

ISSN 2720-3581



H₂O



JOURNAL

OF GEOTECHNOLOGY
AND ENERGY

FORMERLY AGH DRILLING, OIL, GAS

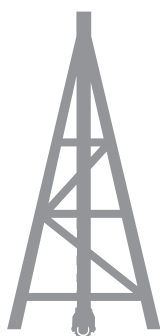
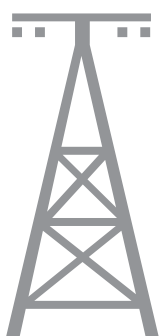
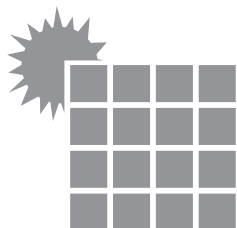
2022, vol. 39, no. 4



WYDAWNICTWA AGH

KRAKOW 2022

ISSN 2720-3581



JOURNAL

OF GEOTECHNOLOGY
AND ENERGY

FORMERLY AGH DRILLING, OIL, GAS

2022, vol. 39, no. 4

The “Journal of Geotechnology and Energy” (formerly “AGH Drilling, Oil, Gas”) is a quarterly published by the Faculty of Drilling, Oil and Gas at the AGH University of Science and Technology, Krakow, Poland. Journal is an interdisciplinary, international, peer-reviewed, and open access. The articles published in JGE have been given a favorable opinion by the reviewers designated by the editorial board.

Editorial Team

Editor-in-chief

Dariusz Knez, AGH University of Science and Technology, Poland

Co-editors

Szymon Kuczyński
Małgorzata Maria Formela
Karol Dąbrowski
Katarzyna Chruszcz-Lipska
Rafał Matuła
Sławomir Wysocki

Editorial Board

Rafał Wiśniowski
Danuta Bielewicz
Stanisław Dubiel
Andrzej Gonet
Maciej Kaliski
Stanisław Nagy
Stanisław Rychlicki
Jakub Siemek
Jerzy Stopa
Kazimierz Twardowski

Publisher

AGH University Press

Linguistic corrector: *Aeddan Shaw*
Technical editor: *Kamila Zimnicka*
Desktop publishing: *Munda*
Cover design: *Paweł Sepielak*

© Wydawnictwa AGH, Krakow 2022
Creative Commons CC-BY 4.0 License
ISSN: 2720-3581
DOI: <https://doi.org/10.7494/jge>

Journal website: <https://journals.agh.edu.pl/jge>

Wydawnictwa AGH (AGH University Press)
al. A. Mickiewicza 30, 30-059 Kraków
tel. 12 617 32 28, 12 636 40 38
e-mail: redakcja@wydawnictwoagh.pl
www.wydawnictwo.agh.edu.pl

CONTENTS

Stanisław Nagy, Jakub Ślęk, Szymon Kuczyński Society of Petroleum Engineers Poland Section – thirtieth anniversary	5
---	---



Stanisław Nagy

AGH University of Science and Technology in Krakow
ORCID: 0000-0001-9777-2258
e-mail: stanislaw.nagy@agh.edu.pl

Jakub Ślęk

Halliburton Company Germany GMBH Sp. z o.o.
ORCID: n.a.
e-mail: jakub.slek@halliburton.com

Szymon Kuczyński

AGH University of Science and Technology in Krakow
ORCID: 0000-0001-8261-4417
Correspondence: szymon.kuczynski@agh.edu.pl

SOCIETY OF PETROLEUM ENGINEERS POLAND SECTION – THIRTIETH ANNIVERSARY

Date of submission:
28.12.2022

Date of acceptance:
29.12.2022

Date of publication:
31.12.2022

© 2022 Authors. This is an open access publication, which can be used, distributed, and reproduced in any medium according to the Creative Commons CC-BY 4.0 License

<https://journals.agh.edu.pl/jge>

Abstract: The SPE Poland Section (established in 1992) allows members and sympathizers to participate in interesting lectures, presented by international experts from various fields, associated with the oil and gas industry. In general, these are the Distinguished Lecturers chosen by the SPE, lecturers from various companies, and research centers present the latest technological developments in the oil and gas industry. The activity of the SPE Poland Section contributes to the expansion and strengthening of international scientific and technical cooperation. Also, it allows to its members to update their professional knowledge and learn about the trends in development and technological progress. Within the Section, AGH UST SPE Student Chapter acts an important role. SC brings together active students who organize workshops, industrial training, field trips, and internationally known East Meets West Congress. The work performed by Student Chapter is greatly appreciated by the academic community, as well as by the management of the region and the headquarters of the SPE. In 2022 SPE Poland Section celebrates 30th anniversary of its establishment and we would like to express our deep appreciation to all members of the Section and our sympathizers who have contributed so much to the development of science and education in the field of drilling, oil, and gas engineering.

