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ATTEMPTS TO ORGANIZE OIL INDUSTRY IN INTERWAR POLAND

Abstract. The purpose of the study is to highlight the attempts of the entire oil industry of interwar Poland to unite in order to overcome mutual competition and achieve greater economic success. **The methodology of the study** is based on the principles of historicism, logic, scientific objectivity in assessing the past, a critical attitude to existing sources, including laws, which regulated the oil industry of interwar Poland, minutes of meetings of oil companies and societies, articles in specialized journals, etc. General scientific (analysis, analogy, synthesis, generalization), special and historical methods (historical and genetic, historical and typological, historical and systemic, comparative and historical) were used. The scientific novelty consists in the issue of the oil industry organization in interwar Poland, which significantly influenced the development of this industry, has not been the subject of a separate study. This issue was analyzed only causally describing the situation in the oil industry of Galicia in general. The Conclusion. The issue of the oil industry organization was important for the development of this industry in interwar Poland. At that time, crude oil production decreased significantly. Although the majority of the oil industry continued to be owned by foreigners, however, the Germans and the Austrians were largely replaced by the French. The Polish citizens owned mainly small and medium enterprises, the Polish state owned the biggest oil refinery in Drohobych. The task of the oil industry and the government was to organize various groups of entrepreneurs in this industry. But it was impossible to unite the entire oil industry. This unification was hampered by disputes among individual foreign firms, among foreign and local entrepreneurs, and etc. Nowadays, attempts to achieve such unification of the entire oil industry can be a good example of what mistakes should not be made for a proper unification in order to develop the industry by the government and entrepreneurs. Key words: Galicia, syndicate, cartel, "pure producers", oil industry, interwar Poland.

СПРОБИ ОРГАНІЗАЦІЇ НАФТОВОЇ ПРОМИСЛОВОСТІ У МІЖВОЄННІЙ ПОЛЬЩІ

Анотація. Мета дослідження — висвітлити спроби усієї нафтової промисловості міжвоєнної Польщі об'єднатися з метою подолати взаємну конкуренцію й досягнути більших

господарських успіхів. Методологія дослідження трунтується на приниипах історизму, логічності, наукової об'єктивності в оцінках минулого, критичного ставлення до наявних джерел, зокрема, законів, які регулювали нафтову промисловість міжвоєнної Польщі, протоколів засідань нафтових підприємств і товариств, статей у профільних часописах тощо. Використовувалися загальнонаукові (аналізу, аналогії, синтезу, узагальнення) й спеціально-історичні методи (історико-генетичний, історико-типологічний, історико-системний, порівняльно-історичний). Наукова новизна статті полягає у тому, що питання організації нафтової промисловості у міжвоєнній Польщі, які істотно впливали на розвиток цієї галузі, не стали об'єктом окремо дослідження. Цю проблему розглядали лише причинково, в загальному описуючи стан нафтової промисловості Галичини. Висновки. Питання організації нафтової промисловості було важливим для розвитку цієї галузі в міжвоєнній Польщі. В цей час істотно зменшилося видобування нафтисирцю. Хоч більшістю підприємств нафтової промисловості продовжували володіти чужоземці, однак німців й австрійців змінили здебільшого французи. Громадяни Польщі утримували головно малі й середні підприємства, у власності польської держави був найбільший нафтопереробний завод у Дрогобичі. Завданням нафтової промисловості й уряду було належно організувати різні групи підприємців галузі. Об'єднати всю нафтову промисловість так і не вдалося. Цьому на заваді стали суперечки між окремими чужоземними фірмами, між чужоземними й місцевими підприємиями тощо. Спроби досягти такої організації цілої нафтової промисловості можуть бути нині добрим прикладом, яких помилок не варто допускатися владі й підприємцям для належного об'єднання заради розвитку галузі.

Ключові слова: Галичина, синдикат, картель, "чисті виробники", нафтова промисловість, міжвоєнна Польща.

The Problem Statement and Topicality. Energy independence is one of the important components of the state economic success. That is why, all countries always try to provide themselves with energy resources, among which the most important (especially during the period between the two world wars) is oil. For interwar Poland, solving this problem was complicated by a significant reduction in crude oil production and, consequently, the production of petroleum products. In addition, the structure of the industry changed significantly. Later, it was dominated by foreign capital, and the Poles owned small and medium enterprises mostly. However, the German and Austrian ownership in the Galician oil industry was taken over by the French largely. It was important for the Polish government to ensure the development of the oil industry, taking into account the probability of a new war, the development of motorization, maintaining a positive trade balance and the need to provide raw materials to numerous refineries. To this end, governments tried to organize diverse enterprises in the industry to avoid undesirable competition in the oil market. Coverage of the attempts to create institutions aimed at combining different types of production activities, national origins of capital and production volumes of enterprise can be useful for modern organization practice of the oil industry. At the same time, in current oil policy of the state there should be taken into account numerous mistakes that accompanied the attempts to unite enterprises of the oil industry during the interwar period. It was the mistakes which hampered the development of the oil industry, accelerated its decline, and as a result led to a decline in the industrial potential of Galicia.

The Analysis of Sources and Recent Researches. The basis of the article source base are publications in specialized journals of the interwar period: "The Mining and Metallurgical Magazine" (in Polish – "Czasopismo górniczo-hutnicze"), "The Oil" (in Polish – "Nafta"), "The Oil Industry" (in Polish – "Przemysł naftowy"). Some materials of the Central State Historical Archive in Lviv from the funds of various institutions of the oil industry were also used.

Until nowadays, in historiography there has not been specifically studied the organization of the oil industry in interwar Poland. The question of the development of this industry was mostly causally mentioned in general works on economic history. Not so many researches focus on the oil industry. In 1972, the research of Jan Cząstka (Cząstka, 1972) was published in Kraków, in which there was analyzed the development of the oil industry in Poland briefly. This issue is analyzed in the History of the Polish Oil Industry in more detail, which was published in two volumes in 1994 - 1995. In Volume 1 there were analyzed the industry foundation and technical issues of oil production and refining of crude oil, briefly there were described the activities of major enterprises. In Volume 2 there were analyzed the development of the gas industry, and the organization of the oil industry, research and education, patriotic and social activities of oil workers (Historia..., 1994 - 1995). Some issues of this problem were analyzed in a special collection of articles published in Toruń in 2014 (Historia..., 2014). However, little is mentioned about the organization of the oil industry in these studies. Some researchers analyzed the oil industry in Galicia: Stanislav and Kristina Volkovichi, Marek Granichny and Halyna Urban (History..., 2017), Alison Frank (Frank, 2005; 2011) Volodymyr Klapchuk (Klapchuk, 2013a), Wojciech Morawski (Morawski, 2017) and Oksana Pasitska (Pasitska, 2019). Special publications were written on oil production by S. Wołkowicz (Wołkowicz, 2019), V. Klapchuk (Klapchuk, 2013b), Mariusz Majewski (Majewski, 2009), Roman Masyk (Masyk, 2017b). R. Masyk studied oil refining in Eastern Galicia (Masyk, 2017a). The change of ownership in the Polish oil industry after World War I was written by Norman Davies (Davies, 1970) and Piotr Franaszek (Franaszek, 1986). Vladyslava Moskalets analysed some issues in the history of the oil industry in Galicia (Moskalets, 2014; 2019).

