

Trends in the Applied Profiling of Research Institutes in Vilnius in 1945–1965

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Abstract: *Based on archival documents and published sources, the article attempts to identify and evaluate the main features of the process of establishing applied research institutes and organising their activities in Vilnius during the first two postwar decades. This period marked the formation of the institutes' organisational structure and formulation of the main directions of their activities. The developments of this period in the history of the research institutes can be attributed primarily to the efforts of the academic community in Vilnius to mobilise the scientific potential that had survived the postwar years and to plan research that was more relevant to the Lithuanian context at a time of strict Soviet ideologisation and regulation of activities. In postwar Vilnius, applied research and studies were first initiated at the institutes of the then Health Commissariat. The postwar situation also meant that the research institutes established in Vilnius under the Academy of Sciences focused on applied and natural sciences. The structure and specialisation of these institutions was based on the organisational model of the Academy of Sciences of the Soviet Union. However, the aim in Lithuania was to align research as much as possible to the needs of the region and to upgrade the qualifications of young Lithuanian scientists. The sources and published data discussed in this article reveal that the further specialisation of the main applied and theoretical research areas, pursued at the institutes of the Academy of Sciences, took place between 1956 and 1965.*

Keywords: *academy of sciences, applied sciences, research institutes, science policy, Vilnius*

Introduction

The occupation of Lithuania by the Soviet Union in 1940 and the establishment of the Soviet political system, which strictly regulated the entire economic, cultural, and scientific life, severely hampered the process of higher education and scientific research that had begun in independent Lithuania in the 1920s. The reorganisation of Lithuanian higher education, research institutions and organisations was already underway in 1940–1941, under conditions of political and ideological pressure and repressions against the intelligentsia.

The propaganda of the time promoted the importance of the scientific and academic intelligentsia in the coercive “construction” of the Soviet system in Lithuania. Under the conditions of occupation and Sovietisation, some members of the Lithuanian intelligentsia still hoped to preserve their scientific potential and continuity of research. Others were simply deceived by the Soviet propaganda promising advances in the organisation of science and excellent conditions for scientists in the Soviet Union.

It should be noted that, from an organisational point of view, scientific research in the Soviet Union was carried out in the institutions of the Academy of Sciences of the USSR, as well as in higher education institutions and applied research institutes, which were established and directly controlled by specific departments, initially called commissariats and later ministries. Such a structure for organising scientific research in Lithuania was to be introduced primarily in Vilnius, the capital of the republic. To this end, the Soviet system of “planning” and managing science, as well as the awarding of scientific degrees, was to be introduced.

As the most important theoretical and applied research in the Soviet Union was coordinated by the Academy of Sciences of the USSR, the first step was to establish similar institutions in the republics of the Soviet Union. On 16 January 1941, the Academy of Sciences of the Lithuanian SSR was established, laying the foundation for the institutionalisation of science and compelling scientists to work within the limits imposed by Soviet science policy.

Many Lithuanian scientists became disillusioned with the reality of the Soviet regime in the early years and, with the end of the Second World War and the second Soviet occupation approaching, fled to Western countries. Those Lithuanian intellectuals who chose to stay in the occupied country, even though

they had lost confidence in the Soviet government, continued working in the scope of their qualifications in hopes of doing meaningful work for their country and trying to preserve their cultural identity.

Historical research has already provided important assessments of the application of the administrative system and the control of the communist regime, as well as the ideologisation of education, culture, intellectual activity, and public life in Lithuania and other Baltic countries during the Stalinist period (Misiūnas & Taagepera, 2006, pp. 76–130; Krikštopaitis, 1991, pp. 169–172; Streikus, 2018; Tamošaitis, 2010). The insights into the behaviour of Lithuanian scientists at the beginning of the Soviet regime by the historian of science and philosopher Juozas Algimantas Krikštopaitis (1997; 2013) are important in both theoretical and historical sense and help us understand the experience of intellectual expression and its peculiarities in the conditions of the Soviet period.

The scientific literature that examines international and Lithuanian experience emphasises that the viability of emerging and disappearing branches of science is influenced by the ability of science to rely on practical activities and the provision of favourable conditions for organising scientific research—institutionalisation, facilities, financial and technological provision, etc. (Voverienė, 2013, p. 327). The historiography of the institutionalisation of applied sciences in the Soviet period is not rich. Some more general data on the establishment of research institutions at the beginning of the Soviet period in Lithuania can be found in the commemorative and retrospective publications of the Lithuanian Academy of Sciences and some of the institutes (Liekis, 2001; *Lietuvos TSR Mokslų akademija ir taikomieji mokslai respublikoje 1941–1985 m.*, 1985; *Lietuvos TSR Mokslų akademija*, 1981; etc.). Useful data and evaluations have also been published in works based on the memoirs of the organisers and staff of research institutes (Matulis, 1999; Vasinauskas, 1986; Kviklys, 1957a; 1957b; etc.).