Keywords: SPE, knowledge transfer, association, society, networking

1. Introduction

In 1957, the Society of Petroleum Engineers (SPE) was founded and reported to the American Institute of Mining Engineers (AIME). In 1985, SPE became a stand-alone organization and is now the largest organization in the world of engineers, management, scientists, and students related to the oil industry.

The aim of the Society is to collect and disseminate knowledge about new oil and gas technologies, exchange technical information, and improve the professional qualifications of its members. The basic form of activity of the SPE is the organization of conferences, exhibitions, and training. Members of the association can be oil engineers, scientists, specialists related to the oil industry, and students.

The association currently has more than 124,833 members, including 58,813 students. The professional members form 203 sections in 134 countries, while students are grouped into 417 sections located in 117 countries (SPE 2021 year-end summary).

SPE collaborates with other international industry organizations, such as the International Association of Drilling Contractors (IADC), the American Association of Petroleum Geologists (AAPG), and the Society of Exploration Geophysicists (SEG).

The SPE has its headquarters in the United States, in Richardson, Texas. The association is chaired by its president, who in 2022 is Dr. Kamel Ben-Naceur. The chairman is elected for a period of one year, and, in order to maintain the smoothness of organizational work, his candidature is voted one year in advance. The association currently has a wide ranging structure of regional branches, with currently seventeen regions in the world.

The Polish section is part of the South, Central & East Europe region. In addition to Poland, our region includes the following sections: Croatia, France, Germany, Hungary, Italy, Spain, Switzerland, Romania, Turkey and the Vienna Basin Section bringing together Czechs, Slovaks and Austrians. The division into sections is not on a state basis but a regional one. It should be emphasized that the section is territorially connected with the area of drilling and production activities, regardless of the origin of the operators and international oil companies. The Society does not provide company membership, only individual membership. The basic form of the association's activity is a training system based on the organization of conferences and seminars. Once a year, a large world conference called the Annual Technical Conference and Exhibition (ATCE) is organized, combined with an industrial exhibition attended by several thousand participants. The speakers are carefully selected and are known as Distinguished Lecturers. Another form of knowledge transfer and a common way is communication over the Internet. Using this medium, any member

of the organization can contact the headquarters at any time. Thanks to the Internet platform, members can get a lot of valuable information, but the use of, for example, the society's extensive library is payable because it is one of the forms of financing its activities. Each member has the option of choosing and signing up to one of several thematic groups dealing with various technical problems for free, such as surface mining equipment, directional and horizontal drilling technology, gas storage, marine drilling technology, chemistry and corrosion, HSE (Health, Safety and Environment). The Association also publishes its own monthly, distributed free of charge as part of the membership fee – "Journal of Petroleum Technology" and the highly valued peer-reviewed journals "SPE Journal", "SPE Drilling & Completion", "SPE Production & Facilities", "SPE Economics and Management", "SPE Reservoir Evaluation & Engineering". SPE also publishes the technical magazines: "Oil and Gas Facilities", "The Way Ahead", "HSE Now". SPE also publishes reliable textbooks that can be purchased from an online bookstore [1]. SPE members have a 50% discount on these textbooks. See below for further details. A particularly interesting publication is the SPE Technical Reports, which cover areas where members of the SPE and the public benefit from understanding the current technology and challenges of the oil industry [2]. Any member of the SPE may propose that they develop a technical report to the executive board of the SPE. An excellent source of knowledge is the following: PetroWiki, which contains information from seven volumes of the *Petroleum Engineering Handbook* (PEH) published by SPE [3]. In the field of earth sciences, an excellent source of information is the SEG Wiki [4]. The main mission of the SEG Wiki is to provide scientific material to the earth sciences community and the general public through online books, guides, articles, and biographies of prominent scientists. Two of SEG's best-selling books are available for free on the SEG Wiki. A useful source of knowledge for young people, teachers, and the public is the SPE program called Energy4me with a lot of information as well as tips on the preparation of relevant lessons and lectures [5]. SPE Connect is a platform that provides the opportunity to establish direct contact with any specialist, SPE and participation in specialized discussions in selected topic groups [6].

