



Vasily Dokuchaev (the 175th anniversary)

Central Soil Museum by V.V. Dokuchaev –
Branch of the Federal Research Centre
V.V. Dokuchaev Soil Science Institute
Saint Petersburg, Russia

2021

Vasily Vasilyevich Dokuchaev

(01.03.1846 – 08.11.1903)

**Great Russian scholar, natural scientist,
Professor of Mineralogy and Geology of St. Petersburg University.**

- created the science of soil - Soil Science
- he was the first to establish that the soil is an independent natural body, qualitatively different from all other bodies of nature
- proved that living organisms form an integral part of the soil
- discovered the basic laws of the origin and geographical distribution of soils
- developed the doctrine of natural and soil zones, discovered the law of horizontal zoning and high-altitude zoning of soils
- formulated the law about factors of soil formation
- established the principles of the structure of the soil profile
- developed new methods of soil research and the basics of soil classification and cartography
- laid the foundations of ecology
- laid the foundations of the doctrine of the biosphere
- he pioneered and put into practice a sustainable system of farming
- the author of 281 printed works, 4 maps; editor of 57 books and 7 maps from 1869 to 1900
- founded the scientific school. His outstanding students made major contributions to various branches of natural science.

The Dokuchaev natural science paradigm evolutionarily changed the methodologies of almost all sciences of the XX century. Many of Dokuchaev's ideas are most relevant and they have not lost their significance in the modern world.



On the site of this house in the village of Milyukovo, Novoduginsky district, Smolensk region, stood the house where Vasily Dokuchaev was born.

Archive CSM F.2. I. 39. D. 4, P.28



Church of St. Nicholas the Wonderworker in the village of Milyukovo, Smolensk region, where V. Dokuchaev was baptised in 1846. It was destroyed during the Great Patriotic War.

Archive CSM F.2. I. 39. D. 4, L.14

Vasily Dokuchaev was born on 1 March (February 17 by the Julian calendar) 1846 in the village of Milyukovo, Smolensk region into the family of the priest Vasily Sergeyevich and Pelageya Trofimovna Dokuchaev. Vasily was the youngest of seven children.

The house where the family lived and the church where the father served and the children were baptised have not survived to the present.

The Dokuchaev family



Anastasia
sister



Maria
Vorobyova
sister



Efrosinya
Sushchinskaya
(1835-1924)
sister



Anna
1847
died young



Nikifor
1840-1870-ies
brother



Timothy
1842-1899
brother



Uspenskaya,
Alexandra
Ivanovna
niece

Vorobyova,
Antonina
Ivanovna
niece

Vorobyova,
Sofya
Ivanovna
niece



Sushchinskaya,
Olga Vasilyevna
niece



Sushchinsky,
Ioan
Vasilyevich
nephew



Sushchinskaya,
Alexandra
Vasilyevna
niece



Sushchinsky,
Alexander
Vasilyevich
nephew



Sushchinsky,
Alexey
Vasilyevich
nephew



Sushchinsky,
Konstantin
Ivanovich



Sushchinsky,
Alexander
Nikolaevich

Г. ВЯЗЬМА. № 2.
Духовное училище.



Vyazemsky Religious School at the Smolensk Seminary.

Вязьма.—Wiasma. № 1.
Общій видъ города.



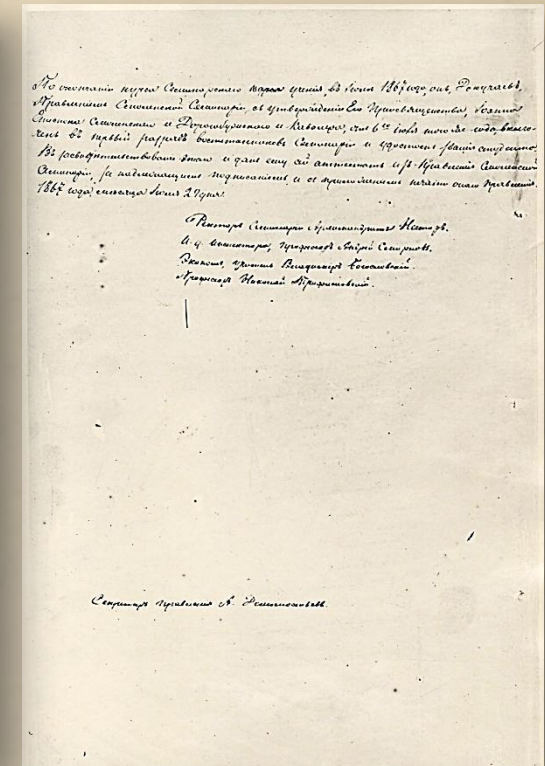
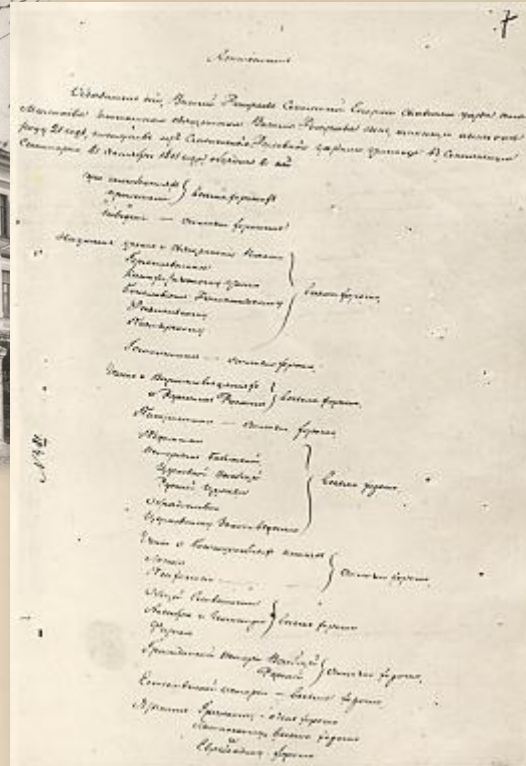
The view of the city of Vyazma

