

ХРОНИКА НАУЧНОЙ ЖИЗНИ

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“Towards the centenary of the Great Russian Revolution: Women’s Faces of Russian Science — the heritage.” Conference held at the S.I. Vavilov Institute for the History of Science and Technology on the 7th and 8th of November, 2017

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The international conference held at the S.I. Vavilov Institute for the History of Science and Technology (IHST) on the 7th and 8th of November 2017 was devoted to the centenary of women’s legal equality in Russia. The opening of the Conference very symbolically coincided with the 150th anniversary of the birth of a great woman scientist Marie Curie, the first woman to win a Nobel Prize and a twice recipient of the Nobel Prize, Honorary Member of the Imperial Academy of Sciences, and may be regarded as a tribute to her memory too. At IHST, the themes of women’s and gender history have been discussed at the roundtables within the framework of the IHST Annual Conferences and in the works of the IHST historians of science and technology, in particular O.A. Valkova, who explored these themes in depth and defended the first dissertation for the Doctor of Sciences degree that was devoted to women’s and gender history. This Conference, the first to be expressly dedicated to this topic at IHST, was jointly organised by IHST and the Archive of the Russian Academy of Sciences.

The women whose stories were told by the Conference participants ranged from the prominent, internationally acknowledged scientists who belonged to the Russian and international scientific elite such as O.A. Fedchenko, Lina Stern and M. Grunberg-Manago to modest researchers and non-research workers whose work had been nevertheless indispensable for the development of science: archivists, bibliographers and museologists such as E.P. Pod’yapolskaya, A.D. Shakhovskaya, T.P. Fesenko, and E.L. Grinberg-Petri. Some of them had no scientific degrees and held less important positions, however, the organisers of the Conference wanted to ‘give the floor’ to these women too, so that they would not fall into oblivion.



Fig. 1. Olga Valkova, Dr. Hist. Sci., IHST

The Conference aimed to address the following aspects: the contributions of Russian women scientists to the development of science; scientific biographies of women scientists in the context of the time; professional scholastic career for women in Russia before and after 1917; women historians of science and technology; Russian women scientists in the Russian and international historiography; documentary heritage of Russian women scientists in the archives, libraries and museums; and women scientists in emigration.

The Conference stirred a lot of interest, much more than was expected by its organisers. The presentations were met with numerous questions and animated discussions. There were many people in the audience who came just to hear the papers presented by the participants.

The representatives from several museums and archives, such as e. g. Russian State Archive of Economics and Museum of History of The Moscow Technological University participated in the Conference. Many presentations were accompanied by a wealth of illustrations and photographs, which helped to reconstruct the atmosphere of the time and put faces on the names mentioned in the papers, e. g. a portrait of O.A. Fedchenko or a group photograph of Golitsyna's Courses from the paper by O. Elina. Quite a few documents were introduced for scientific use for the first time — many of these came from family archives.

Equal rights were introduced after the October 1917 Revolution by the 1918 Decrees that granted women not only equal political and economic rights but also equal rights to education and career (including scholastic career). As the Conference initiator and organiser Dr. Olga Valkova put it, it was a century-long, “previously unheard-of social experiment that involved, without exaggeration, every citizen of the country, both men and women”. More than 60 papers presented at the conference and published in the omnibus titled “Russian women scientists:

