

The Lviv-based journal "Nafta" in 1893-1914

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Abstract: The article describes the Lviv-based journal “Nafta”, which was published between 1893 and 1914. The journal was published as a monthly or bi-weekly and its editorial board was composed of professors of Lviv universities and Galician economic activists. "Nafta" was not the first journal devoted to the issues of the oil industry – methods of its extraction, economic questions on this branch of the economy, information on the functioning of the oil industry in other countries or the actions of national and state authorities towards this industry. Such journals had already been published earlier in Gorlice and Krosno and, after the publication of "Nafta" began, also in Jasło (Pawłowski 1995: 366). However, these journals were ephemera, and the Lviv-based "Nafta", as the long-standing organ of the National Petroleum Society and earlier the Society of Petroleum Technicians, was published until the end of July 1914.

Keywords: Galicia, Lviv, oil industry in Galicia, Polish journals in Galicia

Introduction

The development of oil production in Galicia occurred in the last decades of the 19th century and the beginning of the 20th century. Certainly, the growing interest in mining this resource was influenced by the possibility of winning substantial revenues. In addition, the initial use of oil and its derivatives as a source of energy used mainly for lighting rooms gradually expanded to the use of this raw material also as a source of heating or propulsion.

The first primitive methods of extracting oil generally took place where it appeared directly on the surface of the earth. To get it out of deeper wells, it was necessary to use new drilling techniques and also to take advantage of the geological knowledge that could point to drilling sites. This required exploration, co-operation, and knowledge acquisition. Lviv – which was the scientific centre of Galicia at the time – was therefore a natural centre, bringing together scientists, activists and entrepreneurs interested in developing knowledge about oil exploration and research in the broadest sense. The centre of this institution was the University and Lviv Polytechnic School and the oil research conducted there (Brzozowski 1995).

Genesis of the journal

In July 1893, the first issue of the monthly "Nafta", the organ of the Society of Petroleum Technicians in Lviv, which was founded in 1893 on the initiative of the National Petroleum Society, was published in Lviv. The journal's editor-in-chief was Dr. Rudolf Zuber – a geologist and then an associate professor at Lviv University. The title page of the journal included a call *To the Readers!*, outlining the reasons for the establishment and goals of the journal. The editors pointed out "*the acute lack of communication and means of communication between workers in the various oil industries scattered throughout the country and abroad*" and the fact that "*no means can lead more effectively to such a goal as the publication of its own organ*". At the same time, it was recognised that the periodical did not aspire to deal with problems scientifically, but "*we only want to enable individuals working in this profession to communicate and instruct each other by publicly expressing their discoveries, insights, experiences and needs*". In order for this goal to be realised, the editors appealed to readers to co-operate by "*as numerous and frequent correspondences and reports from all our mining and refining areas as possible*" ("Nafta" 1893; 1).

Initially, the journal was published as a monthly, but regular publication was halted as early as August 1894, as only one issue covering five months of the year was published. In the message addressed to readers *From the Editor* the reasons for the "*several months of stagnation in the publication of the journal*" were not given in order "*not to bore our Dear Readers*". At the same time, it was announced that from the beginning of 1895 the journal would be published twice a month ("Nafta" 1895: 113). This announcement was realised and the following year 24 issues of the magazine were published, appearing on the 15th and 30th of each month. However, from the beginning of the following year, there was again a break of several months in the continuity of the periodical's publication, which lasted until May 20, 1896, when the first issue of that year appeared, again published as a monthly; it was to be published on the 20th of each month. The headpiece in the journal provided information that Adolf Strzelecki had become the new editor in charge and the editors again did not indicate the reasons for the interruption, informing laconically that "*without going into a dissection of the causes of this interruption – causes completely beyond the control of the previous and present editors – we must assure you that with the exertion of all our energies we will strive to ensure that henceforth a new period in the life of the journal will begin, a period of steady and successful development*" ("Nafta" 1896: 1).