Source: <https://humus.livejournal.com/3145976.html?view=comments>

After attending a parochial school in Milyukovo, at the age of 11 Dokuchaev enrolled at the Vyazemsky Religious School at the Smolensk Seminary.



The Smolensk Theological Seminary
 Source: <https://drevo-info.ru/pictures/19181.html>



The Smolensk Seminary Diploma of Dokuchaev's. Issued July 27, 1867.
 Archive CSM copy from CGIA St. Petersburg. F.14. I.5. D.3550.

In 1867 Dokuchaev graduated with honours from the Smolensk Theological Seminary and was sent to the St. Petersburg Theological Academy.



Срб. Императорск. Университетъ.
Фот. Л. В. Шапкинъ.

St. Pétersbourg. L'Université

Imperial Saint Petersburg University

Source: <https://museums.kpfu.ru/blog/news/lingvist-professor-buntovshhik-chast-1/?template=popup>



V. Dokuchaev as a seminary student.

Archive CSM F.2. I. 39. D.1. P.5

After enrolling in the St Petersburg Theological Academy, he left it and almost immediately joined the Faculty of Physics and Mathematics of the Imperial St Petersburg University.

V. Dokuchaev as the Guardian of the Geological Cabinet.
Source: Article by P. V. Ototsky "The Life of Dokuchaev". "Eurasian Soil Science" journal . 1904



ДИПЛОМЪ.

Советъ Императорскаго Санктпетербургскаго Университета снѣжъ объявляетъ, что **Василій Васильевъ сынъ Докучаевъ**, 25 лѣтъ отъ роду, Православнаго вѣроисповѣданія, поступившій въ число студентовъ сего Университета 28 сентября 1867 года, выслушавъ полный курсъ науки по естественному разряду физико-математическаго факультета и оказавъ на испытаніяхъ слѣдующія познанія: *въ ботаникѣ, анатоміи чловѣка, физіологіи животнаго, химіи, ботаникѣ, минералогіи, геологіи и палеонтологіи — отличными, въ физикѣ и физическѣй географіи — хорошии, въ зоологіи и французскомъ языкѣ — достаточными*, за которыя физико-математическій факультетъ, по представленіи диссертации, признавъ достойнымъ ученой степени **кандидата** и, на основаніи 4 пункта § 12 общаго устава Россійскихъ Университетовъ, утверждающаго въ этой степенн Советовъ Университета 20 сентября 1871 года. Посему предоставляются **Докучаеву** всѣ права и преимуществя, заповѣданы Россійскою Имперіею со степенью **кандидата** соединенными. Въ засвидѣтельство сего данъ сей дипломъ отъ Советъ Императорскаго Санктпетербургскаго Университета, съ приложеніемъ университетской печати. Санктпетербургъ, 16 октября 1871 года.

Ректоръ Императорскаго Санктпетербургскаго Университета, Докторъ физико-математическихъ наукъ, Императорскій профессоръ, Директоръ Главнаго Статскаго Совета въ качествѣ ректора университета.

В. Г. Шенниковъ

Директоръ Физико-математическаго выдѣла, Докторъ философскихъ наукъ, Императорскій профессоръ, Статскій Советникъ и ректоръ Физико-математическаго факультета.