The Purpose of the Research. Having analyzed the historiographical achievements, source materials – publications in specialized periodicals of the oil industry of the interwar period, as well as unpublished documents of oil institutions to elucidate the attempts to organize this industry in interwar Poland; to highlight the problems that did not allow all oil entrepreneurs to unite completely.

The Results of the Research. The oil industry was very important for the economy of interwar Poland and taking into consideration the international trade, and the need to have own oil products in case of a new war (Central State Historical Archive of Ukraine in Lviv, f. 207, d. 1, c. 70, p. 9; c. 166; p. 1; c. 178, p. 6; Kozicki, 1933). All European countries tried to provide themselves with oil products. To this end, much was invested in the search of brine and the construction of new refineries (Wachtel, 1933, pp. 13–14). In interwar Poland, all oil deposits were located in the south of the state at the foot of the Carpathians, from Liman County in Kraków Voivodeship to the border with Romania in the east. Oil refineries were mostly located near the fields, close to Boryslav, Drohobych, etc. (Gaj, 1939, p. 3; Kozicki, 1933, pp. 117–118).

The traditional division into groups of the oil industry (production, refining and trade) was not typical of interwar Poland. In this case it is more expedient to use other classification. In interwar Poland oil producers were divided into three groups: pure brine producers; entrepreneurs who produced and refined crude oil (producers-refineries); enterprises that only processed it (pure refineries). Pure producers were mostly small enterprises founded on the basis of the Polish capital. Their share in the oil industry was about 30%; they owned almost 50% of all oil wells (Szlemiński, 1933a, pp. 91–92).

Refinery firms were mainly foreign-owned and dominated oil production. They owned more than half of all wells in Poland and extracted about 2/3 of brine; except for the state-

owned plant in Drohobych, all major refineries. Pure refineries included the state oil refinery in Drohobych and numerous small enterprises. Small refineries were based mainly on the Polish capital and were less well equipped technically (Sprawozdanie..., 1925, p. 118; Wachtel, 1933, pp. 19–20).

After the end of World War I, the oil industry in Galicia underwent significant changes and new problems appeared. Foreigners continued to dominate the industry. Initially, the Polish government occupied enterprises which belonged to the Austrians and the Germans (3/4 of all enterprises). Later they were bought out mainly by the French banks. Thus, in the oil industry of Galicia the Austrians and the Germans were replaced by the French (Chabrzyk, 1995, p. 134; Cząstka, 1972, p. 23; Franaszek, 1986, pp. 229–243). As a result, by the mid-1920s, more than 80% of the Polish oil industry was owned by foreigners. At the same time, the French owned more than 50% of the industry (Chabrzyk, 1995, p. 135).

During the interwar period, crude oil production decreased significantly (Table 1).

Table 1

Crude oil production decreased or stabilized at a very low level from year to year. The amount of brine extracted in Poland was insufficient to ensure the production capacity of the country's refineries. It was dangerous to allow the export of brine, because it could undermine Poland's self-sufficiency in oil products and pose a threat in case of a possible new war. Because of this, it was necessary to find new methods of searching for brine, deposits outside Boryslav. At the same time, it was necessary to support pure brine producers and not to forget about the state oil refinery in Drohobych and small plants, as they were owned by the Polish citizens. Forgetting to support them, the Polish government risked the oil industry to be completely taken over by foreigners (Morawski, 2017, pp. 21-22).

The lack of a sufficient number of brine and differences in financing and tasks of the oil industry necessitated the organization of the industry. The best solution was to organize everyone who worked in the oil industry. This could not be achieved, which provoked a confrontation between pure producers and refineries, large and small refineries.

The National Petroleum Society was the only platform for some negotiations of the entire oil industry. It was founded in 1877 and during the Austrian rule this institution managed to unite the majority of entrepreneurs in the oil industry. However, during the interwar period the National Petroleum Society remained a public organization and could not

Year	Crude oil extracted
1913	1,113.668
1919	831.700
1920	765.024
1921	704.874
1922	713.103
1923	737.181
1924	770.792
1925	811.930
1926	796.082
1927	722.596
1928	742.896
1929	674.689
1930	662.763
1931	630.480
1932	556.686
1933	550.673
1934	529.207
1935	514.763
1936	510.630
1937	501.301
1938	nearly 507.000

Based on (Masyk, 2017b, p. 791).

properly protect the financial interests of all groups in the industry (Kachlik, 1995, pp. 165–168).

The need for cooperation of all those who worked in the oil industry was discussed many times among the Polish oil industry men. For its development it was necessary to find the ways for mutual understanding among enterprises owned by the citizens of interwar Poland, and companies owned by major global concerns.

The first projects to organize the entire oil industry in Galicia appeared in mid-1919. They were initiated by the National Petroleum Society. Thus, on June 18, 1919, a special commission was formed in the bosom of the Society, which was to conclude a project of such organization. The membersof commission took as a basis the proposals suggested to the Austrian government before the war. The main principle was to keep the production of crude oil in order not to stop the process. The distribution of brine among refineries according to their production capacity was considered important. At that time, there was a problem connected with brine which was accumulated at warehouses during the Polish-Ukrainian war. Refineries did not intend to buy it, waiting for the price of raw materials to fall, and the state-owned plant in Drohobych could not process it all. Under such circumstances, the oil industry offered the government to boost the export of brine, but the government did not agree to it. This fact caused large surpluses of raw materials in warehouses, its producers could not take advantage of high profit in foreign markets and often simply burned expensive brine. The project of the National Petroleum Society also provided for the organization of refineries. The organization was to be based on the forced union of all enterprises. Domestic trade in petroleum products was to be conducted by a refinery organization that, in agreement with the government, would cover all domestic demand for petroleum products. Exports of petroleum products were to remain with the government. At the same time, the state oil refinery in Drohobych was given priority in processing brine for export. To organize exports, the government proposed to found a separate institution that would conduct specific transactions. On September 29, 1919, a delegation of the National Petroleum Society went to Warsaw and proposed these decisions to the government. However, such project of organizing the oil industry was not implemented (Organizacja..., 1919; Sprawy..., 1919).

At the same time, there was suggested a more radical solution to the organization of the industry. For example, in 1919 a joint-stock company the Polish Oil was established in Warsaw, which advocated the nationalization of the Polish oil industry. The institution established a branch in Lviv and planned to establish similar ones in Boryslav and Krosno (Wiadomości..., 1919). The Polish government did not follow the path of the oil industry nationalization and allowed both the Polish and foreign entrepreneurs to invest in this industry on equal terms.

In order to organize the entire oil industry, various industry groups had to unite themselves at first. Pure producers were the first ones who tried to unite immediately after the Poles captured Boryslav field. In May of 1919, the Union of Brine Producers (in Polish – Związek producentów ropy) advocated the unification of all crude oil production in order to distribute it among refineries rationally, which stopped operating under the rule of the Western Ukrainian People's Republic (ZUNR). At the same time, the government had to control the brine prices, because its appearance in free market would cause prices to fall and cause many wells to stop operating. At that time Warsaw was proposed to be the center of the institution (Powszechna..., 1919).