2. Society of Petroleum Engineers Poland Section – the short story

The SPE Polish Section has existed for 30 years, and the driving force behind its creation was Kazimierz Głowacki. It should be noted, however, that members of the organ-

ization from the outset have been: Jakub Siemek, Jan Krzysiek, Stefan Miska, Andrzej Wojtanowicz, Kazimierz Głowacki, Marek Capik and Mariusz Łaciak. The Polish Section of the SPE, headquartered at the AGH University of Science and Technology in Krakow, was established at the election meeting on March 20, 1992 (Fig. 1), based on the decision of 38 members, founders, employees of AGH and industry representatives who had been encouraged to join the SPE Poland section: T. Bachleđa-Curuś, W. Biedrzycki, S. Bednarz, M. Capik, S. Dubiel, M. Dzia-dkiewicz, J. Ekiert, K. Głowacki, A. Gonet, W. Górecki, Z. Herman, A. Kessler, M. Kiełt, P. Krępulec, G. Kozubał, M. Łaciak, A. Mularczyk, S. Nagy, J. Niewodniczański, A. Olajosy, R. Orliński, A. Osiadacz, C. Rybicki, S. Rychlicki, J. Siemek, M. Sławomirski, K. Słupczyński, J. Soboń, T. Solecki, A. Sołtysik, J. Stopa, S. Szafran, J. Traple, W. Weil, R. Wiśniowski, R. Wojtasiewicz, L. Zawisza and A. Zubrzycki.

Initially, the section benefited from the financial support and experience of the SPE Stavanger Section. Currently, our section has over 40 members who are recruited from the AGH University of Science and Technology and from the oil and gas companies that operate in Poland. It should be emphasized that the good cooperation with the authorities of the Faculty of Drilling, Oil, and Gas of the AGH University of Science and Technology, allows the Section to organize conferences and lectures at the University.

The main activity of the Section is the organization of lectures, held on average every three months, to which members of the organization, its supporters, and everyone interested in the topic of the session are invited. The most common speakers are Distinguished Lecturers, as well as Polish Lecturers. To date, more than 130 lectures have been organized about drilling technology, the exploration and exploitation of oil and natural gas deposits, as well as IT technologies in the industry.

The SPE Polish Section harmoniously cooperates with the Association of Engineers and Technicians of the Oil and Gas Industry (SITPNiG), members of SITPNiG are regularly invited to SPE Distinguished Lecturers, and conversely, members of the SPE are invited to lectures and meetings organized by SITPNiG, creating excellent conditions for the continuous training of professional staff.

SPE members have quick and easy access to expert information, over 120,000 specialist publications, papers from SPE conferences and/or published in SPE periodicals.

The Polish Section of the Society of Petroleum Engineers has been honored to host lectures by many presidents of the SPE, including: in 1993 – J. Bosio, in 1997 – D. Craigh, in 2001 – J. Cooligan, in 2002 – S.A. Holditch, in 2003 – A. Young, in 2005 – G. Pacaloni, in 2011 – A. Labastie [6, 7].