А. Г. Самаринъ

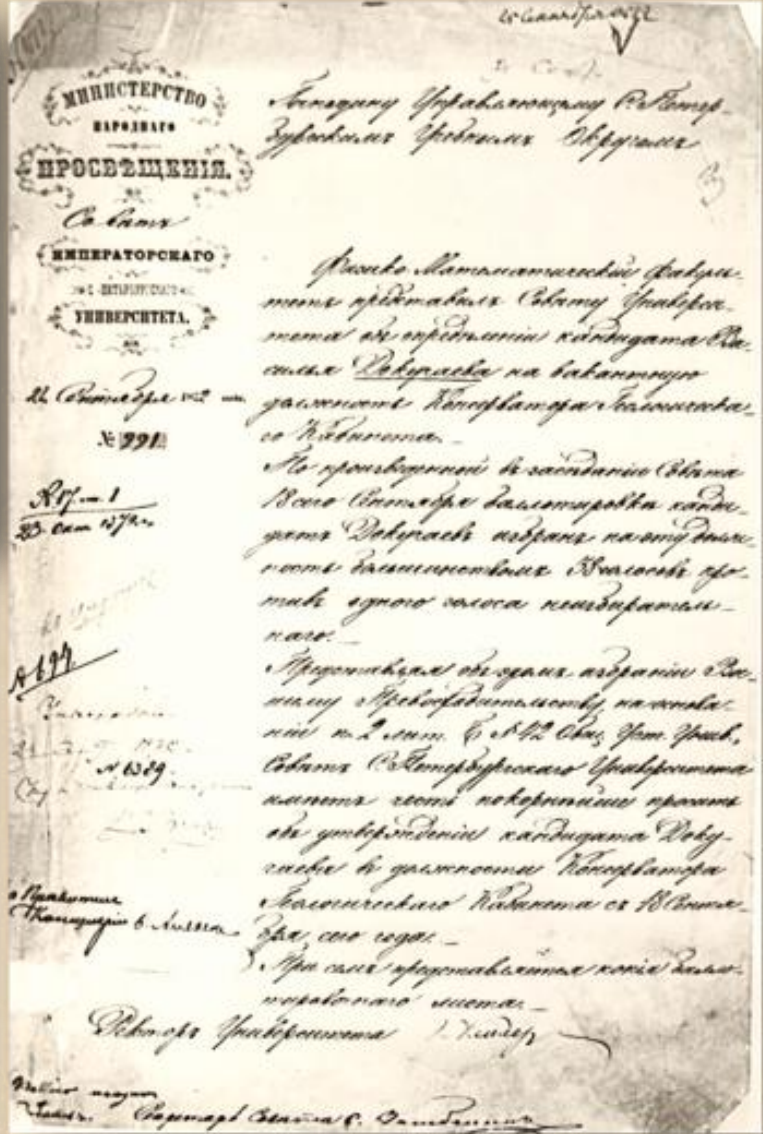
Директоръ казеннаго банка Императорскаго Университета

Полковникъ

Секретарь въ Статскаго Совета въ качествѣ ректора университета.

№ 477

Diploma of the Imperial St. Petersburg University with the defense of a thesis and the awarding of the Candidate's degree. October 16, 1871.
Archive CSM copy from CGIA St. Petersburg. F.14. I.5. D.3550. P.39



МИНИСТЕРСТВО
ПРОСВЕЩЕНІЯ
ИМПЕРАТОРСКАГО
УНИВЕРСИТЕТА.

Въ Санктпетербургѣ
1872

Благородному Управляющему Рязанскаго
Губернскаго Землемѣрнаго Округа

Грѣху Монашескому Филарету
имену предъаваясь Обществу Филарета
имену въ опредѣленіи кандидатура Рязанскаго
Губернскаго на вакансїю
гласнаго Рязанскаго Землемѣрнаго
округа.

А въ производимомъ въ заведеніи Обществу
Рязанскаго Землемѣрнаго Округа кандидатура
Филарета избранъ на эту должность
гласнаго Рязанскаго Землемѣрнаго
округа одного голоса кандидатура
наго.

Предъявляя въ означенномъ заведеніи Рязанскаго
Губернскаго Землемѣрнаго Округа кандидатура
Филарета на эту должность гласнаго Рязанскаго
Землемѣрнаго Округа кандидатура Филарета
имену съ согласіемъ Рязанскаго Землемѣрнаго
Округа кандидатура Филарета на эту должность
гласнаго Рязанскаго Землемѣрнаго Округа.

И при сему представляю именіи Рязанскаго
Землемѣрнаго Округа кандидатура Филарета на эту
должность.

№ 1
23 сент 1872

№ 1289

Полковникъ
Генералъ въ отставкѣ

Филаретъ Филаретовичъ

Полковникъ
Генералъ въ отставкѣ

Approval of candidate V. Dokuchaev for the vacancy of Guardian of the Geological Cabinet from September 18, 1872.
Archive CSM copy from CGIA St. Petersburg. F.14. I.1. D.7132. P.3.

№ 6312. 28 Сеп. 19 Сентября 16

М. Н. П.
Собору
ИМПЕРАТОРСКОГО
С.-ПЕТЕРБУРГСКОГО
УНИВЕРСИТЕТА.