The organization of pure producers gained real shape at the end of 1919 – the beginning of 1920, when on the initiative of Wladyslaw Shaynok there was formed the Union of Polish Oil Producers (in Polish – Związek Polskich Przemysłowców Naftowych) in Lviv. The Union was to represent the interests of all medium and small oil plants founded by the Polish citizens. These plants could not defend themselves against the influx of foreign enterprises

with huge capital and government support. In order to influence the state oil policy somehow, they needed to unite. Otherwise, there was a threat that foreigners would completely take over the industry (20 lat..., 1939, p. 123; CSHAUL, f. 219, d. 1, c. 186, pp. 1, 6; c. 299, p. 58).

At the very beginning, the Union of Polish Oil Producers worked as a society, but on October 29, 1920, a law on cooperatives was passed in Poland. The Union, by the way, was engaged in commercial activities, that is why, it had to be reorganized into a joint-stock union. On March 28, 1923, the Union, in accordance with the changes in legislation, was transformed into a cooperative with a limited liability (Walne..., 1923, p. 41; Związek..., 1923, p. 52).

The activities of this institution can be divided into two stages. The first lasted from its founding until 1929. In the first decade of its activity, the Union set itself many tasks. It not only operated as a cooperative, but it was also an oil society – it represented the Polish small and medium enterprises among the authorities, tried to influence oil policy (20 lat..., 1939, p. 124).

Gradually, as a cooperative, the Union became a representative body of pure brine producers. Organizational matters had to be separated from money (loans, etc.). It was decided that the old organization should deal only with financial matters. Instead, there was the necessity to create a new institution that would control the most important common affairs of pure producers. Formally, the reorganization of the institution took place at the end of the summer of 1929. (20 lat..., 1939, p. 126).

To preserve the continuity of the new organization from the cooperative, its name was preserved – the Union of Polish Oil Producers. At the same time, the cooperative continued to operate with the same name. As a result of the division of competencies, conditions were created when all pure mining enterprises could join the Union (society). Therefore, this organization managed to become the center of this group of the oil industry, to unite entrepreneurs with the same interests. Since then, the activities of the Union (society) had not been combined with a cooperative, which was engaged only in monetary affairs (20 lat..., 1939, p. 127; Statut..., 1929; Statut..., 1930; Zmiany..., 1929).

In 1932, instead of the cooperative, the Union of Polish Oil Producers organized the Syndicate of Brine Producers (in Polish – Syndykat Producentów Ropy). It dealt with trade of pure producers (20 lat..., 1939, p. 132).

In the second half of 1934, pure brine producers were reorganized again. There were talks of merging into one institution. On June 2, 1935, a meeting of the Union of Polish Oil Producers took place in Drohobych. Since then, the only institution representing the interests of pure producers had reopened (Zasadnicze..., 1935, pp. 21–23).

It was important for the Union to influence the state oil policy. Otherwise, large refineries, which were mostly global concerns, could take over small, pure producers. The most important tasks of the Union were: to organize the entire oil industry of Poland; to form such prices for brine, which would ensure the profitability of its production; to develop oil drilling, mainly pioneering. Gradually the Union became a solid organization of pure brine producers, becoming the most powerful representative of the Polish property in the oil industry. From 1934 it was represented in the economic self-government (20 lat..., 1939, p. 134).

In interwar Poland the first mergers of large oil refineries (including "pure" refineries and refineries-producers) arose during the recovery of the industry from the effects of World War I and the Polish-Ukrainian War. Private refineries were not destroyed after ousting of the former owners (mainly the Austrians and the Germans), but were in decline due to shutdowns. The Polish government abandoned the idea of the state monopoly on crude oil refining and was forced to attract foreign capital because the Polish business was unable to finance big refineries (Przegląd..., 1919, p. 92; Szaynok, 1925c, pp. 85–88; Szaynok, 1929, pp. 22–25). As a result, the Polish entrepreneurs invested only in oil production and small refineries.

In 1919, the government began to create the first cartels of refineries and at the same time increase the number of foreign firms in the industry. According to the Polish oil producers, this was a defining mistake in the governmental oil policy. In some period of time, the cartel began to influence the government, which had no its own vision of the industry (Państwo..., 1924, p. 4). At the same time, foreigners, who, with the assistance of the government after the war, significantly reduced their role in the large-scale production of oil and petroleum products of the Polish capital, ceased to reckon with other groups in the industry. Therefore, the first associations of refineries could not contribute to the development of the oil industry (Wojciechowski, 1933, p. 210).

As early as the end of 1918, the "Polraf" Bureau of Polish Refineries was established in Kraków (in Polish – Biuro Polskich Rafinerów Nafty "Polraf"). Enterprises from Western Galicia took part in it, as Boryslav deposit was controlled by the Western Ukrainian People's Republic at that time. Then this institution moved to Warsaw (Kachlik, 1995, pp. 168–169). With the capture of Boryslav, the refineries began to talk about reorganizing of their union. Finally, in November of 1919, the Syndicate of the Polish Oil Industry was formed under the name the Polish Oil "Polnaft" (in Polish – "Polnaft"). It was joined by the state oil refinery in Drohobych, which was supposed to be a regulator of relations in the industry. Mainly, the syndicate began to chase after export earnings (Z przemysłu..., 1919, pp. 258–259).

After the abolition of the sequestration of petroleum products in 1921, in order to organize the sale and even distribution of oil throughout the country, a trading company "Kraionafta" was established (in Polish – "Krajonafta"). This organization determined the contingents of production for each refinery, then sold them, monopolizing the price. It, for example, managed to concentrate domestic sales of paraffin. At the end of 1922, this organization was liquidated because the State Oil Refinery in Drohobych left it. Since then, fierce competition between refineries had begun. Oil prices fell, and there were problems in the markets. The disorganization of the Polish exports led to the fact that the Polish oil products were paid 30% less in Europe than the US oil products (Sprawozdanie..., 1925, p. 123; Sprawozdanie..., 1927, pp. 95–96; Szaynok, 1923, pp. 51–52).

The first cartels were particularly sharply criticized by the Polish oil entrepreneurs. For example, the Union of Polish Oil Producers believed that all these organizations wanted to make state-owned oil refineries dependent. Having thus lost a competitor, the cartels sought to take over the entire oil industry. Foreign industrialists tried to influence the government in every possible way. For the most part, they saw Poland as a market for petroleum products, rather than as a country in which large sums of money could be invested in the oil industry. This was primarily due to the extremely high cost of extracting brine there. The Polish government made it clear to foreign entrepreneurs that it would use all means to support its country oil independence. However, some goals foreign capital managed to achieve (Kachlik, 1995, p. 169; Szaynok, 1922, p. 36). The government controlled private industry, but "the Kraionafta" cartel, for example, dictated the price of oil to Drohobych State Oil Refinery and paid for its products later as compared to private firms. During hyperinflation, this caused significant losses to the state-owned enterprise (Nowa..., 1924, pp. 173–174; Szaynok, 1922, p. 37; Z historii..., 1922, pp. 21–24).