the heritage” [1] told the stories of those brave and determined Russian women who dared to pursue scholastic careers in the XIX and early XX century before the 1918 Decrees, those whose personal and professional lives changed after these decrees, and those whose scholastic careers developed after 1918. The idea was to picture a vast cross-section of the life of Russian women who wished to do research, to identify and describe their scientific and documentary heritage. The conference participants explored the stories of women who devoted themselves to different disciplines of natural and exact sciences and of the humanities: biological and biomedical disciplines (systematic botany and geobotany (O.A. Fedchenko, G.I. Poplavskaya, E.A. Galkina, N.A. Bazilevskaya); palaeontology (M.V. Pavlova, A.P. Gartman-Veinberg, T.A. Dobrolyubova); physiology (Lina Stern); biochemistry and molecular biology (M. Grunberg-Manago, M.S. Shreiber, T.B. Gapon); biomedical and medical research (M.A. Bokova-Sechenova, M.B. Stanishevskaya, E.E. Malovichko, A.A. Krasuskaya, O.N. Podvysotskaya, Lina Stern, Z.V. Ermolieva, as well as women physicians who worked at the Sklifosofskii Institute of Emergency Medicine); veterinary sciences (O.N. Uvarova aka Dame Olga Uvarov); soil sciences (E.N. Ivanova, I.A. Assing); agriculture (Zh.V. Kossko-Sudakevich); geosciences (Z.G. Veis-Ksenofontova, M.V. Klenova, E.V. Rozhkova, M.V. Shcherbakova, L.A. Popugayeva); economic geography (V.V. Zaorskaya-Aleksandrova); mathematics (V.I. Shiff, P.Ya. Polubarinova, O.N. Tsuberbiller); chemistry (Yu.V. Lermontova, chromatographers M.S. Shreiber and T.B. Gapon, N.S. Dombrovskaya, V.V. Chernaya(Chichagova), and M. von Wrangell, the first woman professor in a German university); astronomy (M.V. Zhilova, one of the first professional woman astronomers); history (E.N. Shchepkina, K.V. Florovskaya, E.V. Gutnova, and an internationally renowned medievalist O.A. Dobiash-Rozhdesvenskaya); history of science (O.A. Dobiash-Rozhdesvenskaya, I.I. Lyubimenko, E.Ch. Skrzhinskaya, M.A. Tikhanova, M.E. Sergeenko, V.F. Gnucheva, S.A. Yanovskaya, Z.K. Sokolovskaya, — and a botanist and historian of botany N.A. Bazilevskaya); auxiliary sciences for history and source studies (E.I. Kamentseva); economics (M.N. Vernadskaya, the first woman economist in Russia); statistics (A.I. Khryashcheva); philosophy (M.V. Bezobrazova, E.F. Litvinova, Z.K. Stolitza, V.A. Volkovich, A.M. Miloradovich); psychology (P.O. Efrussi, E.V. Antipova); and cosmonautics (T. Kuznetsova, I. Solovieva, V. Tereshkova, V.L. Ponomareva, E.A. Ivanova, E.I. Dobrokvashina, L. Pozharskaya, T. Zakharova).

All presentations devoted to women scientists who received their education in the XIX and early XX century in Russia mentioned the difficulties encountered by Russian women who sought higher education and scholastic careers. Three papers presented at the Conference were expressly focused on women’s education in Russia before 1917. A.E. Ivanov analysed overall situation in women’s education in the second half of the XIX and early XX century and described the emergence of higher women’s courses in Moscow, St.Petersburg, and other cities. Before the 1870s, the “learned ladies”, i.e. “female persons with higher education”, received their education in the European (mostly Swiss, German and French) universities only. Women were banned from higher education in Russia. During the period of reforms in the 1960s-1970s, the demands for Russian women’s emancipation became pronounced but the expectations from the university reform had not been fulfilled as the new 1863 University Regulation left the Russian universities for men only. Ivanov quoted E.F. von Bradke, Chair of the Imperial Commission for Preparation of the New University Regulation, who had thus grounded this position on the matter of women’s education, “I believe that female gender, due to the specifics of its construction and its mental and spiritual abilities, cannot be rendered capable of studying anatomy necessary for medicine, nor of acquiring legal knowledge in all its dryness and strict order, nor of the profound philological considerations”. Nevertheless, the government, making