The aim of this article is to identify and evaluate the main features of the process of establishing applied research institutes and organising their activities in Vilnius during the first two postwar decades, drawing from published sources and archival documents, focusing on the period when the organisational structure of these institutes was being developed and the main directions of research activities were being identified. This issue has not been specifically analysed in published academic papers; however, it is relevant in that it could contribute to a better understanding of the intentions and possible interactions between science and practical activities during the Soviet period. Historical research on the development of research institutions is also important because debates on

the purpose of science often arise both in the Lithuanian political space and the academic spheres; therefore, the historical experience of the organisation of applied science presumably allows for a more detailed explanation of the ambitions, challenges, and priorities of the activities of academia in the context of complex historical conditions. Freedom of intellectual expression from ideological and political influences and the transformation of spiritual cultural values are topical and debated issues not only in the present-day societies of Eastern and Central Europe, but also in other European Union countries.

The methods of analysis and synthesis have been applied in the preparation of this article. It references minutes, reports, official letters, published scientific works and other sources of information, memoirs of scientists, and other texts of research institutions operating in Vilnius at the time.

Applied specialisation in the first postwar research institutes

Applied research and studies in postwar Vilnius first started in the research institutes subordinated to the Health Commissariat of the Soviet Republic of Lithuania. Among the earliest applied research institutes opened in 1944 was the Institute of Sanitation and Hygiene. The Institute of Tuberculosis Research and the Institute of Skin and Venereal Diseases were founded in 1945. These Vilnius-based institutes later acquired the status of Republican Medical Research Institutions.¹ The aim of these institutions was to address the severe infectious and other diseases among the population of postwar Vilnius residents more effectively, as well as to solve sanitation problems.

In terms of institutional arrangement, it is noteworthy that on September 6, 1945, a Science Council was established at the Republican Commissariat for Health Protection to coordinate applied medical research. The Council included 22 medical practitioners and scientists, and its first chairman was Professor Pranas Mažylis. The Science Council opened consultations to cooperate with medical scientists and doctors not only in Lithuania but also in Latvia and Estonia. For example, at the Congress of Medical Specialists in Riga, held on September 10, 1945, the prospects and practical benefits of developing scientific relations

¹ In Lithuanian: *Sanitarijos ir higienos institutas, Tuberkuliozės mokslinio tyrimo institutas, and Odos ir venerinių ligų institutas.*

were discussed. The aim of this and other events was to set priorities for medical research and applied studies, get updates on issues related to the treatment of diseases in the population, and cooperate in the exchange of information on the organisation of medical treatment, training of scientists, and the provision of methodological support to physicians (Kviklys, 1965, p. 10).

Besides, already in the early postwar years, the drafting of research thematics had to be coordinated with the Medical Council functioning in the healthcare system of the Soviet Union, and the people occupying the highest positions in this council directly “supervised” the process of planning research. Lithuanian scientific leadership was directed to collaborate directly with institutions in the Belarusian SSR and comply with the guidelines of the science and healthcare policies adopted by the Soviet regime (Laws of the Lithuanian SSR, 1957, p. 50).

As already mentioned, the organisation of applied medical studies started with the re-establishment of the Institute of Sanitation and Hygiene, which had been operating in Vilnius before the war. Vladas Kviklys, a physician and hygienist, was directly involved in the organisation and later in the management of the institute’s activities. In his later writings, he described the process and emphasised that the newly established institute was to deal first and foremost with the issues of overcoming the sanitary consequences of the war (Kviklys, 1957a, pp. 21–25). The institute’s infrastructure was formed by merging the individually operating Water and Food Laboratories, the Pasteur Station, and the former Warsaw branch of the Institute of Hygiene in Vilnius. In 1946, a Sanitary Education House was established at the institute to improve contacts with other medical institutions. In the first postwar years, it was planned that the institute would become a full-fledged research facility. The institute employed 77 staff members and identified three urgent scientific directions: the elimination of the sanitary consequences of the war, measures and developing methods to combat intestinal infections, and the improvement of environmental health (Kviklys, 1957a, p. 23).

As the collection of sources and publications shows, in 1948, planned scientific work started to be carried out more consistently: the development and prospects of research were discussed at scientific conferences, a more realistic planning of research was initiated, and the first dissertations in the field of hygiene science were prepared for Candidate of Science degrees. In institutional terms, it should be noted that the Soviet authorities intensified their control over science and regulation of plans, urging the most rapid adoption of “Marxist methods of work” and focusing on compliance with the requirements imposed by the Soviet Union on science and the preparation of dissertations. It is therefore not surprising that

only 10 dissertations were completed at the Institute of Sanitation and Hygiene in the course of ten postwar years, even though there was a greater need for skilled scientific staff.