Eventually, conflicts between foreign and state-owned refineries led to the liquidation of "the Kraionafta" at the end of 1922. Immediately after the liquidation, the creation of a

new cartel was discussed. The Union of Polish Oil Producers was strongly opposed to this, fearing an increase in foreign ownership in the industry. Pure producers offered to start the state-owned enterprise in Drohobych, which could process up to 40% of all brine produced in Poland in 1923. Instead, this enterprise processed only a quarter. In this way there should be increased the role of the Polish capital in the oil industry (Nowa..., 1924, pp. 174–175; Przeciw..., 1923, pp. 145–147).

The government took a different path and supported foreigners and on December 1, 1924 created a trade organization – Economic Association of Refineries (in Polish – Zjednoczenie gospodarcze rafineryj olejów mineralnych) in Warsaw (Sprawozdanie..., 1925, pp. 123–124; Szaynok, 1925a, p. 3). This organization was also weak and could not solve the problems of the industry. Many refineries immediately stated that they would not comply with the cartel harsh conditions (Szaynok, 1925a, p. 5). The government forced the state-owned enterprise in Drohobych to join the Economic Association of Refineries, which again found itself in a similar non-profitable position as in previous cartels. In fact, acting this way, the state supported foreign property in the industry, which infuriated the Polish oil producers. Especially since refineries began to bring down the price of brine deliberately (Szaynok, 1925b, p. 50; Szaynok, 1925d, pp. 68–69; Szczepanowski, 1925, p. 98).

The Economic Association of Refineries did not fulfill any task that could prove the feasibility of its functioning in practice; none of the promises made to the government and society. It did not contribute to the modernization of refineries. All refineries competed with each other. The cartel did not resolve the issue of a large number of refineries, which significantly increased production costs in petroleum production. Brine production covered the production capacity of operating refineries by only 60%. Another problem of the Economic Association of Refineries was the rivalry of refineries for the domestic market. They overdeveloped their trade organizations in different parts of the country. In addition, there were some trade companies that did not participate in the production and processing of brine. It was necessary to reduce the number of such organizations to reduce trade costs, but oil companies did not agree to this case. The cartel was to free Poland from fierce competition and provide consumers with a good product at an affordable price. Instead, oil prices rose significantly (Kielski, 1927, pp. 59, 113–115, 142, 230–231; Sprawozdanie..., 1927, pp. 95–96; Wojciechowski, 1926, p. 18).

The cartel also promised to support oil production. High prices for petroleum products were to increase the price of brine, which in turn would increase drilling. When the Economic Association of Refineries was founded, the refineries promised to increase the price of Boryslav brine to \$ 200 per ten-ton carriage. This increase would correspond to the world cost of such brine. However, these promises were not kept. At the beginning of 1926, Boryslav brine cost only \$ 135–160. By raising oil prices, the cartel simultaneously neglected the interests of crude oil production, and actually the government stayed away from these problems in the mid-1920s. (Wojciechowski, 1926, p. 19). The cartel planned to set up a joint bureau for the purchase of raw materials, but refineries did not agree on the maximum and minimum contingents for its processing. At the end of 1926 the situation deteriorated, when the production of crude oil decreased every month in Boryslav (Kielski, 1927, pp. 368–370, 390–392).

The cartel did not organize the export of petroleum products either, which was the main condition set by the government. It was only managed to reach an agreement with another major European producer of paraffin – Scotland (Kielski, 1927, pp. 259, 296–297; Wojciechowski, 1926, p. 19). Agreements on a single export of other petroleum products

were not successful. This happened because the Polish oil industry already became completely dependent on the policies of two major global concerns – "Standard" ("Standard Oil Company") and "Shell" ("Shell Oil Company"). The concerns constantly competed for world markets, that is why, no agreement was reached between their Polish offices (Kielski, 1927, pp. 58–59; Wojciechowski, 1926, p. 20).

The Economic Association of Refineries operated until December 31, 1926. After that, competition among them intensified (Dr. S. S., 1930, p. 108; Szydłowski, 1930, p. 75). Therefore, on January 1, 1927, negotiations began on establishing a new organization. The unresolved issues quickly hindered its establishment: there was not enough brine for the Polish refineries; not enough domestic consumption, even for small Polish processing; too extensive trade organizations for a weak internal market; large and expensive export apparatus. The Polish oil industry needed an organization that would: strengthen domestic consumption, without which no production had a sound basis; eliminated the fierce competition of the Polish companies in foreign markets; made it possible to keep the price of brine at a level that would at least slightly support drilling. The Polish government began to emphasize the importance of oil production (Kielski, 1927, pp. 479–480, 502–503).

The government tried to solve all these problems, and in November of 1927 the trade organization Syndicate of the Oil Industry was founded (in Polish – Syndykat przemysłu naftowego). It included almost all major oil producers. The government allowed Drohobych state-owned refinery to join the organization (Sprawozdanie..., 1929, p. 110). The Syndicate was to operate until April 30, 1933 (Szydłowski, 1930, p. 75). The cartel was organized with the participation of the government, including the Minister of Industry and Trade, who agreed to join the state-owned refinery under certain conditions. They intended to streamline the domestic market; to increase domestic consumption; cooperation in the export market; to use the part of income received from market regulation for operational tasks (Dr. S. S., 1930, p. 108).

The Syndicate continued the policy of production contingents. During the year, centralized organizations were set up to supply the Syndicate refineries with crude oil and joint whole sales (Sprawozdanie..., 1930a, pp. 49–50). A brine purchase Center was established. The company "Vacuum" was entrusted to manage it. This company bought brine in the free market and distributed it according to a special key among oil refineries. Also, refinery producers, after fulfilling their contingent determined by the agreement, had to give the excess brine from their wells to the purchase Center. The Syndicate companies could not buy and sell brine on their own (Szczepanowski, 1928, p. 48).

The Syndicate managed to centralize domestic sales of petroleum products, determined prices and terms of sale for all final products in a way motivated by the cost of refining and market relations. The agreement that gave the Syndicate the central sale of most petroleum products was signed on August 18, 1928. The prices of brine and final products stabilized favourably for the oil industry. The joint organization of wholesale covered all the most important products. Gasoline, oil and gas were sold by the central sales office; paraffin both in wholesale and retail in the domestic market and for export at the paraffin department of the Syndicate. Lubricating oils, due to their differences, were sold separately by companies (Dr. S. S., 1930, pp. 109–110; Szydłowski, 1930, p. 76; Wygard, 1928, pp. 425–426).

In 1929 exports were centralized in the Joint Export Bureau (in Polish – Wspólne Biuro Eksportowe). It included the three largest companies – the State Oil Refinery in Drohobych, "Małopolska" and "Limanowa", whose share in exports was 80% (Sprawozdanie..., 1930b, p. 58). However, the expected changes in the organization of exports did not happen. Paraffin

was the only oil product when the Polish companies abroad acted as one front was Paraffin (Dr. S. S., 1930, pp. 110–111; Szlemiński, 1930, p. 2; Szydłowski, 1930, p. 77).