Петербург 1879 года.
№ 1068

Разрешая
Управлению
Старшего Ассистента
19 Сентября 1879 года

Уд. Старишину
Академиком С. С. Урусовым, представил Совету
№ 6685.

(Министерство
Учреждения)

Вашему А. Докучаеву

Российскому Императорскому правительству рассмотреть программу лекций по Геологии, петрографии и минералогии в Докучаевым, представившим заявление о назначении в Императорский университет лекции по предмету: Права государства и признаки происхождения Т. Докучаевым, представляя лекции удобство в гонимости сего Министра к времени лекций по Геологии.

Совету Университета представляю о вышеизложенном, на основании ст. 3 ст. 12. § 42 Императорского Устава, Высочайшему Председательству, иному члену.

А. С. с.
19 Сентября 1879.



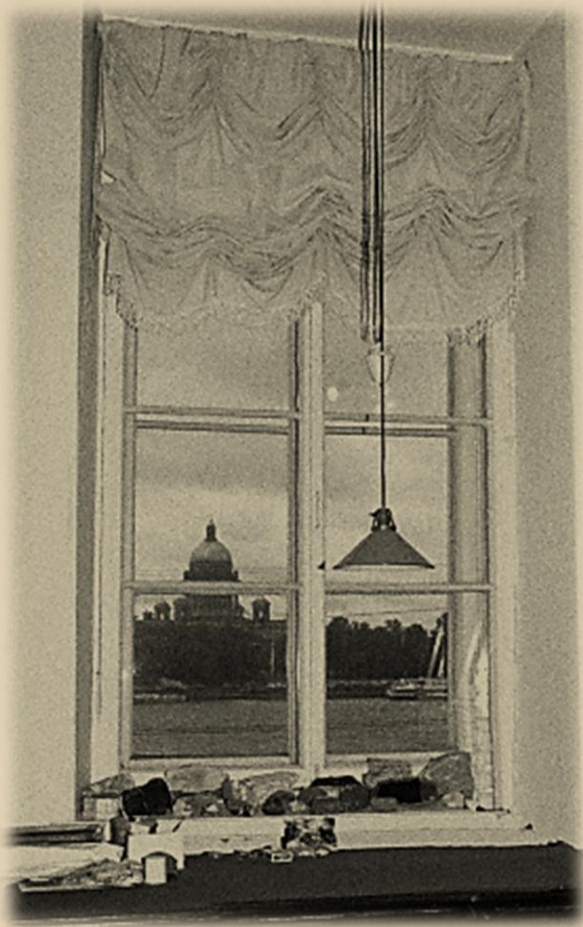
The Geological Cabinet of St. Petersburg University
Source: <http://nlr.ru/petersburg/spbpcards/vo/3.htm>

Submission from the Council of St. Petersburg University for the appointment of Master of Mineralogy and Geology Vasily Dokuchaev as privat-docent to give lectures in Geology.

September 19, 1879.

Archive CSM copy from CGIA St. Petersburg. F.14. I.1. D.7192. P.16.

From 1870 Vasily Dokuchaev was lecturing in dynamic geology and petrography at the Imperial University in St. Petersburg.



View from the window of the office of Vasily Dokuchaev on the Neva river and St. Isaac's Cathedral.
Archive CSM