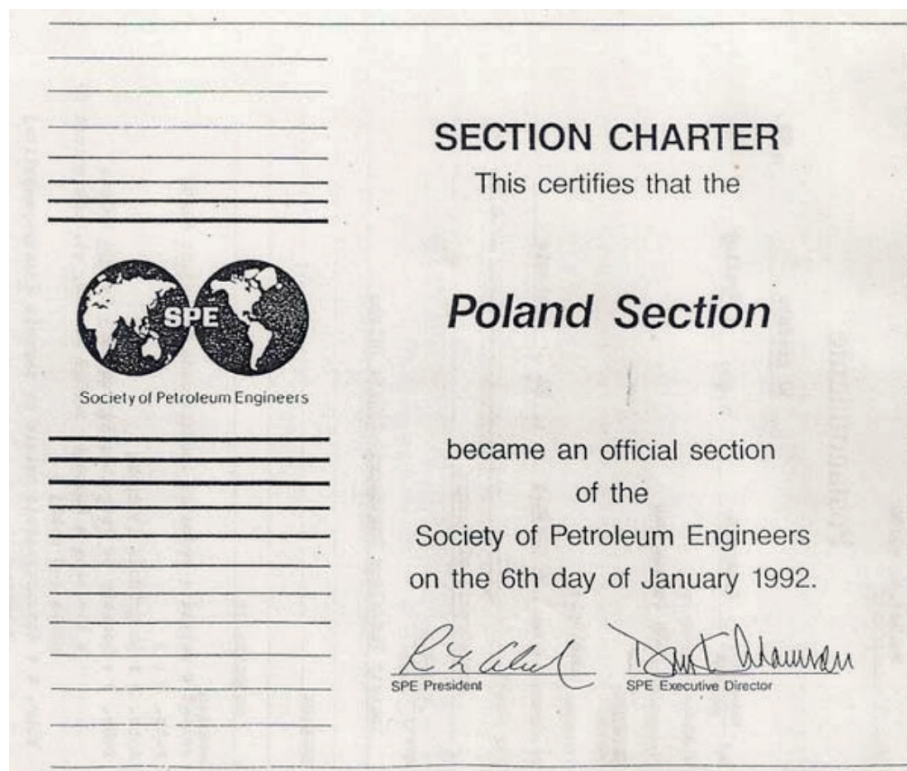


Fig. 1. Confirmation of the establishment of the Polish Section of the SPE signed by the President of the SPE, Roger L. Abel [8]

For the last 30 years, the Executive Council of the Polish Section has been elected for in two years terms. The list of chairpersons and Executive Council is shown in Table 1. Active and passive voting rights are granted to every member of the Section.

The following members have worked in the Audit Committee over the years: S. Szafran, M. Dziadkiewicz, S. Nagy, A. Sołtysik, S. Wilk, J. Traple, T. Solecki, J. Ziaja, K. Skrzypaszek, Z. Herman, J. Ślęk, K. Kogut, A. Gonet, C. Rybicki.

Table 1. The list of chairpersons and Executive Council over the past 30 years – SPE Polish Section

Dates	Chairperson	Executive Council
1992–1993	Kazimierz Głowacki	J. Siemek, A. Osiadacz, L. Zawisza – secretary, W. Górecki – treasurer
1994–1995	Stanisław Rychlicki	K. Głowacki, J. Siemek, C. Rybicki – secretary, A. Zubrzycki – treasurer
1996–1997	Stanisław Bednarz	S. Rychlicki S., D. Bielewicz, M. Łaciak – secretary, A. Zubrzycki – treasurer
1998–1999	Stanisław Bednarz	D. Bielewicz, W. Biedrzycki, M. Łaciak, D. Knez – secretary, A. Zubrzycki – treasurer
2000–2001	Stanisław Bednarz	M. Capik, J. Stopa, D. Knez – secretary, A. Zubrzycki – treasurer
2002–2003	Marek Capik	S. Bednarz, J. Stopa, S. Nagy – secretary, A. Zubrzycki – treasurer
2004–2005	Maciej Kaliski	J. Stopa, S. Nagy, W. Szott, M. Capik – secretary, A. Zubrzycki – treasurer
2006–2007	Jarosław Bałasz	M. Kaliski, S. Bednarz, S. Nagy, J. Stopa, K. Fugiel, W. Szott, M. Załubka – secretary, D. Knez – Student Chapter liaison & treasurer
2008–2009	Stanisław Bednarz	J. Bałasz, K. Fugiel, S. Nagy, M. Załubka, W. Szott, J. Stopa – secretary, D. Knez – Student Chapter liaison & treasurer
2010–2011	Maciej Załubka	S. Bednarz, K. Fugiel, A. Gonet, S. Nagy, R. Wiśniowski, J. Stopa – secretary, D. Knez – Student Chapter liaison & treasurer
2012–2013	Maciej Załubka	K. Fugiel, S. Bednarz, S. Nagy, R. Wiśniowski, W. Szott, J. Stopa – secretary, P. Kosowski – Student Chapter liaison & treasurer
2014–2015	Krzysztof A. Fugiel	S. Nagy, S. Bednarz, A. Gonet, J. Stopa – secretary, P. Kosowski – Student Chapter liaison & treasurer
2016–2018	Krzysztof A. Fugiel	S. Nagy, S. Bednarz, A. Gonet, R. Wiśniowski, J. Stopa, Ł. Klimkowski – secretary, A. Pańko, P. Kosowski – Student Chapter liaison & treasurer
2018–2021	Stanisław Nagy	J. Stopa, J. Ślęk – secretary, S. Kuczyński – Student Chapter liaison & treasurer
Since 2022	Stanisław Nagy	J. Stopa, J. Ślęk – secretary, S. Kuczyński – Student Chapter liaison & treasurer