During the absence of credits, the oil industry was able to become financially selfsufficient owing to unification. However, the funds were not enough, that is why, investments were made in the most basic needs (Sprawozdanie..., 1930b, p. 60) during the period of 1927 – 1932. The Syndicate somewhat stabilized relations in the industry. The price of Boryslav crude oil remained at more than PLN 1 700, reaching almost PLN 1 900 during the period of conjuncture (Sprawozdanie..., 1934, p. 108).

The Syndicate was to support oil production actively. In 1928 the "Pioneer" Union was created by the Syndicate for this purpose (in Polish – "Pionier") (CSHAUL, f. 207, d. 1, c. 319, p. 8; Sprawozdanie..., 1934, pp. 110–111). This Union was allocated large sums of money for research work, but it did not achieve high results (Wojciechowski, 1929, p. 35). One of the reasons for "Pioneer's" failures was that it was run by people from the cartel who were not very interested in the development of oil production. For example, pure producers believed that the money for such work would be worth giving them (Szlemiński, 1930, p. 3).

Despite some achievements, the Syndicate did not become a normal understanding for the entire Polish oil industry, but rather a price bureau. A quarter of the oil industry was outside the Syndicate (Kartel..., 1929). It did not fully take into account the interests of other groups in the oil industry, which contributed to its conflicts with pure clean producers (Szlemiński, 1930, pp. 8–9). Then small refineries came into play. They tried to exploit misunderstandings between pure producers and the Syndicate refineries. Small refineries launched their work fully. They did not participate in scarce exports and worked only for the domestic market. Small refineries offered pure producers a higher brine price. Then the Syndicate companies, in order to reduce the brine price, entered into negotiations with small and medium-sized refineries, so that for compensation they would stop their enterprises operating (Rosenberg, 1929, p. 174; Szlemiński, 1930, pp. 5–6). Such negotiations were successful sometimes (Wiadomości, 1930, p. 98). This success affected the production of crude oil significantly. The biggest problem arose with special brands of brine, which only small refineries agreed to process (J. S., 1929, p. 179). Such activities of the Syndicate were constantly opposed by pure producers, fearing the loss of their brine buyer (Zjazd..., 1929, pp. 179–180).

The crisis that prevailed in the world at the end of 1920s and at the beginning of 1930s also affected the oil refining industry. Prices began to fall in foreign markets. This price fall was dangerous for the Polish oil industry. In Poland, crude oil production was more expensive than in other countries (Zjazdy..., 1931, pp. 90–94). This state of affairs worried the government. Already in the spring of 1931 it initiated negotiations of all groups in the industry. The case was entrusted to former Minister Marian Shydlovsky. Since then, pure producers and companies from the Oil Industry Syndicate had begun lengthy negotiations to form a new joint organization. It should consist of all groups in the oil industry. It was planned to organize all pure producers, separately pure refineries together with producers-refineries. Then, to establish a joint institution that would unite both organizations in brine supply and selection (Mikucki, 1931a, pp. 473–475; Mikucki, 1931b, pp. 422–423; Proces..., 1932, pp. 141–147; Sprawozdanie..., 1932, pp. 140–141; Sprawozdanie..., 1933, p. 134).

The government, in turn, began to regulate oil law. As a result, on March 18, 1932, the law was passed and it entrusted the Ministry of Industry and Trade significant powers: to issue bans on the export and import of crude oil and oil products, to set customs rates, to regulate the price of raw materials, to centralize in one organization all cycle of brine and oil

products, to create stocks, to use funds to support oil production. For six months only, the law provided for the voluntary organization of the oil industry. Otherwise, the Ministry of Industry and Trade would create it by force (Ustawa..., 1932).

On May 19, 1932, the Syndicate of Crude Oil Producers was established (in Polish – Syndykat Producentów Ropy) (Mikucki, 1932, pp. 245–247; Sprawozdanie..., 1933, p. 135). In mid-1932, an agreement was reached between crude oil producers and refineries. According to the agreement all crude oil from pure producers was taken away by the Syndicate refineries. Its price was regulated depending on the Polish and export prices for final products. This regulation allowed the Oil Industry Syndicate to keep prices high. They fell only when the Syndicate began to lose influence in the Polish market. Small refineries developed and captured the domestic market, and the Syndicate members could not influence them. At the same time, there could be no argument that small businesses had less money because they did not invest in technology, which led to large losses of raw materials. At the same time, there could be no argument that small businesses had less money because they did not invest in technology, which led to large losses of raw materials. Instead, small businesses sold all their products in the domestic market, where there were relatively high prices for oil products (Naokoło..., 1932, p. 172; Porozumienie..., 1932, pp. 333–336, 353–354; Zasady..., 1932, pp. 150–170).

The final agreements of all groups in the industry were not reached, and on October 12, 1932, the Minister of Industry and Trade forcibly organized foreign trade in oil and oil products at the Polish Oil Exports Institution (in Polish – Polski Eksport Naftowy) with its the centre in Lviv. On May 1, 1933 the Institution began work under the statute announced on March 31, 1933 (Rozporządzenie..., 1932; Sprawozdanie..., 1934, p. 109).

The Polish Oil Exports, by determining the export contingents of oil products, thus regulated the Polish market, as it first clarified the domestic needs. By setting domestic contingents within a real demand in certain months, the organization prevented oversupply. Thus, it weakened competition without eliminating it and not setting prices, which during the Syndicate functioning gave rise to many complaints by buyers. Depending on the size of the Polish and export contingents from refining in each refinery, the Polish Oil Exports influenced the maintenance of crude oil prices indirectly; each refinery was interested in increasing processing, and thus the purchase of raw materials in the free market. When the Polish Oil Exports was established, small refineries were theoretically required to participate in scarce exports, but they had privileges compared to big refineries. The smallest companies were completely exempt from exports, and the slightly bigger ones instead paid to the drilling fund the part of difference between the Polish and export prices. This is how their "more difficult" situation was taken into account (Ankieta..., 1934; Sprawozdanie..., 1934, pp. 109–110).

All these changes affected the development of the oil industry significantly. This is the most noticeable in the gross prices of Boryslav crude oil. In the first half of 1933, when the Oil Industry Syndicate still operated, it declined constantly from 1 511 zl in January to 1 255 zl in July. After the creation of the Polish Oil Exports the price increased from 1375 zl in August to 1570 zl in December. This price increase was crucial for the ability to retain and develop oil production; it had a positive effect on the stabilization of prices for final products in the Polish market (Sprawozdanie..., 1934, p. 110).