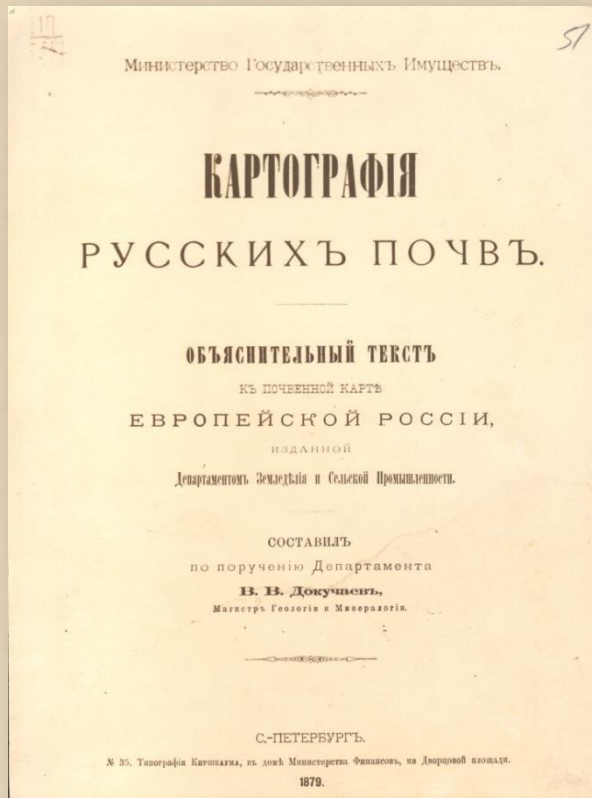


St. Petersburg University. Mineralogical Museum.
Archive CSM

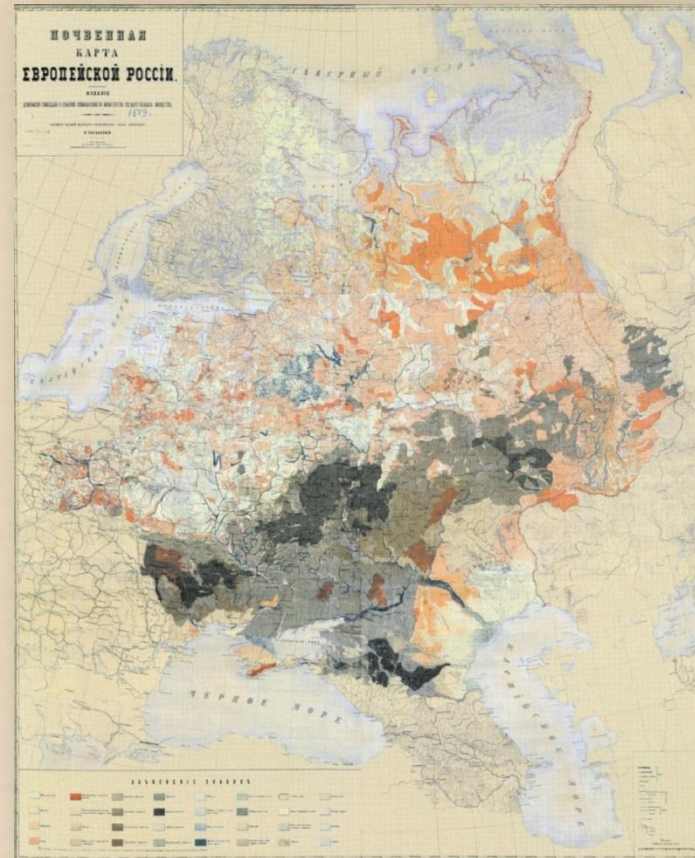


St. Petersburg University. Mineralogical classroom
Source: <http://nlr.ru/petersburg/spbpcards/vo/3.htm>

In 1879 Vasily Dokuchaev was appointed privat-docent of mineralogy and became head of the department of mineralogy and crystallography at St. Petersburg University.

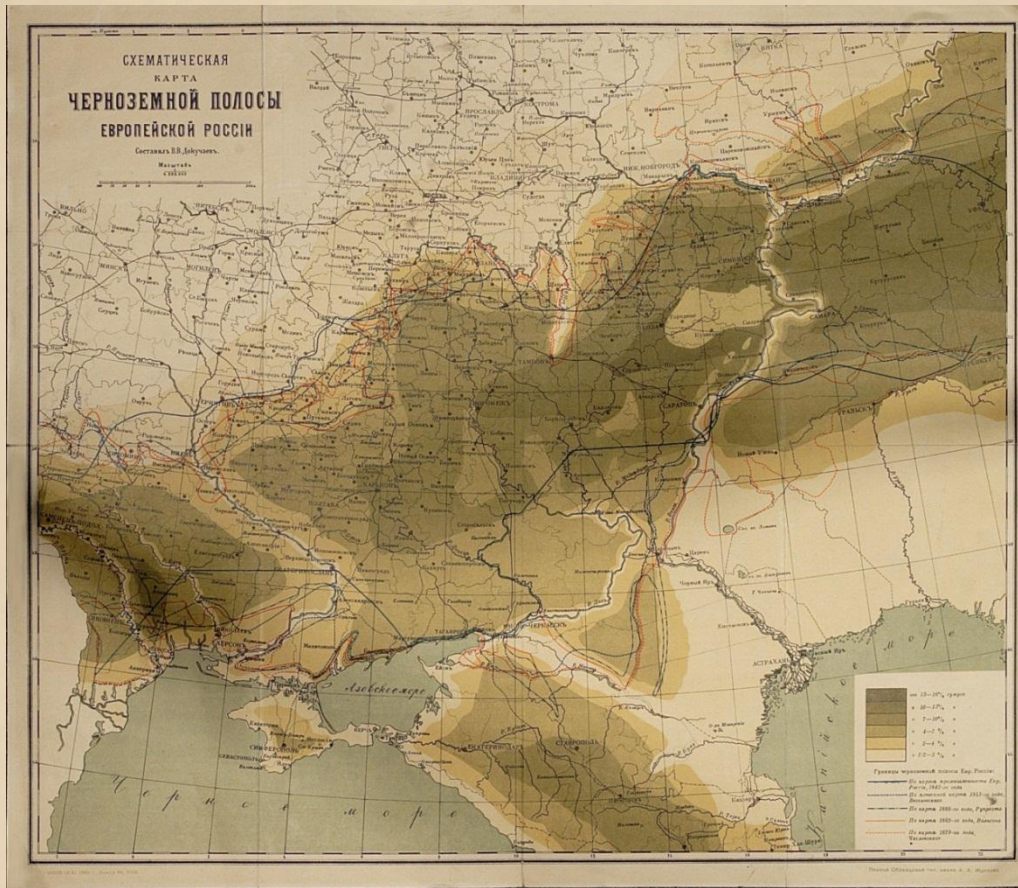


Explanatory text written by Vasily Dokuchaev for the soil map of the European Russia.
Archive CSM