In the next issue, the editors announced that the magazine had gone from being a biweekly to a monthly and would henceforth go out in an increased volume of approximately 40 pages. At the same time, it was reported that the editors would seek to enter into close contact with the Petroleum Society and the editors of the "Reports" published by the Society ("Nafta" 1896: 17). During the year, there were

further changes. In the October issue, there was information that the journal, hitherto the organ of the Society of Petroleum Technicians (SPT) in Lviv, would be published jointly with the National Petroleum Society (NPS) and the editors would strive to "*create and maintain close communication among the general members of our oil industry*". Leading editorship was assumed by Stanisław Schnür-Peplowski, and administrative editorship by Dr. Stanisław Olszewski, secretary of the NPS. The editors invited more than a dozen specialists – including Klaudiusz Angerman, Julian Fabiański, Stanisław Margulec, Zygmunt Nowosielecki and Ludwik Zdanowicz ("Nafta" 1896: 85). By the decision of the NPS department, it was decided that from November 1 the periodical would be published by the joint efforts of both oil associations and "Nafta" would remain under the leadership of a committee formed by August Gorayski (chairman), Stanisław Szczepanowski (deputy) and Kazimierz Gąsiorowski, Leon Syroczyński, Waclaw Wolski, Roman Załoziecki, Rudolf Zuber and edited by S. Schnür-Peplowski ("Nafta" 1896: 97).

The last issue of the journal in 1896 announced the decision of the editorial committee to publish "Nafta" again as a biweekly from 1897 ("Nafta" 1896: 121). Between 1896 and 1898, its headpiece reported that "Nafta" was a periodical devoted to the affairs of the domestic oil industry.

In August 1897, the Society of Petroleum Technicians, chaired by W. Wolski, who had been the founder of "Nafta", was dissolved and the reason for this was the organisation of a technical section by the NPS, which was joined in large numbers by existing SPT members. The NPS undertook to publish a periodical on its own ("Nafta" 1897: 182). As a result, the journal became the publication of the National Petroleum Society in Galicia.

This state of affairs did not last too long, because from the beginning of 1900, the NPS "*separated 'Nafta' from its scope of activities and thus it ceases to be its organ*". The editors asked readers for material support and help in publishing the journal. As a result, the journal became the organ of the "Galician oil industry" – not until in 1905 again the organ of the National Petroleum Society and from the 2nd issue of 1914 the joint organ of the NPS and the Chamber of Employers in Borysław, because "*the Chamber of Employers, which has goals related to the National Petroleum Society, acceded with all readiness to sustain our journal*" ("Nafta" 1914: 1) and agreed to subsidise it.

At the same time, it was reported that a German-language version of the magazine ("Naphta") was being printed, the content of which was to differ slightly from the Polish-language version ("Nafta" 1899: 328). The German-language edition of the journal was published from 1900 to 1908 as "Naphta. Zeitschrift für die Petroleum-Industrie und Bohrtechnik. Organ des Galiz. Landes Petroleum Vereines" and its editor was R. Załoziecki (Katalog 1931: 72). Due to financial difficulties and declining support from industrialists, the German-language version of the periodical was discontinued at the end of 1908 ("Nafta" 1901: 1). As reported in the TPS report for 1908, the arrears at the printing house amounted to K6,000, which the TPS undertook to pay, as well as to settle the deficit from the printing

of "Naphta" in the amount of K2,500 ("Nafta" 1909: 22). Due to a typesetters' strike, the last 24th issue was not published in 1913 ("Nafta" 1914: 1).

Journal editorship

Initially, the journal's editorial and administrative offices were located at 4A Piekarska Street, and in 1896-1898 it was located at 27 Zyblikiewicza Street. The headquarters of the journal's editorial office and administration often changed and was associated with changes in the publisher's headquarters – the Society of Petroleum Technicians or the National Petroleum Society in Lviv. Starting in October 1898, the editorial office, after moving from Zyblikiewicza St. was located in the so-called "Oil House" at 17-19 Chorążczyzna St., to move from the early 1900s to 10 Zofii Chrzanowskiej St. and already the following year to the building "Roman Villa" at 39 Krzyżowa Street. This was not the editorial office's last move – the address was changed twice in 1905 – first, in January, it was returned to 17 Chorążczyzna St., to occupy, as of July 1, the premises at 3 Słowackiego St., where the editorial office was located until the end of June 1907. From 1907 to 1912, the journal's administration and editorial offices were located at Kraszewskiego Street – first at number 1 and from October 1909 at number 5. In the last years before the outbreak of World War I, the editorial office moved from October 1, 1912 to 32 Batorego St. and a year later to 6 Senatorska St.

The first editors of "Nafta" were Antoni Błażowski, Kazimierz Gąsiorowski, Alfons Gostkowski, Zenon Suszycki, Dr. Paweł Wispek, Eng. Waclaw Wolski, and Dr. Rudolf Zuber. The number of editors decreased from the beginning of 1894 due to the death of A. Błażowski, president of the Society of Petroleum Technicians and owner of the Schodnica mine ("Nafta" 1894: 9, 33-34). The work of the editorial board until the end of 1895 was headed by Dr. Rudolf Zuber as editor-in-chief.