In the beginning, the Union of Polish Oil Producers was skeptical of the Polish Oil Exports. It believed that this organization would act similarly to the former cartel institutions, i.e., in the interests of big refineries (Moment..., 1932, pp. 233–238). However, this did not happen. Under

pressure from the government the Polish Oil Exports worked in the interests of the Polish oil production mainly. Therefore, over time, the rhetoric of pure producers regarding this institution changed and it became a defender of the Polish Oil Exports (Sprawa..., 1935, pp. 13–15; Sprawy..., 1936, pp. 146–148; Szlemiński, 1933b, p. 109; W obronie..., 1936, p. 301). Owing to the activities of this institution, it was possible to organize the oil industry in interwar Poland successfully, to stabilize relations in this area, which contributed to its development.

The Conclusion. The problem of organizing the oil industry in interwar Poland was key to the development of this industry. At that time, crude oil production decreased significantly and Galicia ceased to play an important role in the oil industry of the world. On the other hand, it was important for interwar Poland to have its own oil products in case of war. The ownership structure of enterprises in the industry changed. After the proclamation of the Polish statehood, the Polish citizens got little in the oil industry and owned small and medium-sized enterprises mainly. The Polish state, however, continued to govern the biggest oil refinery in Drohobych. Instead, foreigners continued to own the majority of big refineries and managed to buy up many oil fields. However, the German and Austrian ownership of oil companies was replaced by the French. The task was to organize different groups of the oil industry to avoid undesirable competition and ensure the development of oil production. It was not possible to organize the whole industry properly. This was hampered by disputes between individual foreign companies, between foreign and local entrepreneurs, and etc.

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BIBLIOGRAPHY

20 lat. (1939). 20 lat działalności Związku [20 years of the Association's activity]. *Nafta, (XVIII),* 122–137. [in Polish]

Ankieta. (1934). Ankieta w sprawie oceny działalności Polskiego Eksportu Naftowego [Survey on the evaluation of the activities of the Polish Oil Export]. *Nafta, (XII),* 66–75. [in Polish].

Boryń, M., Chodubski, A. & Duraj, B. (2014). *Historia polskiego przemyslu naftowego* [History of the Polish oil industry]. Toruń: Wydawnictwo Adam Marszałek, 115 p. [in Polish].

Chabrzyk, A. (1995). Organizacja kopalnictwa naftowego [Organization of petroleum mining]. Red. R. Wolwowicz, *Historia polskiego przemysłu naftowego*, (in 2 vols. Vol. 2, pp. 129–147) Brzozów, Kraków: Muzeum regionalne PTTK im. Adama Fastnachta w Brzozowie. [in Polish]

Cząstka, J. (1972). Nafta w Polsce [Oil in Poland]. Kraków: Nauka dla wszystkich, 36 p. [in Polish]

Davies, N. (1970). Brytyjski kapitalizm a nafta galicyjska w latach 1917 – 1920 [British capitalism and Galician oil in the years of 1917 – 1920]. *Studia Historyczne, (XIII/2),* 283–289. [in Polish]

Dr. S. S. (1930). Polski kartel naftowy [Polish oil cartel]. Przemysł naftowy, (V), 108–113. [in Polish]

Franaszek, P. (1986). Kapitał francuski w procesie centralizacji kapitału w polskim przemyśle naftowym 1920 – 1939 (koncern naftowy Dąbrowa i grupa "Małopolska") [French capital in the process of capital centralization in the Polish oil industry 1920 – 1939 (Dąbrowa oil concern and the "Małopolska" group)]. *Studia Historyczne, (XXIX),* 229–243. [in Polish]

Frank, A. (2011). Environmental, economic, and moral dimensions of sustainability in the petroleum industry in Austrian Galicia. *Modern Intellectual History, (8/1).* 171–191. Doi: 10.1017/S1479244311000102 [in English]

Frank, A. F. (2005). *Oil Empire: Visions of Prosperity in Austrian Galicia*. Cambridge: Harvard University Press, 343 p. [in English]

Gaj, J. (1939). Potrzeby inwestycyjne Małopolski Wschodniej w zakresie przemysłu naftowego i gazyfikacji [Investment needs of Eastern Małopolska in the field of the oil and gas industry]. Lwów, 9 p. [in Polish]

J. S. (1929). W obliczu następstw porozumienia rafinerów [In the face of the aftermath of the refiners' agreement]. *Nafta, (VIII)*, 178–179. [in Polish].

Kachlik, K. (1995). Organizacja przemysłu rafineryjnego [Organization of the refining industry]. Red. R, Wolwowicz, *Historia polskiego przemysłu naftowego*, (w 2 t. T. 2, ss. 162–218). [in Polish]

Kartel. (1929). Kartel na rozdrożu [The cartel at a crossroads]. Nafta, (VIII), 96–102. [in Polish]

Kielski, A. (1927). Kartel naftowy [The oil cartel]. *Przemysł naftowy, (II),* 58–59, 85–86, 113–115, 142, 230–231, 259, 296–297, 368–370, 390–392, 479–480, 502–503.

Klapchuk, V. (2013a). Korysni kopalyny Halychyny: vydobuvannia ta pererobka [Minerals of Galicia: extraction and processing]. Ivano-Frankivsk: Foliant, 503 p. [in Ukrainian]

Klapchuk, V. (2013b). Vydobuvannia nafty ta hazu v Zakhidnii Halychyni (1930 – 1944 rr.) [Oil and gas production in the Western Galicia (1930 – 1944)]. *Mandrivets, 4,* 38–42. [in Ukrainian]

Kozicki, J. (1933). Przemysł naftowy a obrona Państwa [The oil industry and the defense of the state]. *Ankieta naftowa odbyta dnia 25 marca 1933 roku z inicjatywy Izby Przemysłowo-Handlowej we Lwowie.* (pp. 117–125). Lwów: Prasa Nowa. [in Polish]

Majewski, M. W. (2009). Poszukiwanie złóż ropy naftowej i gazu w Polsce [Search for oil and gas deposits in Poland]. 66 Annales Universitatis Paedagogicae Cracoviensis. Studia Historica, (VIII), 129–154. [in Polish]

Masyk, R. (2017a). Naftopererobna promyslovist v Skhidnii Halychyni u mizhvoiennyi period [Oil refining industry in Eastern Galicia in the interwar period]. *Drohobytskyi kraieznavchyi zbirnyk,* (3), 238–248. [in Ukrainian]

Masyk, R. (2017b). Naftovydobuvannia u mizhvoiennii Polshchi [Oil production in the interwar Poland]. *Visnyk Lvivskoho universytetu. Seriia istorychna, (spetsvypusk)*, 790–802. [in Ukrainian]

Mikucki, T. (1931a). Dalsze prace nad konsolidacją przemysłu naftowego [Further work on the consolidation of the oil industry]. *Przemysł naftowy*, (VI), 473–475. [in Polish]

Mikucki, T. (1931b). Współna organizacja przemysłu naftowego [Co-organization of the oil industry]. *Przemysł naftowy, (VI)*, 421–424. [in Polish]

Mikucki, T. (1932). Syndykat Producentów Ropy [Oil Producers Syndicate]. *Przemysł naftowy,* (VII), 245–247. [in Polish]

Moment. (1932). Moment zwrotny [Turning moment]. Nafta, (XI), 233–238. [in Polish]