Fig. 2. Tatiana Kursanova, Cand. Biol. Sci., IHST

concessions to popular appeal, allowed to open special courses for women with the university-level curricula. The first higher women's courses were opened in Moscow in 1872 on the initiative of V.I. Guerrier, professor of universal history at Moscow University. To prevent Russian girls from seeking higher education abroad, particularly at Zurich University and Polytechnic Institute, similar higher women's courses were opened in Kazan, St.Petersburg and Kiev, but, in line with conservative counterreforms of the 1880s, these courses ceased to enrol new auditors. However, to pursue women's equality in higher education, the faculty of Moscow, Kharkov and New Russian (Odessa) Universities began to deliver public lectures for women that were also banned by the Ministry of Education. The Moscow academe found a new way to

teach women: the so-called ‘Collective Lessons’, i. e. lectures, seminars and laboratory classes conducted under the auspices of the Society of Tutoreses and Teachers. The legislation that banned these collective lessons and allowed to open higher women’s courses similar to those in St. Petersburg instead (naturally, under thorough control of the Ministry of Education), was adopted in 1900. The public campaign for women’s rights to higher education continued and in 1902 women were allowed to pass qualification exams at the universities. A breakthrough in this matter was achieved during the first Russian Revolution in 1905. Ivanov emphasises the role of Prof. Bechterev’s Psychoneurological Institute, Rostovtsev’ Private University in Tartu, A.L. Shanyavsky Moscow People’s University, etc. After 1905, despite the post-revolutionary political reaction, the movement towards women’s equality in higher education continued to gain momentum.

Olga Elina’s presentation addressed the history of agricultural education in Russia. Not only the possibilities for higher education for women were very scarce but also very few women were interested in agriculture *per se*. However, the first woman pioneer in agriculture, Zh.V. Kossko-Sudakevich, was so determined in her desire to study agriculture at the Moscow Agricultural Institute (MSKhI) that she managed to obtain the permission from the Minister of Agriculture A.S. Ermolov. Elina emphasised the role of a prominent Russian agronomist A.I. Stebut in getting women involved in the agricultural research and practice, and of the Society for Promoting Women’s Agricultural Education (OSZhSKhO, or *ОСЖХО*) that was founded on his initiative in 1899. The Society opened several private elementary and secondary agricultural schools in Russia. In 1904, the standing women’s agricultural courses, offering two years of the secondary vocational education, were opened in St. Petersburg. In 1907, these courses were reorganised into a full-fledged higher school of agriculture (four years of studies with the curriculum similar to that of MSKhI). OSZhSKhO’s campaign promoting higher education for women culminated with adoption of a regulation on agricultural education that provided for higher education institutions for women. Ermolov thus explained why he was promoting higher education for women: because of the “scarcity of conscientious male land stewards” and because “women ... usually settle for a comparatively small remuneration”. In 1909, Kossko-Sudakevich became the first woman to be issued a diploma of graduation from MSKhI. The 1905 revolution boosted the women’s movement and many universities began to admit women as auditors and, during World War I, women often replaced men at the agricultural stations and as local (*zemsky*) agronomists. Olga Elina maintained that one of the reasons that had made agricultural education attractive for women during the post-revolution and post-war ravages was the opportunity to provide for their families by taking jobs in agriculture.

Roman Fando offered a vivid description of how zoology was taught at the Higher Women’s Courses in Moscow based on the university-level curricula. In 1904, a zoological laboratory opened at the Courses to train the auditors in histology, embryology, and evolutionism. The teachers were the renowned Moscow University professors M.A. Menzbir, N.K. Kol’tsov, and P.P. Sushkin. The auditors attended both lectures and practicums where they learned to dissect animals and conduct scientific experiments. Fando’s description of how a lecture room was quickly rearranged to become a practicum (due to the scarcity of space) evoked the picture of how it was, with the auditors bent over the microscopes. The laboratory provided the auditors with the equipment, collections, and professional literature necessary for in-depth studies; all of these were regularly updated and replenished, in which charity donations played an important role. The importance of these collections, in particular, Kohts’ personal collections of taxidermied animals, was hard to overestimate. The demonstration course in zoology taught by A.F. Kohts effectively comprised the fundamentals of evolutionism and the taxidermied

animals demonstrated during each class were used to illustrate the content of his lectures. Eventually Kohts' collections were handed over to the Higher Women's Courses and later on formed the core of the Darwin Museum. The unique experience of teaching zoology at the Zoological Laboratory was so important that it was shared with the participants in the 12th Congress of Natural Scientists and Physicians in Moscow. In 1918, the Courses were reorganised into the Second Moscow University.