In 1898, the editorial board continued to be made up of August Korczak Gorayski (chairman), Stanisław Prus Szczepanowski (deputy), members Kazimierz Gąsiorowski, Dr. Stanisław Olszewski, Leon Syroczyński and Waclaw Wolski and the responsible editor remained S. Schnür-Pepłowski, replaced from issue 7 onward by Roman Załoziecki, who headed the editorial board as publisher and editor until 1905, and from issue 5 in that year until the end of 1908 together with Stefan Bartoszewicz. Bartoszewicz was the responsible editor of "Nafta" from 1909 to 1914. Changes in the composition of the journal's editorial board occurred from 1901, when the editorial committee consisted of A. Niekrasz from Chorkówka, Dr. S. Olszewski (Lviv), and Eng. W. Wolski (Schodnica). In the same year, from No. 3, Jan Sholman (Schodnica) was a member of the committee, replacing S. Olszewski. This composition of the editorial board lasted until early 1904, when the editorial board included Eng. Klaudiusz Angermann, Dr. Stefan Bartoszewicz, Władysław Długosz and Stanisław Mars. In the following years, the magazine's headpiece did not indicate the composition of the editorial board.

Journal layout. Content characteristics

In 1901, the journal's headpiece included the year of publication, the place and date of issue (day or month), the issue's sequential number during the year; the title, information about the publisher, and the frequency of publication. Further down the headpiece was information about the cost of subscribing, the composition of the editorial committee, the editor and publisher, the address of the editorial office and administration, and the table of contents of the issue (e.g., "Nafta" 1901: 1). The print was double-spaced, and the article titles were centred and separated by enlarged and bold font. Due to the modest volume of the periodical (usually amounting to 12-16 pages, often including 2-4 pages of advertisements), larger studies were published in subsequent issues of the journal (e.g., R. Załoziecki, *Jakich środków użyć by dążyć do rozszerzenia zastosowania produktów naftowych* [*What measures to use to seek to expand the use of petroleum products*], 1906). From 1894, advertisements were accepted by Julian Topolnicki's agency in Lviv, and advertisers had to pay 18 zlotys for a whole page of text, for half a page the fee was 10 zlotys, and for repetitions the "Nafta" administration could apply a discount according to an individual agreement.

In 1893-1895, the journal was printed at the Polish Printing House, located in Lviv at 6 Sykstuska Street. From 1896 to 1897, the periodical was printed in the printing house of E. Winiarz, and from 1898 until the last issue – at the "Słowo Polskie" printing house, initially (until 1902) under the management of Z. Hałaciński, after whom the management of the printing house (until the end of 1912) was taken over by J. Ziemiński. In the last years before the outbreak of World War I, the management of the printing house was in the hands of L. Nowakowski. The journal's circulation was limited by the financial capacity of sponsors and demand – as members of the Society of Petroleum Technicians and later the TPS received copies for free. It is known that in 1908 the journal's circulation in Polish was 450 copies and in German – 400 ("Nafta" 1908: 28). In 1894, subscriptions to "Nafta" for non-SPT members in Austria-Hungary were 5 zlotys per year, 2.50 semi-annually; in Germany, 10 and 5 marks, respectively; in franc-currency countries, 12 and 6 frs; in the UK, 10 and 5 shillings; in Russia, 5 and 2.50 roubles. From 1901 to 1907, the annual subscription was 12 crowns, rising to 16 crowns from 1908 to 1914 – throughout this period, TPS members received copies of the periodical free of charge. Subscriptions from non-members of the TPS were accepted by the journal's administration and Gubrynowicz and Schmidt's bookstore in Lviv's Cathedral Square ("Nafta" 1898: 1).

The layout of the content published in the periodical changed. In the first years of the journal's publication, its layout was typical – the issue opened with various articles, followed by numerous correspondence, then the Chronicle, containing information from the oil industry world – price movements, personal information, economic results of oil companies, etc. The issue ended with advertisements and announcements. From 1897, the layout of the journal was formalised and divided into two clearly named sections – I. Oil Association Affairs and II. Information

Section. The content of the issue was supplemented by the Correspondence, Literature, and Chronicle sections. This layout remained in place until the end of 1899, to return to the less formal layout of the publication, in which the topics of the articles presented were in two main areas – issues of oil and natural wax production and exploitation and, towards the end of the publication's run, natural gas and economic issues.