The first soil map of European Russia by Vasily Chaslavsky. 1879.
From the National Atlas of Soils of the Russian Federation

From 1875, Dokuchaev takes part in creating the first soil map of European Russia. Due to the death of Vasily Chaslavsky in 1878, Dokuchaev had to complete the work himself and write an explanatory note for the Cartography of Russian Soils map, which was published in 1879.



Schematic map of the chernozem zone of European Russia, compiled by Vasily Dokuchaev.
Archive CSM



Soil sample selected by Vasily Dokuchaev. Saratov region, Volsky district, 5 miles West of the town of Volsk. A pasture field.
CSM GIK №1-132

In 1876, at the suggestion of Aleksey Khodnev and Alexander Sovetov, a special commission was organized at the First Department the Imperial Free Economic Society to develop new research programs for Russian chernozem. Vasily Dokuchaev was entrusted with drafting the working program of research and later its execution.

During the summer months from 1877 to 1881, Vasily Dokuchaev was travelling over the chernozem zone of European Russia (the total length of the route was over 10 thousand kilometers).



Showcase of the Pedological Museum of the Imperial Free Economic Society named after Vasily Dokuchaev.

Archive CSM F.5. I.1. D.4. P.3.



Halls of the Pedological Museum of the Imperial Free Economic Society named after Vasily Dokuchaev.

Archive CSM F.5. I.1. D.4. P.4.

Since 1879, Vasily Dokuchaev regularly raised the issue of the need for a soil science museum in Russia. This dream came true only after his death through the efforts of his close student Pavel Ototsky.

The official opening of the Pedagogical Museum was held on 6 of November 1904 at the Imperial Free Economic Society. Already at the time of its foundation the Museum was named after Vasily Dokuchaev.

The exhibition was based on a collection of soil samples and monoliths collected by Vasily Dokuchaev and his students during expeditions, which had been displayed at various exhibitions since the 70s of the 19th century.



Anna Sinkler.
Archive CSM F.2. I. 39. D.1. P.4



Vasily Dokuchaev
Archive CSM F.2. I. 39. D.2. P.8

**Vasily Dokuchaev married Anna Sinkler in 1880.
By the time she met Vasily Dokuchaev, Anna Egorovna had experience of teaching and was head of her own first-class boarding school for girls.**



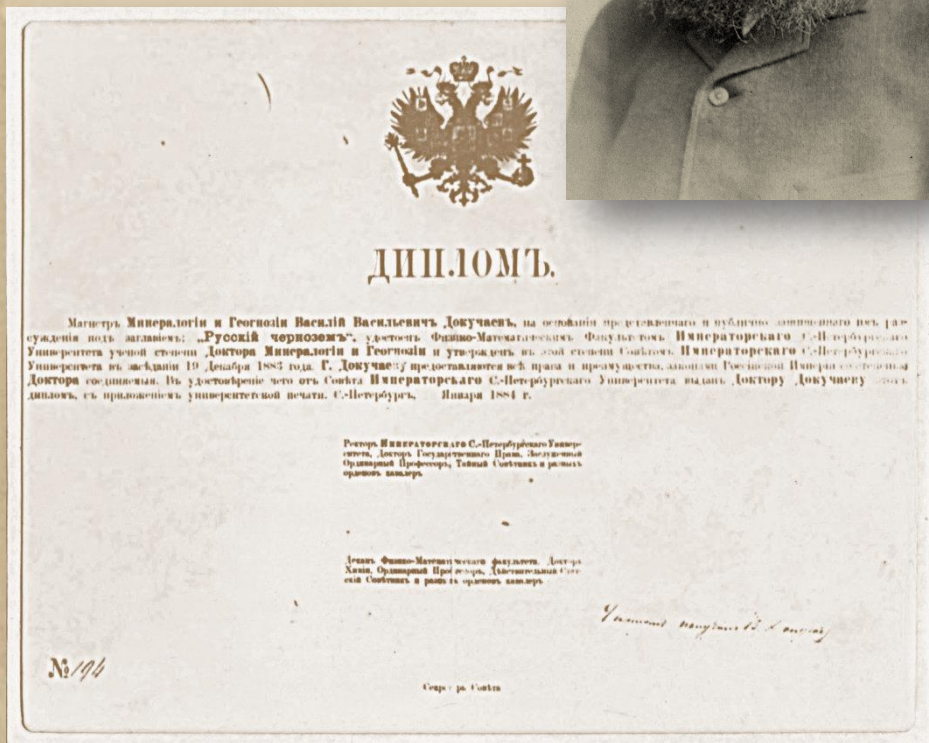
Assembly Hall of the Imperial St. Petersburg University.
Vasily Dokuchaev defended his doctoral thesis "Russian
Chernozem" on December 19, 1883.
Source: <http://nlr.ru/petersburg/spbpcards/vo/3.htm>