Quite a few presentations were devoted to biographies and scientific contributions of women scientists who chose to pursue scholastic careers in biological and biomedical disciplines.

O.B. Bokareva recounted the story of a typical woman of the 1860s, M.A. Bokova-Sechenova, who is known as the first Russian woman ophthalmologist and the wife of I.M. Sechenov, a famous Russian physiologist whom I.P. Pavlov regarded as "the father of Russian physiology". She was born to a family of Major General A.A. Obruchev in the Sandomirsk (*Sandomierz*) Governorate. Due to the father's military service, the family moved several times and lived in Warsaw, Mogilev, Dubno, and Radom. In 1856 the family moved to the Tver Governorate where they had a sizable estate. Inspired and encouraged by her brother Vladimir Obruchev and his friend P.I. Bokov who had treated Maria for scarlet fever, she went to St.Petersburg, accompanied by her mother, where she met her brother's friends including N.G. Chernyshevsky, a Russian revolutionary democrat, materialist philosopher, critic, and writer. They inspired Maria to go into medicine to become a country physician ("zemsky doctor") who helps people. However, the only medical training available for women in Russia at the time was obstetrical courses. In 1861, she married P.I. Bokov (largely for convenience, as it is believed) and enrolled in the St.Petersburg Medico-Surgical Academy as an auditor (noncredit student). She attended classes at I.M. Sechenov's physiological laboratory at the Chair of Physiology as well as V.L. Guber's dissecting room together with her friend N.P. Suslova, the future first woman doctor in Russia. Sechenov offered her to do a study project on colour blindness. She discovered that this condition was caused by the lack of sensitivity of a certain type of receptors. Her experiments were acknowledged by Hermann von Helmholtz and her work was translated into German.

In 1862, her brother Vladimir was sentenced to the galleys and sent to Siberia for his involvement in the revolutionary activities. In 1863, Maria passed the qualification exam at the Second St.Petersburg Boys' Gymnasium in order to be issued a necessary certificate. However, the new University Regulation adopted in 1863 and the ordinance issued by the Ministry of Public Education in 1864 banned women from attending classes even as auditors. Despite Professor Sechenov's efforts, she was not allowed to continue with her studies. On a suggestion by C. Ludwig, a renowned German physician and physiologist and a friend of Sechenov, Maria Bokova decided to go to Europe to study medicine. In 1865, with her husband's permission, Bokova and Sechenov went to Europe to prepare for enrolling in the medical faculty of the University of Zurich. Together they attended the lectures by Ilya Mechnikov (Elie Metchnikoff) and Alexander Kovalevsky (Kowalevsky), and Sechenov presented his work on respiratory muscle innervation. After her father's death in 1866, she returned to Russia. In 1868, having left her mother with Bokov in St. Petersburg, she went to Germany where she enrolled in the medical faculty of Zurich University. In 1871, she defended her doctoral thesis on the problems of keratitis (inflammation of the cornea) and was issued a diploma of the doctor of medicine, surgery and obstetrics. Having learned of the permission to open the Higher Women's Courses, given by the Emperor Alexander II, she returned to Russia to pass the exam necessary for practicing medicine and received her official certificate in 1871. In 1873, Sechenov and Bokova lived

in Odessa where he held the Chair of Physiology at the New Russian University and she had a small private medical practice. They decided to live together. In 1876, Mechnikov became Professor at the Division of Anatomy, Histology and Physiology of St. Petersburg University's Chair of Zoology. In 1888, after her official divorce from Bokov, Sechenov and Bokova were finally married in St. Petersburg. In 1888, the Sechenovs moved to Moscow, him, teaching at the medical faculty of Moscow University and her, treating peasants at her estate. Sechenov died in 1905 and Maria died in a care home in 1929, "the great wife of a great husband". The story of Bokova-Sechenova, Bokov and Sechenov as "new people" of the 1860s was immortalised in N.G. Chernyshevskii's "What is to be done?".