More important institutional changes took place in 1956, when the Kaunas Institute of Epidemiology, Microbiology and Hygiene² was merged with the institute in Vilnius. The new institution acquired the status of a republican multi-profile applied research centre, which dealt with the issues of hygiene, epidemiology, and microbiology for the entire republic. In Kaunas, the manufacturing departments that functioned within the institute produced diagnostic tools, some vaccines, and other materials.

In the postwar period, plans to start applied research were also underway at the Tuberculosis Research Institute, aiming to provide methodological support for the treatment of tuberculosis in Lithuanian medical facilities. However, the institute had only two researchers with scientific degrees and was not equipped to undertake consistent research or provide practical guidance. By the 1950s, plans were developed not only to continue monitoring and analysing cases, but also to introduce laboratory work, using the tuberculosis clinics directly to put scientific innovations into practice.

The institute's main orientation was to develop research on the incidence of tuberculosis in urban and rural areas and partly on the epidemiology of tuberculosis in schools. At the time, the head of the institute was Jurgis Gamperis (1957, pp. 26–28), who researched diagnostic, prophylactic, and other issues of tuberculosis, and also wrote extensively in the press about the difficulties and achievements of the institute.

In the early 1950s, the first dissertations on various aspects of tuberculosis were defended by the institute's staff. Research data and application results were disseminated at conferences and published in the press, including in the journal *Sveikatos apsauga* (Health protection).

In the postwar years, the Institute of Skin and Venereal Diseases, established in Vilnius, began to address the practical concerns of treating infectious diseases. It focused on improving the treatment of syphilis and other venereal diseases. Research at the institute began in 1947, with plans to develop new treatments for skin and venereal diseases. However, over-planning led to delays so that some of the first planned works were not carried out by 1953, resulting in a more rational

² In Lithuanian: *Kauno Epidemiologijos, mikrobiologijos ir higienos institutas*.

planning of scientific work and a reduction in the number of research topics. The institute began to disseminate information about successful experiences in the treatment of venereal diseases in Lithuania (Archives of the Lithuanian Ministry of Health, f. 1, ap. 1, b. 8, l. 8–9).

The research findings and successful research applications developed at the institute were actively publicised at scientific and practical conferences, in the Lithuanian press, and in the institute's scientific journal, launched in 1951 and published in the Russian language. The journal reported on prevention and treatment practices, public education, and efforts to reduce the spread of communicable diseases.

The first postwar decade could be described as the initial phase of infrastructure building, thematic specialisation, and the development of researchers' skills. This period also marks the introduction of the Soviet scientific administration system. In the early postwar years, these institutes had only around 20 staff members with a scientific degree. However, their potential gradually increased over the course of the decade. The largest number of Candidate of Science dissertations (18) was defended at the institutes in 1955. Doctoral dissertations were prepared at a slower pace, with a total of 3 dissertations defended that year (Kviklys, 1957b, pp. 7–12).

The press at the time highlighted the increasing application of scientific advances and recommendations in medical practice. For example, in the field of therapeutic agents and pharmaceuticals, 50 new scientific proposals were introduced in the second half of the 1950s. The results of research into therapeutic methods used at Druskininkai and Birštonas resorts were also widely publicised (Kviklys, 1957b, pp. 7–12).

In the mid-1950s, the incorporation of specialised medical units into the institutes in Vilnius was started, and they were granted the republican status. In the media, this was associated with efforts to improve the practical application of scientific recommendations and achieve a smoother coordination process. However, the rationale for the reforms was often based on the rhetoric of Soviet decisions and directives as well as intentions for greater bureaucratic control over research. The medical institutes in Vilnius stated in their reports that the institutes were not yet capable of fulfilling all the tasks set by the government (Archives of the Lithuanian Ministry of Health, f. 1, ap. 1, b. 8, l. 12–13).

The transformation of applied research institutions focused on more rational planning and updating of research activities. Also, new state organisations were

founded not only for coordinating but also for overseeing research planning. This was due to the strengthening of bureaucratic institutionalisation of science during the Soviet era, shaped by the directives of the Soviet leadership and the Reform of Research Institutions. Documents from the State Committee for the Coordination of Scientific Research attest that in 1957, the State Committee for Science and Technology under the Council of Ministers of Lithuanian SSR was established to provide recommendations regarding the orientation of the research, as well as the dissemination of scientific information (Lithuanian Central State Archives, f. P-183, ap. 2, b. 4, 1. 1–37).