3. Activity of the AGH UST Student Chapter

The AGH UST SPE Student Chapter can trace its origins back to the 1990s, when several students were active in the section. In 2001, it was relaunched because of active participation in the conference of student groups associated with the Society of Petroleum Engineers, organized at the University of Technology in Leoben on July 5–9, 2001. The participants were Wojciech Czapor and Mikołaj Stanisławek, who initiated the foundation of the Student Chapter in Poland. The AGH UST Student Chapter was established on February 1, 2002. In 2000–2002, the Student Chapter had 25 students of the AGH University of Science and Technology from the Drilling, Oil and Gas Faculty, Geology, Geophysics, and Environmental Engineering Faculty and Fuels and Energy Faculty.

Currently, the AGH UST Student Chapter has 40 members, but between 2007–2010 it has welcomed more than 370 students, as the AGH UST Student Chapter included more than 170 students from the Ivano-Frankivsk National Technical University of Oil and Gas in Ukraine. These students moved to the newly established (on June 1, 2010) Student Chapter, and subsequently on July 30, 2014 to Ukrainian Professional Section.

Since its founding in 2001, the chairpersons of the AGH UST Student Chapter have been: Wojciech Czapor, Łukasz Wróbel, Anna Kordek, Katarzyna Niepewny, Andrzej Kwiecień, Sebastian Krocza, Tomasz Wróblewski, Anna Ropka, Aleksandra Piotrowska, Wojciech Cieplak, Kamil Przymuszała, Iwona Mularczyk, Wojciech Panek, Jakub Drohomirecki, Patryk Żrebiec and is currently Stanisław Łaciak.

The activity of the AGH UST SPE Student Chapter is greatly appreciated by the academic community, as well as by the management of the region and the head-

quarters of the SPE. For the last 13 years, the Chapter has been recognized for organizing the International Congress “East Meets West” held at the University. The AGH UST Student Chapter was awarded by the SPE President, Janeen Judah, the 2017 Outstanding Student Chapter Award [6, 7].

4. Prizes and awards

Awards of the SPE Poland Section:

- Gold Standard Section 2017,
- Gold Standard Section 2015,
- President’s Award for Section Excellence 2014,
- President’s Award for Section Excellence 2013.

Awards of the AGH UST Student Chapter:

- Gold Standard Chapter 2018,
- Outstanding Student Chapter Award 2017,
- Gold Standard Chapter 2013.

Individual awards:

- Krzysztof A. Fugiel – SPE Regional Award for South, Central & East Europe Region 2015,

- Stanisław Bednarz – SPE Regional Award for South, Central & East Europe Region 2014,
- Sebastian Krocza – Award for Former Student Chapter President 2013.

5. Discussion and summary

The experience of SPE as a global organization, its contacts with specialists in various technical, economic and business fields, raises the level of knowledge, and discussions among the older and younger generation of members, allow for conclusions to be drawn that should be taken into account when shaping national legal regulations and the provisions of government agencies. The activity of the SPE Poland Section contributes to the expansion and strengthening of international scientific and technical cooperation, allows its members and supporters to keep their professional knowledge up to date and learn about the trends of development and technological progress.

Funding: This research received no external funding.

References

- [1] Society of Petroleum Engineers: <http://store.spe.org/> [8.09.2022].
- [2] Society of Petroleum Engineers: *SPE Technical Reports*. <http://www.spe.org/publications/techreports/> [8.09.2022].
- [3] PetroWiki: <http://petrowiki.org/PetroWiki> [8.09.2022].
- [4] SEGWiki: https://wiki.seg.org/wiki/Main_Page [8.09.2022].
- [5] Energy4me: www.energy4me.org [8.09.2022].
- [6] SPE Connect: <http://connect.spe.org/home> [8.09.2022].
- [7] Bednarz S., Załubka M.: *Sekcja Polska Society of Petroleum Engineers – 20 lecie działalności*. In: *Jubileusz 45-lecia Wydziału Wiertnictwa, Nafty i Gazu 1967–2012*. WwNiG AGH, Kraków 2012.
- [8] Fugiel K.: *Sekcja Polska Society of Petroleum Engineers – 25-lecie działalności*. 2017 [SPE materials – unpublished].