A very interesting and emotional presentation by Olga Valkova was devoted to a great Russian woman Olga Aleksandrovna Fedchenko (1845–1921), the first Russian woman naturalist and the wife of an outstanding traveller and naturalist A.P. Fedchenko. Although her only certificate of education had been issued by the Institute of Noble Maidens, a finishing school for daughters of the nobility, she became a globally renowned botanist, the sixth woman — and the first woman-naturalist — elected to the Imperial Academy of Sciences (even though as Corresponding Member) before 1917 (she was 61 at the time). A daughter of A.O. Armfeld who was a very popular Professor at Moscow University, she became fascinated with natural sciences at a young age and collected herbs, minerals, insects, and bird eggs at the family's estate in Mozhaisk. To identify the items in her collections, she came to Moscow University's Zoological Museum in 1861 and joined a small students' circle, the antecedent of the future Society of Enthusiasts of Natural Science, Anthropology, and Ethnography (ОЛЕАЭ — OLEAE). Prof. N.N. Kaufman included her herbarium of the Mozhaisk Uyezd's flora in his famous book of Moscow's flora. In 1864, she became one of the founders of OLEAE and, most likely, the first woman member of a naturalist society in Russia. As Russian universities did not accept women, she self-educated with the help of books and her friends from among the students and scientists, attended the Zoological Museum where she helped with the Museum's collections and assisted her colleagues in their studies, and translated the foreign scientists' biology texts into Russian. In 1867, she married A.P. Fedchenko, a recent graduate of Moscow University and a member of their close-knit circle. In 1868, A.P. Fedchenko was sent by OLEAE to the newly-annexed Turkestan territories to conduct a scientific exploration of local nature and wildlife. The famous 1867–1871 Turkestan Expedition has been well covered in literature, both on the history of science and the history of diplomacy, geopolitics, etc. Olga went with her husband and, beside traditional duties of a wife accompanying her husband on a major scientific expedition (accounting, meteorological studies, cartography, scientific correspondence, etc.), she collected herbaria and sketched landscapes and buildings, wildlife and plants. In the absence of photographers and other artists, her work was very important. Her pictures were later used in all publications of the Turkestan Expedition materials and also published as a standalone album. She had assembled a herbarium of up to 1,800 Turkestan plants, including many earlier unknown species.

Soon after the Fedchenkos returned to Moscow, they went to Europe and in 1873 Alexey Fedchenko died in a violent storm on Mont Blanc. After her husband's death, Olga returned to Moscow. She never remarried and devoted herself to scientific research and raising her son. Her biggest concern was to complete processing, editing and publishing the Turkestan expedition materials. Although, formally, she could not take her late husband's place to complete this work, the President of OLEAE G.E. Shchurovskii managed to convince the Governor of Turkestan K.P. von Kaufman that the completion of this extremely important mission had to be entrusted to no one but Olga. OLEAE elected her as a member of an ad hoc editorial committee

to edit “The Travel to Turkestan” and correspond with the authors involved in the processing of materials. In the end, due to her hard work and perseverance, the series of Turkestan reports were regularly published in 1874–1902, with a total of 20 volumes of descriptions of Turkestan’s animal and plant species as well as the description of the journey per se. It was the first time in the history of Russian science that a woman almost officially took charge of, and successfully completed, a large-scale time- and money-consuming scientific project. Later on Olga Fedchenko returned to her field work and, together with her son Boris Fedchenko (who eventually became a prominent botanist too), undertook several expeditions to the South Urals, Crimea, Caucasus, and Turkestan to study the local flora. The major outcome of her efforts was a series of works devoted to the flora of Turkestan, published by Olga Fedchenko in the 1900s, including “The flora of Pamir. Own studies in 1901 and a summary of previous studies”, “Conspectus florae Turkestanicae: the list of wildly growing plants in Turkestan”, etc. Since the late 1990s, she also became interested in cultivating wild southern (mostly Turkestan’s) plants in the Moscow Governorate, and set up a botanical garden at her own estate Olgino. She had published a total of over 60 works. Apart from OLEAE, she was member of many other associations in Russia and internationally, including the Russian Geographical Society, Moscow Society of Naturalists (MOIP), etc. Despite her deteriorating health and violent political upheavals of 1916–1921, she continued to work till her death. Olga Fedchenko is remembered in the history of science not only as a prominent scientist but also as the first woman botanist in Russia.