Restrictions on international academic contacts between scientists and new technological demands stimulated Soviet research institutions to develop mechanisms for the accumulation of secondary scientific information and innovative knowledge disseminated abroad. The collection and dissemination of scientific information was initiated at the Republican Institute of Scientific and Technical Information,³ established in Vilnius in 1959 (*Lietuvos TSR Mokslų akademija ir taikomieji mokslai respublikoje 1941–1985 m.*, 1985).

Activities of applied research institutes under the Academy of Sciences

The postwar situation required that the scientific institutes established by the Academy of Sciences of Lithuanian SSR⁴ also focus on applied and natural sciences. This was done primarily at the insistence of the Soviet political leadership, which was in a hurry to rebuild the destroyed economy and develop industry. The prioritisation of these areas was emphasised by the directives and the autocratic centre of science—the Academy of Sciences of the USSR—which was trying to impose a narrow, applied specialisation of the institutions being established. (Krikštopaitis, 1997, p. 40).

According to official documentation, the infrastructure and specialisation of these institutions was based on the organisational model of the Academy of Sciences of the Soviet Union. However, the aim in Lithuania was to align research to the needs of the region and to upgrade the qualifications of young Lithuanian scientists.

³ In Lithuanian: *Respublikinis mokslinės-techninės informacijos institutas*.

⁴ In Lithuanian: *Lietuvos TSR Mokslų akademija*.

It is worth noting that the process of establishing the Academy of Sciences in Vilnius dates back to prewar times. A manuscript of a review written during the war by people involved in the establishment of the Lithuanian Academy of Sciences indicates that in 1940, when the plan for the organisation of the Academy of Sciences in Lithuania was being prepared, the founders not only analysed the system of operation of the academies of sciences in the Soviet republics of Ukraine, Georgia, and Belarus, but also studied the experience of the establishment and development of academic sciences in other European countries (Manuscript Section of the Martynas Mažvydas National Library, f. pr-582, 1. 4). According to those who participated in the establishment of the Lithuanian Academy of Sciences, the final draft of the Academy's Statute was prepared with reference to the Statutes of the Vienna Academy of Sciences and the Belarusian Academy of Sciences. "The project did not pass easily through the Lithuanian Board of Commissioners," the review says. "After the publication of the resolution on the establishment of the Lithuanian Academy of Sciences on January 16, 1941, the Institute of Lithuanian Studies was fully incorporated into the Academy" (Manuscript Section of the Martynas Mažvydas National Library, f. pr-582, 1. 4).

According to the historian of science Juozas Algimantas Krikštopaitis (2013, p. 241), at the time the Academy of Sciences was founded, some Lithuanian intellectuals "took a stance of silent disobedience and the sparing of their efforts." Some academic elites were very active and sympathetic to Soviet science policy (Tamošaitis, 2010, p. 83).

The active participation in the rapid establishment of academic research institutions under the Soviet regime was in fact in line with the general trend among intelligentsia in Lithuania and other Baltic countries. As the historians Romualdas Misiūnas and Rein Taagepera argued, "some of the cultural figures in these countries collaborated with the regime in order to remain culturally active or to avoid repression, also for career reasons" (Misiūnas & Taagepera, 2006, p. 122).

On January 16, 1941, the Academy of Sciences of Lithuanian SSR and the Organising Committee, under its head Vincas Krėvė-Mickevičius, were established, and on March 10, 1941, the Statute of the Academy of Sciences of Lithuanian SSR was adopted. It designated the Lithuanian SSR Academy of Sciences as the supreme Lithuanian scientific institution uniting the most eminent scientists. The Academy was structured into three sections: the Humanities Section, the Social Sciences and Economics Section, and the Natural Sciences,

Mathematics and Engineering Section. (Liekis, 2001, p. 106) The leadership of the Lithuanian Academy of Sciences was elected on April 18 that same year. Vincas Krėvė-Mickevičius was elected president, Antanas Purėnas vice-president, and Mykolas Biržiška, Albinas Rimka, and Juozas Matulis as general secretaries. The Presidium of the Academy of Sciences was located on the premises of the Wroblewski Library. Preparatory work began on the establishment of the Institutes of Chemistry, Geology and Geography, Biology and Experimental Medicine (Matulis, 1999, p. 51).

As the end of the Second World War and the second Soviet occupation was drawing near, the majority of Lithuania's interwar intelligentsia fled to Western countries. The intellectual potential of the country diminished considerably; some of the country's prominent scientists and science organisers were already disillusioned with the realities of Soviet life and feared new repressions. Of the 13 members of the Academy of Sciences, 5 elected in 1941 left for Western countries during the war. Among those who emigrated was Steponas Kolupaila, the author of the project to move the faculties and research institutes of Kaunas University to Vilnius. Kolupaila, who took part in the Soviet reorganisation of science but did not adapt to the new system, wrote in one of his letters that he "had no fear of communism and began to work for his nation, but soon became convinced of the reality of Soviet policy: he witnessed arrests, deportations, and killings" (Juzefovičius, 2002, p. 270).