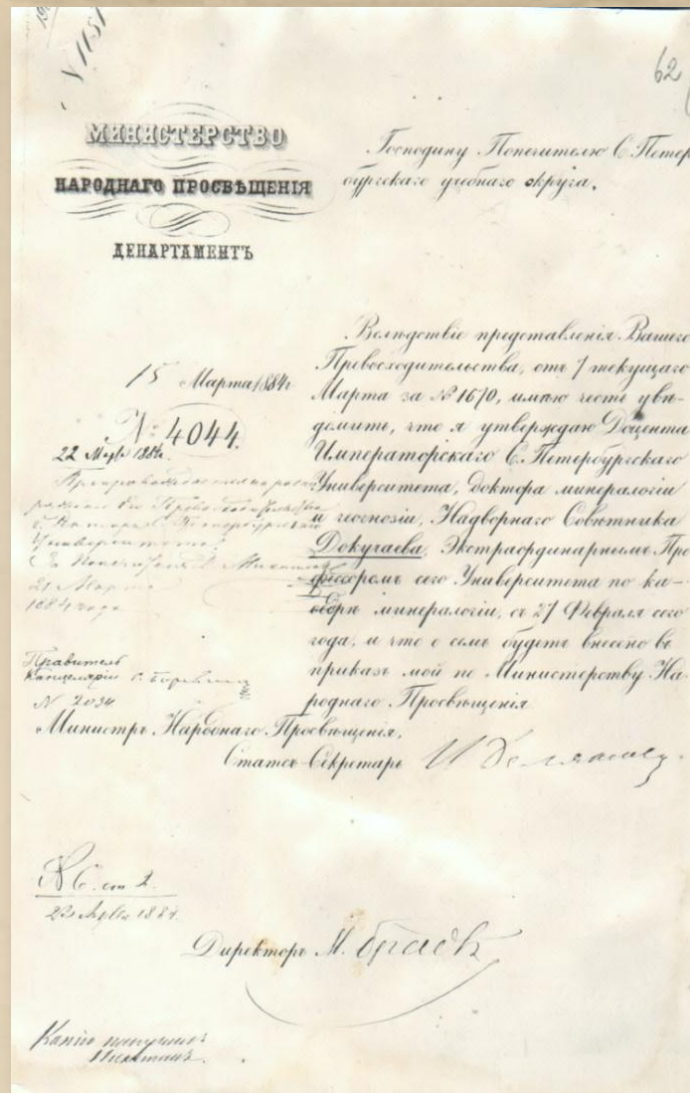
The work on the study of the chernozem zone of European Russia evolved into Dokyuhaev's doctoral thesis entitled "The Russian Chernozem", which he defended at the Imperial Saint Petersburg University on 19 December, 1883.

One of the official opponents for the thesis was Dmitry Mendeleev, who highly appreciated this work.

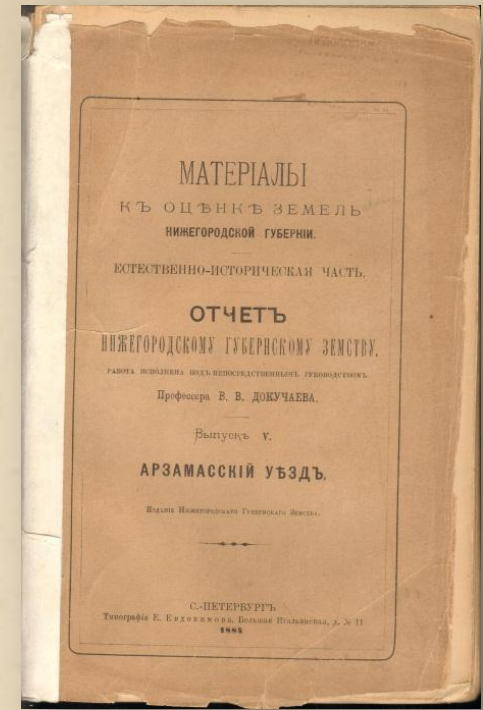
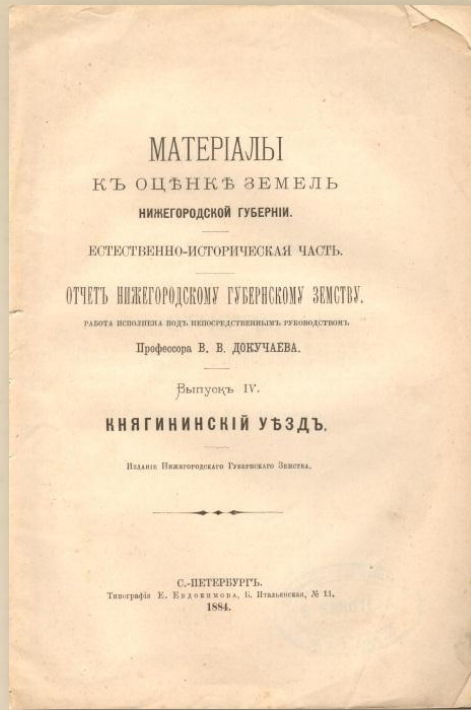
Vasily Dokuchaev as a professor.
 Archive CSM F.2. I. 39. D.1. P.5