Morawski, W. (2017). Galician Oilfields. *Kwartalnik Kolegium Ekonomiczno-Szpłecznego. Studia i Prace, (2),* 15–32. Doi: 10.33119/KKESSiP.2017.2.1 [in English]

Moskalets, V. (2014). The exodus from Galician mitsraim: The unemployment of Jewish workers in Boryslav and the rescue campaign of 1897 – 1899. *Scripta Judaica Cracoviensia, (12),* 59–68. Doi: 10.4467/20843925SJ.14.005.2811 [in English]

Moskalets, V. (2019). The Importance of Connections: The Rise of Jewish Business Elites in Galicia. *Jahrbuch fur Wirtschaftsgeschichtet – Economic History Yearbook, (60/2),* 473–496. Doi: 10.1515/jbwg-2019-0018 [In English]

Naokolo. (1932). Naokoło zawartego porozumienia [Around the deal made]. *Nafta, (XI)*, 172. [in Polish] Nowa. (1924). Nowa ofenzywa [A new offensive]. *Nafta, (III)*, 173–175. [in Polish]

Organizacja. (1919). Organizacja przemysłu naftowego [Organization of the oil industry]. *Czasopismo górniczo-hutnicze, (IV),* 157–160, 185–187. [in Polish]

Państwo. (1924). Państwo a nafta [The state and oil]. Nafta, (III), 1-5. [in Polish]

Pasitska, O. (2019). Rozvytok naftovoho biznesu v Halychyni: vid "Naftovoi stolytsi Yevropy" do kryzy "Halytskoi Kalifornii" [The development of the oil business in Galicia: from the "Oil Capital of Europe" to the crisis of "Galician California"]. *Hileia, (142),* 118–122. [in Ukrainian]

Porozumienie. (1932). Porozumienie w przemyśle naftowym [Agreement in the oil industry]. *Przemysl naftowy, (VII),* 333–336, 353–354. [in Polish]

Powszechna. (1919). Powszechna organizacja przemysłu oleju skalnego w Rzeczypospolitej Polskiej P. O. P. O. S. [Common organization of the rock oil industry in the Republic of Poland P. O. P. O. S.], *Czasopismo górniczo-hutnicze, (IV)*, 134–137. [in Polish] **Proces.** (1932). Proces organizacyjny w przemyśle naftowym [The organizational process in the oil industry]. *Nafta*, (*XI*), 141–147. [in Polish]

Przeciw. (1923). Przeciw kartelowi naftowemu [Against the oil cartel]. Nafta, (II), 145–148. [in Polish]

Przegląd. (1919). Przegląd przemysłu. Chwilowa sytuacja w przemyśle naftowym [Industry overview. Temporary situation in the oil industry]. *Czasopismo górniczo-hutnicze, (IV)*, 92. [in Polish]

Rosenberg, M. (1929). Kartel rafineryjny a kopalnictwo naftowe [The refining cartel and oil mining]. *Nafta, (VIII),* 171–178. [in Polish]

Rozporządzenie. (1932). Rozporządzenie Ministra Przemysłu i Handlu z dnia 12 października 1932 r. w sprawie przymusowej organizacji obrotu zagranicznego olejem skalnym i produktami naftowemi [Regulation of the Minister of Industry and Trade of October 12, 1932 on the compulsory organization of foreign trade in rock oil and petroleum products]. *Dziennik Ustaw Rzeczypospolitej Polskiej, (89),* 1813 – 1814. [in Polish]

Sprawa. (1935). Sprawa eksportu parafiny [Paraffin export case]. Nafta, (XIV), 13–15. [in Polish] Sprawozdanie. (1925). Sprawozdanie z czynności Izby handlowej i przemysłowej we Lwowie w latach 1922, 1923 i 1924 [The report on the activities of the Chamber of Commerce and Industry in Lviv in 1922, 1923 and 1924]. Lwów: Prasa, 261 p. [in Polish]

Sprawozdanie. (1927). Sprawozdanie z czynności oraz protokoły posiedzeń plenarnych Izby handlowej i przemysłowej we Lwowie w roku 1926 [The report on activities and minutes of plenary sessions of the Chamber of Commerce and Industry in Lviv in 1926]. Lwów: Prasa Nowa, 336 p. [in Polish]

Sprawozdanie. (1929a). Sprawozdanie z czynności oraz protokoły posiedzeń plenarnych Izby handlowej i przemysłowej we Lwowie w roku 1927 [The report on activities and minutes of plenary sessions of the Chamber of Commerce and Industry in Lviv in 1927]. Lwów: Prasa Nowa, 347 p. [in Polish]

Sprawozdanie. (1930a). Sprawozdanie z czynności oraz protokoły posiedzeń plenarnych Izby przemysłowo-handlowej we Lwowie w roku 1928 [The report on activities and minutes of plenary sessions of the Chamber of Commerce and Industry in Lviv in 1928]. Lwów: Prasa Nowa, 158 p. [in Polish]

Sprawozdanie. (1930b). Sprawozdanie z czynności Izby przemysłowo-handlowej we Lwowie za rok 1929 [The report on the activities of the Chamber of Commerce and Industry in Lviv for 1929]. Lwów: Prasa Nowa, 142 p. [in Polish]

Sprawozdanie. (1932). Sprawozdanie z czynności Izby przemysłowo-handlowej we Lwowie za rok 1931 [The report on the activities of the Chamber of Commerce and Industry in Lviv for 1931]. Lwów: Prasa Nowa, 248 p. [in Polish]

Sprawozdanie. (1933). Sprawozdanie z czynności Izby Przemysłowo-Handlowej we Lwowie za rok 1932 [The report on the activities of the Chamber of Commerce and Industry in Lviv for 1932]. Lwów: Prasa Nowa, 295 p. [in Polish]

Sprawozdanie. (1934). Sprawozdanie z czynności oraz o stanie gospodarczyn w okręgu Izby Przemysłowo-Handlowej we Lwowie w roku 1933 [The report on the activities of the Chamber of Commerce and Industry in Lviv for 1933]. Lwów: Prasa Nowa, 256 p. [in Polish]

Sprawy. (1919). Sprawy organizacyjne. Z Krajowego Towarzystwa naftowego [Organizational matters. From the National Oil Society]. *Czasopismo górniczo-hutnicze*, (*IV*), 165–167, 188–191, 210–211, 237–238. [in Polish]

Sprawy. (1936). Sprawy naftowe w fałszywym świetle [Oil matters in a false light]. *Nafta*, (XV), 146–148. [in Polish]

Statut. (1929). Statut Związku Polskich Przemysłowców Naftowych [The statute of the Union of Polish Oil Industrialists]. *Nafta*, (VIII), 183–192. [in Polish].