Although the intellectuals who remained in their country became disillusioned, they hoped to work within their qualification, thus defending the cultural and economic interests of the Lithuanian nation and continuing the work of the scientific institutions. In summer 1944, on the initiative of scientists, preparations were made to organise the work of the Lithuanian Academy of Sciences, namely discussions concerning research priorities and the importance of applied research. On February 13, 1945, the government of Soviet Lithuania, the Council of People's Commissars, adopted the Resolution On Resuming the Activities of the Academy of Sciences of the Lithuanian SSR. To organise the work of the Academy's scientific departments and institutes, the Organising Committee of the Representatives of Various Sciences was established, with Juozas Matulis as chairman, Juozas Bulavas as secretary general, and Juozas Žiugžda as a member (Matulis, 1999, p. 121). The Science Centre underwent a major overhaul, with its activities organised and regulated in a rigorous and unified manner. A new Statute of the Academy of Sciences of Lithuanian SSR was drawn up and, after consideration, adopted on April 14, 1945. It laid down the structure of the

institutions of the Academy of Sciences and its organisational system (Statute of the Academy of Sciences of the Lithuanian SSR, 1945, pp. 3–5). From an organisational perspective, it is worth noting that the directives established for the Academy of Sciences were to combine theoretical and applied research.

On April 14, 1945, after discussions and coordination with the authorities of Soviet Lithuania, the Department of Mathematics, Natural and Applied Sciences of the Lithuanian Academy of Sciences was approved to coordinate the work of the following institutes: the Institute of Chemistry and Chemical Technology, the Institute of Geology and Geography, the Institute of Biology, Experimental Medicine and Oncology, and the Institute of Agriculture⁵ (Liekis, 2001, p. 188). In terms of applied research, the establishment of academic institutes involved the merger of some of the small research-related units already operating in Vilnius, Kaunas, and elsewhere.

In the early postwar years, agricultural technology and soil research was started in Vilnius, and the Institute of Agriculture was established. The institute had a very broad profile, covering not only farming but also mechanisation and stockbreeding. The institute began integrating the existing experimental stations. The aim was to test, improve, and apply scientific innovations in the field of agronomy to the conditions of the republic, which were diverse depending on the geographical location in the country. According to the well-known professor of agricultural science, Petras Vasinauskas (1986, p. 115), the scientists' efforts in the postwar years were increasingly “paralysed by all sorts of surrogates of the science of agronomy, which hindered the improvement of conditions for the production of agricultural products.”

The Institute of Biology, established in Vilnius in 1945, was linked to applied agricultural research. Lithuanian zoologist and biologist Tadas Ivanauskas was involved in the establishment of the institute and became its first director. The departments of botany and zoology, established within the institute, became the basis for the establishment of two separate institutes in the late 1950s. The founding documents of the institute emphasised that the study of flora and fauna would not only contribute to the restoration but also to the “development of the fisheries, animal husbandry and plant production in the republic” (Liekis, 2001, p. 228).

One of the first academic institutes to operate in Vilnius in the postwar period

⁵ In Lithuanian: *Chemijos ir cheminės technologijos institutas, Geologijos ir geografijos institutas, Biologijos institutas, Eksperimentinės medicinos ir onkologijos institutas, and Žemės ūkio institutas.*

was the Institute of Geology and Geography. The process of its establishment started in 1941. The following works of applied research were carried out at this institute: the study of mineral deposits and water resources suitable for construction, the study of raw material reserves for the cement, lime, glass, and brick industries, the mapping of Lithuanian mineral raw materials, etc. The postwar planning work of the institute was linked to this research (Liekis, 2001, p. 228).

In 1946, the Presidium of the Lithuanian Academy of Sciences adopted the regulations of the newly established Institute of Chemistry and Chemical Technology, which provided for the development of research in the field of chemical technology, and the study of materials for industry and the population. The institute's structure included the establishing of departments of inorganic and organic chemical technology, physical chemistry, as well as laboratories for peat research and fuel technology, and building materials research (Liekis, 2001, p. 229).

In 1946, the Institute of Experimental Medicine and Oncology of the Academy of Sciences was opened in Vilnius, with departments of oncology, physiology, microbiology, and epidemiology. In the first postwar years, the institute used the laboratories of Vilnius University for its research, and in 1948, it moved into a renovated building on Žygimantų Street to establish its research infrastructure. To study issues of female infertility, Kaunas City Women's Hospital No. 2 was transferred to the institute. It is worth mentioning that this institute was also proposed as an institution for research on the history of medicine, but due to the abundance of practical work in the first postwar years, this research was not initiated at this institute (Liekis, 2001, p. 281).