S.A. Limanova’s paper devoted to another pioneer woman scientist, M.V. Pavlova (1854–1938), was based on the materials stored at the Archive of the Russian Academy of Sciences. Maria Vasilievna Pavlova (nee Gortynskaya) was not only the first woman palaeontologist in Russia but also the first woman professor at Moscow University. Her interest in science was kindled by her father who was a Moscow University alumnus and a medical practitioner. Like Olga Fedchenko, she graduated from the Institute of Noble Maidens (Kiev), worked as a teacher for a few years, and married a country (zemsky) physician N.N. Illich-Shishatskii, who died from typhoid in 1880. After her husband death, she first plunged into self-education and then decided to continue her education in Paris. In 1884, she passed the exams. During her time at Sorbonne she met Alexey Pavlov, a young magistr (master) of geology, who then suggested her to work at the Geological Museum in Moscow. She moved to Moscow and, in 1886, they got married. Being a scientist’s wife enabled her to engage in research, travel to collect necessary materials, write scientific papers, and attend scientific conventions. Her first publication (1887) devoted to the evolution of fossil ungulates instantly gained recognition by the scientific community. This was followed by a series of the “Essays on the paleontological history of the ungulates” based on the materials from Western Europe as well as on her own materials. The Essays were published over the period of 20 years. In 1888, she joined the oldest society for natural sciences in Russia, Moscow Society of Naturalists, and in 1911 she was elected its honorary member. Apart from the ungulates, she also studied the proboscideans and this work culminated with the publication of her milestone book on fossil proboscideans in Russia (1910). She had also prepared and delivered the first course of lectures on palaeontology, translated H.N. Hutchinson’s “Extinct monsters” (1898/99) — the first popular book on palaeontology, and, being a member of many scientific societies (mineralogical, anthropological, geographical, etc.), was extensively engaged in science popularisation. Due to her colleagues’ efforts and despite the Ministry of Education’s reluctance to acknowledge her scientific contributions, she was awarded the doctor of zoology degree in 1916. Later on, having been awarded professorship, she chaired the Department of Palaeontology from 1919 to 1930 and, together with A.P. Pavlov, set up an impressive paleontological section at the University’s Geological

Museum. Pavlova's scientific biography was reconstructed by Limanova, largely based on the documents from this extraordinary woman's personal archive stored at the Russian Academy of Sciences' Archive (Fonds 311).

Irina Yukina recounted a fascinating story based on the materials from the personal archive of Maria Pokrovskaya (1852–1922?) who was a hygienist and sanitarian, an ardent activist and one of the first Russian feminists who fought against injustice and discrimination of women.

Valentina Veremenko presented a rather unusual paper in which she investigated and reconstructed the true story of Evgeniya Lvovna Petri (nee Grinberg), the wife of a Russian geographer, ethnographer and anthropologist Eduard Petri and mother of Bergard Petri, one of the founders of the Siberian anthropological school. According to historiography, B. Petri grew up in a stimulating family atmosphere and E.L. Petri worked at the St.Petersburg Kunstkamera after her husband's early death in 1899. Veremenko, however, described what really happened to the Petris and this story illustrates the vulnerable position of women in Russia in the late XIX century, further aggravated by the problems of mixed (interfaith) marriage. E. Grinberg, the oldest daughter of a Jewish merchant Leon Grinberg, graduated from the Simferopol Girls' Gymnasium and studied at the Women's Medical Courses in St.Petersburg and the medical faculty of the University of Bern where she met her fellow student, Eduard Petri, a Lutheran exiled refugee (due to his involvement with a revolutionary political organisation). Veremenko described the Russian imperial legislation that regulated interfaith marriages which were very few. To be able to marry a Lutheran, Grinberg signed a pledge of "not seducing her future husband and children into the Jewish faith". Eventually, after all necessary requirements were met, the couple was wed in church in 1882. In 1887, Eduard Petri was pardoned by the Tsar and the family returned to St.Petersburg, leaving behind their son Bergard (b. 1884) in Switzerland. Petri was given the title of personal nobleman and chaired the Department of Geography at St. Petersburg University. Their second son was born in 1891 but the same year the parents separated and after a time Eduard Petri initiated the divorce procedure. When the Reformed Church refused to consider his case, the renowned professor tried to get his marriage rendered invalid, which would have effectively made his two sons illegitimate and, at the same time, deprived their Jewish mother of the right to raise them. It was at that difficult time when Evgeniya found herself left without any source of income that Academician Radlov stepped in and offered her a job at the Kunstkamera.

