cultural exchange between students and representatives of the petroleum industry;
- Granting an opportunity for speakers' works to be published in the Book of Abstracts with an ISBN code and RSCI;
- Strengthening the collaboration between SPE student chapters.

THE MAIN THEME OF THE PLENARY SESSION OF THE CONGRESS IN 2021:

Due to the trends the role of the Arctic in the oil and gas industry of our time cannot be overestimated. This region can bring the largest and most promising oil and gas fields to the world but despite this scientists face problems developing Arctic due to harsh climatic conditions and insufficiently developed technologies. Recently, this territory has also acquired one more importance for the world economy — transport. The Northern Sea Route along the coast of the Arctic seas of Russia is almost 2 times shorter than other routes from Europe to the Far East. Thus, all of the above call for the development and application of innovative digital technologies in the oil and gas industry, especially in the Arctic, including the robotization of this region. Russian President Vladimir Putin has approved the Strategy for the Development of the Arctic zone of the Russian Federation and ensuring national security for the period up to 2035.

THE OFFICIAL LANGUAGE OF THE CONGRESS:

English.

CONCLUSIONS

OF «OIL AND GAS HORIZONS» CONGRESS IN 2020

From 18 to 21 November 2020 National University of Oil and Gas «Gubkin University» hosted **the XII International Youth Scientific and Practical Congress «Oil and Gas Horizons»** organized by the Gubkin SPE student section. In 2020, **128 students and postgraduates were representing 43 universities from 15 countries attended the Congress.**

During the opening ceremony, the participants and guests were greeted by Chief Organizer of the Congress Anastasia Kritinina, Alexander Maksimenko, Vice-rector for scientific and international affairs of Gubkin University, Director of the Baker Hughes Directional Drilling Department — Alexander Monakhov, Vice President of Schlumberger in Russia and Central Asia — Artem Karapetov, Regional Director of SPE Russia and the Caspian Region-Ignatiy Volnov, General Director of Salym Petroleum Development NV — Michael Collins, President of SPE International 2020 — Shona Noonan, Director of the Moscow Section of SPE — Anton Ablaev, Director of the student direction of the Moscow Section of SPE — Anar Ermukhambetova, Leading the coordinator of non-profit projects of SPE Russia and the Caspian region is Yaroslava Orlova.

35 representatives of different universities took part in International and Regional (Russia and the Caspian region) Round Tables. **This allowed the participants to share their ideas and projects, as well as receive work tips** from the Leading coordinator of non-profit projects of SPE Russia and the Caspian region, Yaroslava Orlova, and the Director of the student direction of the Moscow Section of SPE, Anar Ermukhambetova.

Oil Case company conducted a technical case, in order to the joint solution of which the students rallied even more and demonstrated good knowledge in the field of mechanized oil production. In parallel, the intellectual game **PetroOlympic Games** was held, during which participants competed in both knowledge and intelligence teamwork.

It was possible to distract from the technical component of the Congress. The main event of the Congress was Technical Sessions, where **participants presented their reports in 14 sections.** Thus, 98 students, postgraduates and young specialists, as well as 22 schoolchildren from 20 cities of Russia, presented their scientific papers. Students of secondary schools and specialized classes of Gazprom and Novatek took part.

At the closing ceremony of the congress, **the winners of the technical sessions, intellectual game and technical case were awarded** by the Chief Organizer of the Congress — Anastasia Kritinina, Vice-rector for scientific and international affairs of Gubkin University — Alexander Maksimenko, Executive Director of Baker Hughes — David Gadzhimirzaev, Technical Director of GeoSplit LLC — Kirill Ovchinnikov, Director of the student thrus of the Moscow Section of SPE — Anar Ermukhambetova, Leading coordinator of non-profit projects of SPE Russia and the Caspian Region — Yaroslava Orlova and Assistant Rector of National University of Oil and Gas «Gubkin University» — Vlada Streletskaya.

The platinum sponsors of the event

were Baker Hughes and Schlumberger, **the gold sponsor** was PJSC Gazpromneft.

Halliburton, PJSC LUKOIL and Oil case became **partners of the Congress.**

Information support for the event was provided by ROGTEC magazine, «Fulcrum», The Journal of Natural Gas Engineering, OGEL, Petroleum, «Oil and gas vertical», «Sphere. Oil and Gas».



IN THE FRAMEWORK OF THE CONGRESS, THE FOLLOWING SESSIONS ARE OFFERED:

- 1. Geosciences:** geology, geophysics, petrophysics.
- 2. Drilling and Completion:** drilling technologies, drilling fluids, tools and well completion.
- 3. Oil and Gas Field Development:** reservoir engineering, production engineering, oilfield equipment.
- 4. Oil and Gas Logistics, Storage and Transportation:** logistics systems, transportation of natural gas and oil, construction of pipelines and storages of oil and gas.
- 5. Oil and Gas Chemistry:** oil refining, gas processing, chemical technology in oil and gas industry.
- 6. Health, Safety and Environment:** technological and law aspects of industrial safety, health and environment protection in oil and gas industry.
- 7. Petroleum Economics and Management:** economic and financial aspects of projects in petroleum sector.
- 8. "Smart" technologies:** digital fields, machine learning, big data, internet of things, data security, remote control.
- 9. Engineering mechanics:** mechanisms and machines research, technological design, mechanization of processes.
- 10. Law Regulation of Oil and Gas Industry:** law aspects of energy policies worldwide, regulation of petroleum industry new technologies, government control of oil and gas companies' activities.