In the early postwar years, academic research institutes were staffed by a small number of researchers, some of whom did not hold scientific degrees. By the late 1940s, according to the standards of the Soviet Union for the training of scientists, postgraduate studies for the preparation of scientific dissertations were organised in Lithuania. Funding for these programmes was allocated, and the appointment of dissertation reviewers and other organisational matters were discussed at the meetings of the Institutes' Research Councils. This led to the steady process of training new researchers. As the sources testify, the Soviet government sought to use scientists, the new academic generation formed in the postwar period for the sovietisation of Lithuanian society, in the consolidation of the Soviet ideological and political base, and the strengthening of ideological control over the institutions.

At the turn of the 1950s, all research and higher education institutions in Soviet Lithuania received “second persons,” sent from the central government to speed up the Sovietisation of academic life, but due to their lack of qualification and ignorance of local realities, they were unable to carry out the most important tasks. According to historian Arūnas Streikus (2018, p. 357), the relatively mild Stalinist terror against Lithuanian scientists can also be partially attributed to the lack of reliable scientific personnel.

Sources and published information indicate that the consolidation of the main directions of applied and theoretical research at the institutes of the Academy of Sciences, further specialisation, and reorganisation of the institutes in accordance with the reforms and recommendations of the Academy of Sciences of the Soviet Union were carried out in Lithuania between 1956 and 1965. (*Mokslas Tarybų Lietuvoje*, 1961; *Lietuvos TSR Mokslų akademija*, 1981). Some of the functions of the Academy of Sciences that were directly linked to practical activities were being transferred to the ministries coordinating the respective activities. Initially, in 1956, the agricultural profile institutions were handed over to other authorities by the Academy of Sciences of the Lithuanian SSR.

New specialised institutes were also established. In 1957, the Republican Research Institute of Oncology⁶ was founded in Vilnius on the basis of the Oncology Department of the Institute of Experimental Medicine, which had been operating under the Academy of Sciences. There were four theoretical and three clinical departments in the newly established institute. The institute started planned work on cancer prevention, diagnosis, and treatment. The Institute of Oncology was to focus on research into the diagnosis and treatment of lung cancer and on the improvement of treatment facilities. (*Lietuvos TSR Onkologijos mokslinio tyrimo institutas*, 1965, pp. 5–8) The head of the institute was oncologist Albertas Telyčėnas, who wrote at the time that the work of the institute would be aimed at improving the diagnosis and treatment of oncological diseases. Telyčėnas himself was directly involved in research on diagnostic methods and other studies concerning lung cancer in patients (Telyčėnas, 1957, pp. 9–34).

In the early 1960s, plans were made to continue the transfer of many of the applied research institutes operating under academies of sciences in the republics of the Soviet Union to the ministries of their respective fields. In 1961, the State Committee of the Lithuanian SSR for the Coordination of Scientific Research was established to carry out the reform, financing, control, and other issues

⁶ In Lithuanian: *Respublikinis onkologijos mokslinio tyrimo institutas*.

of scientific research institutes (Lithuanian Central State Archives, f. P-183, ap. 2, b. 13, l. 1–3). In 1963, the Vilnius Institute of Experimental Medicine and other applied profile research institutes, or their divisions, began to be transferred to other bodies (*Lietuvos TSR Mokslų akademija*, 1981, p. 16). This was the beginning of the so-called field-based model for managing the activities of research institutions, which was directly linked to practical needs and activities in individual fields. This model was in place throughout the Soviet period.

Specialised research was adversely affected by the trajectories of Soviet science and economic policy, short-term needs and orders, and lack of internationalisation. On the other hand, the capital city, Vilnius, continued to nurture and mobilise a new academic generation, resulting in the emergence of promising scientific fields. By delegating the coordination of work directly related to applied practical activities to other ministries or departments, the Academy of Sciences was able to concentrate on theoretical, fundamental research in the natural and so-called exact sciences. (*Lietuvos TSR Mokslų akademija*, 1981, p. 16).

The published data and sources of the new historiography of science show that although the establishment of the Lithuanian Academy of Sciences and other scientific research institutions in the postwar years was primarily aimed at strengthening applied research determined by science policy and ideologising the content of science, the Lithuanian Academy of Sciences and the network of its institutes, according to Juozas Krikštopaitis (2013, p. 239), “gradually acquired a degree of relative organisational autonomy and prestige in the public sphere.” The establishing of the research institutes can be rightly attributed to the efforts of the academic community in Vilnius to mobilise and preserve the scientific potential that had survived in the postwar years, and to plan and consolidate relevant research. This was done despite the strict ideologisation and regulation of activities by the Soviet Union. It should be emphasised that under the conditions of the strengthening of the ideological and political regime, the research communities of the institutes of the Academy of Sciences were able to use the scientists’ potential to develop scientific and creative activities and to disseminate scientific knowledge through academic channels.