The subject matter of the articles on oil issues in the broadest sense was based on several well-known authors – first and foremost W. Wolski, the author of numerous studies, e.g., *O ujęciu gazów naftowych* [On oil gas intakes], *O gwintach stożkowych* [On tapered threads], *W sprawie reformy rur wiertniczych* [On drilling pipe reform], *O taraniu wiertniczym* [On drilling rams], and Roman Zuber author of, *inter alia*, *Kilka uwag o teoriach powstawania nafty* [Some remarks on theories of kerosene formation], *Uwagi krytyczne nad nowoczesnymi hipotezami o powstawaniu nafty* [Critical remarks on modern hypotheses of kerosene formation], *Kilka słów o geologii Kaukazy* [A few words on the geology of the Caucasus]. Several articles were also published by Klaudiusz Angerman (e.g. *Borysław pod względem geologiczno-tektonicznym* [Borysław in terms of geology and tectonics]), Jan Shelman (e.g. *Nóż do ucinania rur i prucia rur hermetycznych w otworach świdorowych* [A knife for cutting off pipes and breaking hermetic pipes in auger holes]), Marian Wieleżyński (e.g. *Metody używane do oznaczania wartości opałowej produktów naftowych* [Methods used to determine the calorific value of petroleum products]), A. Fauck (e.g. *Nowe postępy techniki głębokich wierceń* [New advances in deep drilling technology]), Wiktor Petit (e.g. *O wyciągaczach rur* [On pipe extractors]), Paul Stein (e.g. *Wiercenie szybko udarowe i jego rozwój* [High speed percussion drilling and its development]), J. Gruszkiewicz (e.g., *O gazie naftowym* [On petroleum gas]) and Władysław Szaynok (e.g., *Zastosowanie przegrzanej pary w kopalnictwie nafty* [Application of superheated steam in petroleum mining]).

Very interesting topics were also presented in this group of articles on geology by E. Dunikowski (*Geologiczne warunki występowania ropy w dobrach państwowych w Galicji* [Geological conditions of oil occurrence in state property in Galicia]), J. Grzybowski (*Mikroskopowe badania namulów wiertniczych z kopalń naftowych* [Microscopic studies of drilling muds from oil mines]), W. Szajnocha (*Pochodzenie karpackiego oleju skalnego* [Origin of Carpathian rock oil]), L. Gawroński (*Dzisiejsze poglądy na geologię Karpat i drugorzędne złoża ropy* [Today's views on the geology of the Carpathians and secondary oil deposits]), M. Miączyński (*Geologiczne stosunki Borysławia i Tustanowic* [Geological relations of Borysław and Tustanowice]); in the field of mechanical engineering – G. Potworowski (*Regulator do motorów naftowych i gazowych* [A regulator for oil and gas engines]) and Wit Sulimirski (*Kilka słów o świdrze ekscentrycznym* [A few words about the eccentric auger]), methods of extraction and oil processing – B. Pawlewski (*Z technologii nafty* [From kerosene technology]), F. Siudak (*Spostrzeżenia nad systemem wiertniczym Raky'ego* [Observations on the Raky

drilling system]), G. Schneider (*Wiercenie obrotowe piłującymi dłutami [Rotary drilling with saw chisels and hardened steel shot]*), Z. Bielski (*Rzut oka na nowsze sposoby głębokiego wiercenia [An observation of the newer methods of deep drilling]*), F. Brugger (*Rozwój galicyjskiego systemu wiercenia [Development of the Galician drilling system]*) or A. Łukaszewski (*Wieże wiertnicze, rezerwuary ziemne i gromowody [Drilling towers, earth reservoirs and lightning conductors]*). Some of the articles appearing in "Nafta" were reprints from other – usually German – specialist journals; or they were published lectures by authors, delivered at international and national conventions and congresses, and many of the published papers were unsigned – so they probably expressed the position of the entire editorial board.