SESSIONS FOR PHD STUDENTS AND YOUNG PROFESSIONALS:

- 11. PhD and Young Professionals Paper Contest Upstream:** PhD students paper contest on "upstream" themes: geology, drilling, field development, "Smart" technologies.
- 12. PhD and Young Professionals Paper Contest Midstream:** PhD students paper contest on "midstream" themes: logistics, transportation and storage of oil and gas.
- 13. PhD and Young Professionals Paper Contest Downstream:** PhD students paper contest on "downstream" themes: oil and gas chemistry, economics and management, HSE.

SPECIAL SECTIONS:

- 14. Poster Session:** presentation of scientific works of participants at special stands.
- 15. School Section:** higher school pupil's paper contest on all themes of O&G industry.

PROGRAM

16TH OF NOVEMBER

11:00-16:00 ProfChain
16:00-21:00 Cultural program

17TH OF NOVEMBER

9:00-10:00 Registration
10:00-11:00 Opening ceremony
11:00-11:15 Coffe break
11:15-12:00 Keynote speech
12:15-13:30 Plenary Session
13:45-14:45 Lunch
14:45-16:00 Technical Lecture
16:15-19:15 Technical Sessions/Energy4me
19:30-20:30 Dinner
20:45 Cultural program

18TH OF NOVEMBER

11:00-12:30 Soft Skills Fair
12:30-13:00 Coffe break
13:00-15:00 International Round Table
15:00-16:00 Lunch
16:15-19:15 Technical Sessions/Poster Sessions
19:30-20:30 Dinner
20:30 Cultural program

19TH OF NOVEMBER

10:00-12:00 Technical Sessions
12:30-13:30 Technical Lecture
13:30-14:30 Lunch
14:30-17:00 PetroOlympic Games/Technical Case
17:00-17:30 Coffe break
18:00-22:00 Gala Dinner

DESCRIPTION OF EVENTS

PLENARY SESSION

Companies' discussion. Generally, the discussion will be held by representatives of Platinum, Golden and Silver Sponsors. This year, participants of the Congress will hear the opinion of the leading oil and gas companies on one of the most currently important topics — Arctic Offshore Oil and Gas Industry.



KEYNOTE SPEECH

A keynote in public speaking is a talk that establishes a main underlying theme. A keynote speaker who is well known for his or her expertise in oil and gas field and has wide name recognition due to other accomplishments raises enthusiasm for learning new in O&G industry.

SPE STUDENT CHAPTERS ROUND TABLES



The meeting of SPE Student Chapters is one of the key events being held in order to discuss the development of cooperation between universities and student sections of SPE from different cities and countries. The participants of the International Round Table are the representatives of chapters, as well as members of Professional SPE Sections.

PETROOLYMPIC GAMES



PetroOlympic Games is an intellectual game, the issues of which are based on such disciplines as geology and geophysics, oil and gas chemistry, drilling, development, offshore development and oil and gas business, transportation and storage. This is a competition between 5 teams of 5 people, consisting of 3 rounds.

TECHNICAL CASE

A competition of teams with the aim of solving a real fishing task as best as possible in the allotted time. The task for the case is given to the participants a few days before the event. So, participants have enough time to solve the case before and after the events during the Congress.



ENERGY4ME

An event, that provides technical information in energy industry, science and technologies, which can be understandable for pupils. It will also provide with free access to oil & gas knowledge in different languages. There will be master class for pupils with using of visual materials during the Congress.



SOFT SKILLS FAIR

The project consists of organizing several soft-skills blocks on the same space in parallel. In 2019, there were the following blocks: Improve your CV (specialists help participants with compiling a resume), Bringing the Science (experts talk about scientific activities), SPE (part of SPE), WPC (part of WPC), Find Your Internship (about PetroStage project), Gubkin Talks (interesting stories of specialists about their career path).



The purpose of the object is to help students navigate the world of the oil and gas industry, learn something new for themselves and determine the own path in their careers.

TECHNICAL LECTURE



Technical Lecture is devoted to sponsor companies' lectures on the main topic of the Congress. The lectures are expected to be held by Platinum, Golden and Silver Sponsors.

PROFCHAIN

This is an absolutely new object of the Congress. The main idea of it is to show the technological chain of the most important and current problems of oil and gas industry. Actually, ProfChain includes excursions to petroleum companies and their laboratories, where top specialists will tell students about new trends, research and impressive development.



TECHNICAL SESSIONS

Technical Sessions consist of two parts: Poster Session and Paper Session. This event allows students and young professionals from all over the world to present their scientific papers in 15 sections, exchange their research and get new connections.

GALA DINNER

Solemn celebration of the end of the Congress. It includes the Closing ceremony where the winners of the Technical Sessions, Intellectual Game and Technical Case will be awarded. Moreover, this informal part of the event allows guests and participants to relax, discuss any questions that have arisen, make acquaintances and communicate in a friendly atmosphere.

CONTACT INFORMATION

ANASTASIA KRITININA

President of Gubkin University SPE Student Chapter

E-mail: nastya.krit@yandex.ru

Mob.: +7 (985) 721-76-12

DARIA BELIKOVA

Chief Organizer of “Oil and Gas Horizons” Congress

Head of Knowledge Development Committee of
Gubkin University SPE Student Chapter

E-mail: Belikova.d.a@inbox.ru

Mob.: +7 (915) 270-16-07

THE OFFICIAL E-MAIL OF THE CONGRESS:

ogh@gubkin.ru