The establishment and development of research institutes is linked to the formation of modern scientific schools. The work of some of the leading scientists and their students who worked in Vilnius, as shown by the data published by researchers of the history of science, transcended national boundaries, contributing to the process of scientific development even before the restoration of Lithuanian independence (*Lietuvos mokslinės mokyklos 1945–1990*, 2002, p. 29).

Conclusion

At the beginning of the Soviet period, scientific research in Lithuania had to be organised not only under the difficult conditions of ideological and political pressure, but also under the negative effects of disrupted international academic relations and repressions against intellectuals. Applied research and studies in postwar Vilnius were first initiated in the institutes of the then Health Commissariat. Among the first applied research institutes was the Institute of Sanitation and Hygiene, opened in 1944. The Institute of Tuberculosis Research and the Institute of Skin and Venereal Diseases were founded in 1945.

In the postwar years, the scientific institutes founded by the Academy of Sciences of Lithuanian SSR focused on applied and natural sciences. The structure and specialisation of these institutions was based on the organisational model of the Academy of Sciences of the Soviet Union. However, the aim in Lithuania was to align research as much as possible to the needs of the region and to upgrade the qualifications of young Lithuanian scientists. The Institutes of Experimental Medicine, Geology and Geography, Chemistry and Chemical Technology, among others, were opened in Vilnius during the first postwar decade.

In these years, the organisation of activities was based on a system of strict, unified regulation. The Soviet authorities tightened their control over science and adjusted plans, urging the most rapid adoption of “Marxist methods of work” and compliance with the requirements for science and the preparation of dissertations in the Soviet Union. State organisations were established to coordinate and control scientific planning. This was due to the strengthening of bureaucratic institutions during the Soviet period. Directives issued by the Soviet leadership and reforms of scientific institutions played an important role in this process.

The institutes established within the healthcare system and the Academy of Sciences, as evidenced by the sources, made efforts to plan and consolidate research, publications, and the mobilisation of qualified personnel relevant to Lithuanian society and economy at that time. In the early 1950s, the first dissertations on applied research topics were defended. Research data and application results were published at conferences and in the press. The press highlighted the fact that scientific advances and recommendations were increasingly being applied in medical practice.

The sources and published information discussed in the article show that the consolidation and further specialisation of the main fields of applied and theoretical research at the institutes of the Academy of Sciences took place between 1956 and 1965. Some of the institutions of the Academy of Sciences that were directly involved in practical research activities had already been transferred to the ministries responsible for coordinating the relevant work. This was the beginning of the implementation of the management model of branch scientific institutions. In Vilnius, this model was directly linked to practical activities and developed during the Soviet period. Specialised research was negatively affected by the trajectories of Soviet science and economic policy, short-term needs, and the requirements of the planned economy, as well as the lack of internationalisation. However, in the capital city, Vilnius, a new academic generation continued to be educated and mobilised, promising fields of science emerged, and modern scientific schools were established in institutes.

References

- Archives of the Lithuanian Ministry of Health (1955), *Medicinos mokslinio tyrimo įstaigų ataskaitos* [Reports of medical research institutions], f. 1, ap. 1, b. 8, l. 8–13, Lietuvos Sveikatos apsaugos ministerijos archyvas, Vilnius.
- Gamperis, J.** (1957), 'Apie Respublikinio mokslinio tyrimo tuberkuliozės instituto darbą' [About the activities of the Republican Research Institute for Tuberculosis], *Sveikatos apsauga*, no. 11, pp. 26–28.
- Higienos institutas* (2008), [Institute of Hygiene], Vilnius: Higienos institutas.
- Juzefovičius, R.** (2002), 'Sowietyzacja nauki w powojennym Wilnie: przejawy transformacji i adaptacji' [The Sovietisation of science in postwar Vilnius: Manifestations of transformation and adaptation], in E. Feliksiak & M. M. Leś (eds.) *Wilno i świat: dzieje środowiska intelektualnego*, vol. 1, Białystok: Tow. Literackie im. Adama Mickiewicza, pp. 263–272.
- Krikštopaitis, J. A.** (1991), 'The Subjection of Lithuanian Sciences to the Soviet State System: Consequences and Prospects,' *Journal of Baltic Studies*, vol. 22, no. 2, pp. 169–172. <https://doi.org/10.1080/01629779100000061>
- Krikštopaitis, J. A.** (1997), *Prievartą patyrusiųjų laikysena* [The attitude of society after the experience of compulsion], Vilnius: Pradai.
- Krikštopaitis, J. A.** (2013), *Išmintis, atsiverianti pažinimo kelyje* [Wisdom revealed on the way to the knowledge of world nature], Vilnius: Mintis.
- Kviklys, V.** (1957a), 'Iš Vilniaus mokslinio tyrimo epidemiologijos ir higienos instituto istorijos' [From the history of the Vilnius Research Institute of Epidemiology and Hygiene], *Sveikatos apsauga*, no. 11, pp. 21–25.