Galina Lyubina devoted her presentation to A.P. Gartman-Veinberg (1882–1942), a palaeontologist who specialised in Mesozoic reptiles and was a gifted organiser of science. A graduate from the Bestuzhev Women's Courses (Division of Anatomy) in 1916, she first studied nervous system of the primates at the First Leningrad Medical Institute and then began to study fossil reptiles (Pareiasaurus) at the Academy of Sciences' Geological Museum. In 1927–1931, Gartman led the excavations in the basins of Northern Dvina and Volga and in 1930, having demonstrated excellent organisational skills, and was appointed deputy director of the newly-established Palaeozoological Institute of the USSR Academy of Sciences. In her presentation, Lyubina focused on the Moscow period of her work (1935–1940). In 1935, Gartman-Veinberg moved to Moscow where she set up the Paleontological Laboratory at Moscow University's Faculty of Soil Science and Geography. The Laboratory made a significant contribution to palaeontology research and teaching, and published the specialised periodicals, including an international journal titled "Problems of Palaeontology". In 1942, A.P. Gartman-Veinberg died in blockaded Leningrad.

Another woman palaeontologist whose story was told at the Conference by Svetlana Pukhonto was T.A. Dobrolyubova (1891–1972), who specialised in the Palaeozoic corals and was

also a prominent geologist, a discoverer of mineral deposits. Like many other Russian women scientists, she was also a graduate of the Higher Women's Courses (Moscow).

A presentation by A.A. Stochik and S.P. Glyantsev was devoted to the dramatic story of Lina Stern (1878–1968), an outstanding neurophysiologist and biochemist. Stern was born to a well-off Jewish family in Libau (Russian Empire) and studied at the medical faculty of the University of Geneva. At the age of 27, she defended her doctoral dissertation and in 1917, at the age of 39, became the first woman professor and department chair at the University of Geneva. Together with F. Batelli, L. Stern made fundamental discoveries in the field of cellular respiration. Her other groundbreaking contribution to science was her studies on blood-brain barrier. In 1925, L. Stern moved to the USSR out of political convictions and chaired the Department of Normal Physiology at the Second MSU (since 1930, Moscow State Medical Institute) from 1925 till 1948. She had founded several physiological and biochemical institutions in Moscow and developed a number of very important medical therapies and techniques. In 1939, Stern was elected full member of the USSR Academy of Sciences and became its first female member. Furthermore, in 1944, she became one of the founders on the USSR Academy of Medical Sciences. Despite her international fame, she was arrested in 1949. She had been a member of the Jewish Anti-Fascist Committee (JAC) since 1942. In 1952, as part of the anti-cosmopolite (antisemitic) campaign of the early 1950s, JAC members were tried, sentenced to death and executed, except 74-year old Lina Stern who was sentenced to three and half years of prison and five years of exile. After Stalin's death in 1953, she returned from exile in Kazakhstan and was completely exonerated in 1958. She continued with her research at the Institute of Biophysics of the USSR Academy of Sciences and died at the age of 89.