The second thematic area of publication in the periodical was broad economic issues and oil statistics. Throughout the period of publication of "Nafta", statistics of the oil industry in Galicia were published (e.g., *Statystyka kopalń nafty i wosku ziemnego w Galicji w 1896 r. [Statistics of kerosene and natural wax mines in Galicia in 1896]*, *Spis kopalń nafty w okręgach górniczych Jasło, Drohobycz i Stanisławów w 1902 r. [List of kerosene mines in the mining districts of Jasło, Drohobycz and Stanisławów in 1902]*) and later also monthly production volumes in the partitioned territory. From 1906, "Nafta" reported on the monthly results of oil production in Borysław and Tustanowice. The amount of oil production and trade in Galicia and Austria-Hungary was reported annually, with interest also in the statistics of its production in Romania, Russia or the USA (e.g., S. Olszewski, *Statystyczny przegląd przemysłu naftowego w Baku 1896-1898 [Statistical Review of the Oil Industry in Baku 1896-1898]*, K. Pietrusky, *Przemysł naftowy w Stanach Zjednoczonych Ameryki w roku 1908 [The oil industry in the United States of America in 1908]*). These studies were often based on Austrian and national official publications and the studies of S. Olszewski (e.g., *Przywóz i wywóz produktów naftowych Austro-Węgierskiej Monarchii w r. 1895 [Import and export of petroleum products in Austro-Hungary in 1895]*, *Przemysł naftowy w Galicji w latach od 1884 do 1901 r. [The petroleum industry in Galicia from 1884 to 1901]*). A significant role was played by the substantial correspondence both from the localities where the oil mines were located (at first primarily from Schodnica and later from Borysław and Tustanowice), as well as from Romania, Russia or even from the Dutch East Indies.

Its editors – both Roman Załoziecki and Stefan Bartoszewicz – published in "Nafta" frequently. In 1897-1906, Załoziecki published more than a dozen articles on various topics (e.g., *O zużytkowaniu odpadów fabryk naftowych [On the use of oil factory waste]*, *O zastosowaniu olejów i odpadków naftowych do opalania [On the use of oil and waste oil for fuel]*, *Jakość naszej nafty eksportowej [The quality of our export kerosene]*). Similarly, in 1899-1908, S. Bartoszewicz wrote (e.g., *Organizacja eksportowa naszego przemysłu naftowego i przemysł naftowy amerykański [The export organisation of our oil industry and the American oil industry]*, S. Bartoszewicz, *Spirytus i produkta naftowe jako materiały do oświetlania*

i wytwarzania siły motorycznej [Spirits and oil products as materials for lighting and generating motive power], Traktat handlowy z Niemcami [The trade treaty with Germany], Historia i stan ekonomiczny przemysłu naftowego w Galicji [The history and economic condition of the oil industry in Galicia], Pogląd na dzieje przemysłu naftowego i środki sanacyjne [A view of the history of the oil industry and Sanation measures].

Beginning in 1909, the nature of the journal changed – occasional articles on technical subjects related to oil production and processing were published. The periodical took on the character of an overview of legal and economic issues, focusing on the current situation in the oil industry.

Conclusion

Oil extraction and processing was a major industry in Galicia. The extraction of this resource inspired the development of other industries – primarily the engineering industry, producing for the oil mines. The needs of the oil industry accelerated the development of road, rail, and telecommunications infrastructure in Galicia, changing the socioeconomic character of a sizeable part of its territory. The development of this sector was also possible thanks to extensive international scientific and technical exchanges involving oil scientists and practitioners from the Austro-Hungarian monarchy (including Galicia), Germany, Russia, Romania and France. This exchange was possible due to the growing interest of Galician scientific centres in Lviv and Cracow in the problems of the hard sciences – such as chemistry or geology, and the successes achieved in this field. The development of the oil industry also resulted in the education of a large group of excellent Galician mining engineers at Austrian universities and led to efforts to establish the Mining Academy in Cracow. It was successfully completed in 1914, but the outbreak of war prevented its launch.

All the above-mentioned descriptions of phenomena can be found by browsing the pages of Lviv's "Nafta". The journal was published for 22 years, facing a number of problems during this time – mainly financial. The periodical was completely apolitical – no texts on political issues appeared in it, although they were mentioned when describing the situation during the oil mine strikes in Russia in 1905.

The period of the publication of "Nafta" coincided with a period of intense development of oil production and processing. In Galicia, the number of wells grew, employment in the industry increased, new oil extraction technologies were introduced and exploration for new oil and also natural gas deposits was carried out. These changes were accompanied by new technical, professional, and social problems – which is why the journal's editors extensively discussed issues of the conditions of the oil industry in Galicia and the Habsburg monarchy. It pointed to its economic position, legal arrangements, and the terms of international agreements. It presented statistical information in numerous official materials and each issue contained materials on the current activities of social organisations of the

time, operating in the circle of the Galician oil industry – especially the National Petroleum Society and the Society of Petroleum Technicians.

The information contained in the 335 issues of this Lviv-based journal is essential for understanding the history of Galician industry and for better understanding the history of this part of the Polish lands.

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