- Kviklys, V.** (1957b), 'Respublikos pasiekimai medicininiam moksliniam darbe' [Achievements of the republic in medical research], *Sveikatos apsauga*, no. 11, pp. 7–12.
- Kviklys, V.** (1965), 'Medicinos mokslų raida Lietuvos TSR 1940–1965 m.' [Development of medical sciences in the Lithuanian SSR in 1940–1965], *Sveikatos apsauga*, no. 7, pp. 10–11.
- Laws of the Lithuanian SSR (1957), *Lietuvos TSR įstatymų. Aukščiausiosios tarybos prezidiumo įsakų ir vyriausybės nutarimų chronologinis rinkinys* [Chronological collection of laws of the Lithuanian SSR. Decrees of the Presidium of the Supreme Soviet and government resolutions], vol. 2, Vilnius.
- Liekis, A.** (2001), *Lietuvos mokslų akademija 1940–1990* [Lithuanian Academy of Sciences 1940–1990], Vilnius: Lietuvos mokslų akademija.
- Lietuvos mokslinės mokyklos 1945–1990* (2002), [Lithuanian research schools 1945–1990], Vilnius: Vilniaus universitetas.
- Lietuvos TSR Mokslų akademija* (1981), [Lithuanian Academy of Sciences], Vilnius: Mokslas.
- Lietuvos TSR Mokslų akademija ir taikomieji mokslai respublikoje 1941–1985 m.* (1985), [Academy of Sciences of the Lithuanian SSR and applied sciences in the republic in the period 1941–1985], Vilnius: Lietuvos istorijos institutas.
- Lietuvos TSR Onkologijos mokslinio tyrimo institutas* (1965), *Lietuvos TSR Onkologijos mokslinio tyrimo institutas. VIII mokslinės sesijos medžiaga* [Scientific Research Institute of Oncology, Lithuanian SSR. Proceedings of the 8th scientific session], Vilnius.
- Lithuanian Central State Archives (1956), Valstybinio mokslo tyrimų darbų koordinavimo komiteto dokumentai [Documents of the National Scientific Research Coordination Committee], f. P-183, ap. 2, b. 13, l. 1–3, Lietuvos centrinis valstybės archyvas, Vilnius.
- Lithuanian Central State Archives (1958), Valstybinio mokslo ir technikos komiteto ataskaita [Report of the State Science and Technology Committee], f. P-183, ap. 2, b. 4, l. 1–37, Lietuvos centrinis valstybės archyvas, Vilnius.
- Manuscript Section of the Lithuanian National Martynas Mažvydas Library (1944), *Lietuvos Mokslų akademija Vilniuje 1941–1944 m.*, Lietuvos nacionalinės Martyno Mažvydo bibliotekos rankraščių skyrius [Lithuanian Academy of Sciences in Vilnius in 1941–1944], f. pr-582, l. 4.
- Matulis, J.** (1999), *Autobiografiniai bruožai* [Autobiographical features], Vilnius: TEV.
- Misiūnas, R. & Taagepera, R.** (2006), *The Baltic States: Years of Dependence 1940–1990*, London: Hurst & Company.
- Mokslas Tarybų Lietuvoje* (1961), [Science in Soviet Lithuania], Vilnius: Valstybinė politinės ir mokslinės literatūros leidykla.
- Statute of the Academy of Sciences of the Lithuanian SSR (1945), *Lietuvos TSR Mokslų akademijos statutai*, Vilnius: Spindulys.

- Streikus, A.** (2018), *Minties kolektivyvizacija. Cenzūra sovietų Lietuvoje* [Collectivisation of thought. Censorship in Soviet Lithuania], Vilnius: Naujasis Židinys-Aidai.
- Tamošaitis, M.** (2010), *Didysis apakimas* [The great blindness], Vilnius: Gimtasis žodis.
- Telyčėnas, A.** (1957), 'Onkologijos pagalbos raida ir pasiekimai Lietuvoje' [Development and achievements of oncology care in Lithuania], *Sveikatos apsauga*, no. 11, pp. 9–34.
- Vasinauskas, P.** (1986), *Lietuvos Žemės ūkio mokslų raida* [The evolution of agricultural sciences in Lithuania], Vilnius: Mokslas.
- Voverienė, O.** (2013), *Mokslotyra* [Scientific research], Vilnius: Diemedžio leidykla.

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