Statut. (1930). Statut Spółdzielni Związku Polskich Przemysłowców Naftowych [The Statute of the Cooperative of the Polish Oil Industry Association]. *Nafta*, *(IX)*, 58–62. [in Polish]

Szaynok, W. (1922). Kierownicy naszej polityki naftowej [Our oil policy managers]. *Nafta, (1),* 33–37. [in Polish]

Szaynok, W. (1923). Walka o cenę ropy [The fight for the price of oil]. *Nafta, (II),* 49–52. [in Polish] Szaynok, W. (1925a). Kartel naftowy [The oil cartel]. *Nafta, (IV),* 3–5. [in Polish]

Szaynok, W. (1925b). Kartel ropny [The purulent cartel]. Nafta, (IV), 49-50. [in Polish]

Szaynok, W. (1925c). Monopol handlu produktami naftowymi [The petroleum products trade monopoly]. *Nafta, (IV),* 85–88. [in Polish]

Szaynok, W. (1925d). Program polskiego kartelu naftowego [Polish oil cartel program]. Nafta, (IV), 68–69. [in Polish]

Szaynok, W. (1929). Projekt utworzenia polskiego monopolu handlu produktami naftowymi [The project to create a Polish monopoly on trade in petroleum products]. *Nafta, (VIII),* 22–25. [in Polish]

Szczepanowski, S. (1925). Czem zastąpić kartel naftowy [What to replace the oil cartel]. *Nafta, (IV),* 97–101. [in Polish

Szczepanowski, S. (1928). Syndykat Naftowy [Oil Syndicate]. Nafta, (VII), 46-52. [in Polish]

Szlemiński, J. (1930). Oświetlenie sytuacji w naszym przemyśle naftowym i wytyczne polityki naftowej w dobie obecnej [The explanation of the situation in our oil industry and oil policy guidelines today]. *Nafta, (IX),* 1–9. [in Polish]

Szlemiński, J. (1933a). Kopalnictwo naftowe jako podstawa przemysłu naftowego [Oil mining as the basis of the oil industry]. *Ankieta naftowa odbyta dnia 25 marca 1933 roku z inicjatywy Izby Przemysłowo-Handlowej we Lwowie*. (pp. 89–103). Lwów: Prasa Nowa. [in Polish]

Szlemiński, J. (1933b). Ocena sytuacji i widoki na bliską i odległą przyszłość [Assessment of the situation and prospects for the near and distant future]. *Nafta*, (*XII*), 109–119. [in Polish]

Szydlowski, M. (1930), Pogląd na sytuację w przemyśle naftowym [View of the situation in the oil industry]. *Nafta, (IX),* 73–85. [in Polish]

Tsentralnyi derzhavnyi istorychnyi archiv Ukrainy, m. Lviv [*CSHAUL* – *Central State Historical Archives of Ukraine, Lviv*]

Ustawa. (1932). Ustawa z dnia 18 marca 1932 r. w sprawie regulowania stosunków w przemyśle naftowym [Act of March 18, 1932 on the regulation of relations in the oil industry]. *Dziennik Ustaw Rzeczypospolitej Polskiej, (30),* 509–510. [in Polish]

W obronie. (1936). W obronie polskiej polityki naftowej [In defense of Polish oil policy]. *Nafta*, *(XV)*, 301. [in Polish]

Wachtel, F. (1933). Historyczny rozwój przemysłu naftowego [Historical development of the oil industry]. *Ankieta naftowa odbyta dnia 25 marca 1933 roku z inicjatywy Izby Przemysłowo-Handlowej we Lwowie*. (pp. 13–27). Lwów: Prasa Nowa. [in Polish]

Walne. (1923). Walne Zgromadzenie Zwiazku Polskich Przemysłowcow naftowych [General Assembly of the Union of Polish Oil Industry]. *Nafta*, (*II*), 40–42. [in Polish]

Wiadomości. (1919). Wiadomości bieżące [Current news]. *Czasopismo górniczo-hutnicze, (IV),* 243–244. [in Polish]

Wiadomości. (1930). Wiadomości bieżące [Current news]. Nafta, (IX), 98–99. [in Polish]

Wojciechowski, B. (1926). Czy rząd ma popierać kartel naftowy? [Should the government back the oil cartel?]. *Nafta, (V),* 17–23. [in Polish]

Wojciechowski, B. (1929). O samodzielną politykę naftową [For an independent oil policy]. *Nafta, (VIII),* 29–36. [in Polish]

Wojciechowski, B. (1933). Polska polityka naftowa wczoraj, dziś i jutro [Polish oil policy yesterday, today and tomorrow]. *Nafta, (XII),* 209–213. [in Polish]

Wolkowicz, S. (2019). Ewolucja glównych kierunkow działania PIG w latach 1919 – 2019. [Evolution of the main directions of the PGI activity during 1919 – 2019] *Przegląd Geologiczny, (67),* 139–145. [in Polish]

Wolkowicz, S., Graniczny, M., Wolkowicz, K. & Urban, H. (2017). History of the oil industry in Poland until 1939. W. Mayer, R. M. Clary, L. F. Azuela. T. S. Mota & S. Wołkowicz (Ed.), *History of Geoscience: Celebrating 50 Years of INHIGEO. Geological Society. Special publications, (442/1)*, 401–411. Doi: 10.1144/SP442.32 [in English]

Wolwowicz, R. (red.). (1994). *Historia polskiego przemysłu naftowego [History of the Polish oil industry]*. (T. 1). Brzozów, Kraków: Muzeum regionalne PTTK im. Adama Fastnachta w Brzozowie, 748 p. [in Polish]

Wolwowicz, R. (red.). (1995) *Historia polskiego przemysłu naftowego [History of the Polish oil industry]*. (1995). (T. 2). Brzozów, Kraków: Muzeum regionalne PTTK im. Adama Fastnachta w Brzozowie, 615 p. [in Polish]

Wygard, I. (1928). Organizacja centralnej sprzedaży hurtowej przetworów ropnych [Organization of central wholesale of petroleum products]. *Przemysł naftowy, (III)*, 425–426. [in Polish]

Z historii. (1922). "Z historii Krajonafty" ["From the history of Krajonafta"]. *Nafta, (I),* 21–24. [in Polish]

Z przemysłu. (1919). Z przemysłu naftowego [From the oil industry]. Czasopismo górniczohutnicze, (IV), 258–259. [in Polish]

Zasadnicze. (1935). Zasadnicze przemiany organizacyjne w naftowej grupie czysto kopalnianej [Fundamental organizational changes in the purely mining oil group]. *Nafta*, (*XIV*), 21–23. [in Polish]

Zasady. (1932). Zasady normujące stosunki w przemyśle naftowym w zakresie odbioru i ceny ropy [The principles regulating relations in the oil industry in terms of the collection and price of oil]. *Nafta,* (XI), 150–170. [in Polish]

Zjazd. (1929). Zjazd Producentów ropy [Congress of Oil Producers]. *Nafta. (VIII)*, 179–180. [in Polish] **Zjazdy.** (1931). Zjazdy Naftowe [Oil conventions]. *Nafta, (X)*, 90–94. [in Polish]

Zmiany. (1929). Zmiany organizacyjne [Organizational changes]. Nafta, (VIII), 94–96. [in Polish] Związek. (1923). Związek polskich przemysłowców naftowych. Spółdzielnia z ograniczoną odpowiadzialnością we Lwowie [The Union of Polish oil industrialists. A cooperative with limited liability in Lviv]. Nafta, (II), 52–53. [in Polish]

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