Another dramatic story of a Russian woman scientist, a prominent Soviet microbiologist and epidemiologist Z.V. Ermolieva (1898–1974), was presented by Tatiana Kursanova. Ermolieva dedicated her life to microbiology, bacterial chemistry and antibiotics research. The results



Fig. 3. Anna Stochik, Cand. Med. Sci., N.A. Semashko National Research Institute of Public Health, presenting her paper (with S.Glyantsev) about Lina Stern (photography by the recently deceased Alexander Eduardovich Marov (1963–2018), the Head of Laboratory of Scientific Photography at IHST)

of her work (especially penicillin obtained by Ermolieva) were particularly important during WWII. She discovered and prepared for clinical use a number of new antibacterial therapies. In 1960, her team obtained an antiviral agent, interferon, for the first time in the USSR.

E.M. Senchenkova's paper was devoted to N.A. Bazilevskaya (1902–1997), a renowned botanist and historian of botany.

Four presentations addressed the classical issues of gender history. The paper by K.K. Vasiliev was devoted to women scientists at the Medical Faculty of the New Russian University in Odessa (M.B. Stanishevskaya (1871–1937) who specialised in pathological anatomy; E.E. Malovichko (1882–1962) worked in the field of endocrinology; and A.A. Krasuskaya (1854–1941) whose specialisation was histology and embryology of endocrine system). M.P. Kuzybaeva talked about women physicians and medical researchers at the N.V. Sklifosofskii Institute of Emergency Medicine. A.P. Solovei described the main stages of feminisation of science in Belarus and A.G. Allakhverdyan analysed gender dynamics of the humanities and social sciences.

Several papers presented at the Conference were devoted to Russian women scientists who worked abroad. N.Yu. Masolikova's paper "Through hardships to the stars: female portraits of Russian scientists abroad in the first half of the 20th century" paints the portraits of three remarkable women scientists of Russian origin who pursued successful professional careers abroad and became famous in their chosen areas, while remaining much less known in Russia. E.V. Antipova (1892, Russian Empire — 1974, Brazil) who emigrated to Brazil for a number of reasons in 1924, became a renowned psychologist, pedologist and organiser of science and education in Brasil. Helena Antipoff Foundation established after her death is still operational. O.N. Uvarova (1910, Russian Empire — 2001, UK) arrived in the UK at the age of ten, an orphaned, undernourished little girl wearing a tag that read "Orphan #7" who had been located by the American Red Cross and sent to her uncle who lived in the UK. She studied at the University of London's Royal Veterinary College and pursued an extremely successful career in veterinary medicine. She had been President of the Society of Women Veterinary Surgeons and of the Central Veterinary Society, the first woman president of the Royal College of Veterinary Surgeons. In 1983, she was named Dame Commander of the Order of the British Empire. E.G. Kandyba (1912, Russian Empire — 1989, South Africa) left Russia with her family in 1920 and eventually found herself in South Africa where she began to teach Russian and in 1961 founded a Department of Russian Studies at UNISA.

A paper by N.N. Kolotilova told the stories of three female students of I.I. Mechnikov who studied at Institut Pasteur in Paris, the best known of whom were women microbiologists P.V. Tsiklinskaya, L.M. Gorovits-Vlasova, and M.N. Margulies-Aitova. All of them returned to Russia after the completion of their studies and lived and worked in Russia although M.N. Margulies-Aitova emigrated to France with her family after the 1917 Revolution and lived and worked in Paris.

Another outstanding figures important for the historians of biology are Margarethe von Wrangell (1877, Moscow — 1932, Hohenheim) and Marianne Grunberg-Manago. M. von Wrangell, whose story was told by E.A. Baum, decided to devote herself to science after she attended a botany course at Greifswald University. In the end, she became an agricultural chemist and the first female full professor at a German university. T.I. Uliankina and Arthur Werner described the contributions of M. Grunberg-Manago (1921–2013), a Soviet-born renowned French biochemist and molecular biologist, the first woman president of the International Union of Biochemistry and Molecular Biology (1985–1988) and the French Academy of Sciences (1995–1996), and a talented organiser of science. She is best known for her studies on polynucleotide phosphorylase that contributed to cracking the genetic code.