Diploma awarding the degree of Doctor of Mineralogy and Geognosy to Vasily Dokuchaev on the basis of his thesis "The Russian Chernozem", which he defended on the 19th of December.
 Archive CSM copy from CGIA St. Petersburg. F.14, I.1.



Approval of Associate Professor of the University of St. Petersburg, Doctor of Mineralogy and Geology, Privy Councilor Dokuchaev as Extraordinary Professor of this University. March 15, 1884.
 Archive CSM copy from CGIA St. Petersburg. F.14, I.1, D.7192. P.62.



Materials on land assessment of the Nizhny Novgorod province.
Archive CSM

In 1882, the Nizhny Novgorod provincial zemstvo approached Vasily Dokuchaev with a proposal to determine the qualities of the provincial soils with a precise marking of their boundaries. Under the leadership of Dokuchaev, specialists trained by him completed the work in six years. The results were 14 issues of "Materials on land assessment of the Nizhny Novgorod Province" (one for each county of the province), with a soil and geological map.

In this expedition, the methodology of soil mapping was created and developed, together with the genetic classification of soils with four major classes of land-vegetation, land-swamp, swamp and floodplain soils. The method of land appraisal was improved and the Dokuchaev concept of genetic soil science was tested and extended to the northern soils.

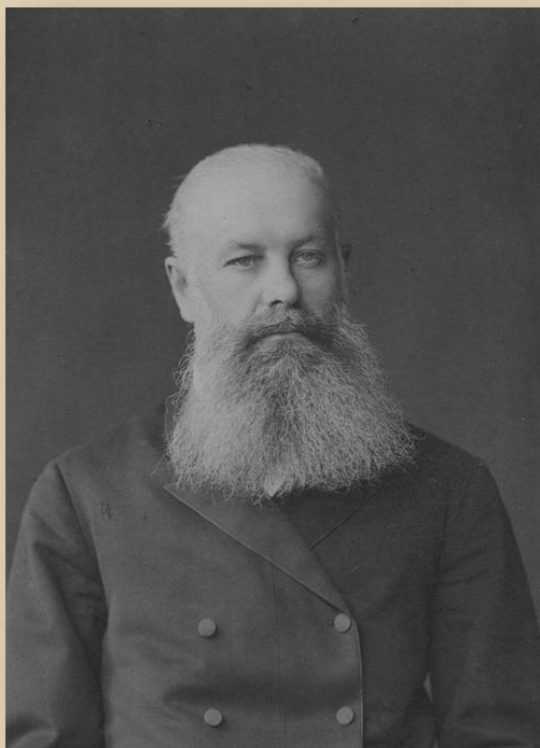


Professors Vasily Dokuchaev and Alexander Sovetov with their students and colleagues of Vasily Dokuchaev. From left to right: top row: N. P. Adamov, D. I. Ivanovskij, S. K. Bogushevskij, P. V. Otocky, O. O. Silant'ev, V. K. Agafonov, V. A. Transhel'. Middle row: K. D. Glinka, G. I. Tanfil'ev, A. V. Sovetov, V. V. Dokuchaev, P. A. Zemyatchenskij, A. R. Ferhmin, M. I. SHeshukov. Bottom row: V. D. Batyushkov, P. A. Kryukov, I. P. Vydrin, M. K. Savich.

Archive CSM F.2. I.39. D.II. P.22

The general appreciation of the research in the Nizhny Novgorod province was confirmed by the proposal to carry out a similar study of the lands of the Poltava province. Dokuchaev was in charge of the expedition's research during 1888-1890. The staff of this expedition included N.M. Sibirtsev, P.A. Zemiatchensky, A.R. Ferkhmin, who had already been on the Nizhny Novgorod expedition, as well as younger students of Dokuchaev: V. I. Vernadsky, K. D. Glinka, P. V. Ototsky, B. B. Polynov, F. Yu. Levinson-Lessing, and others.

State awards of Vasily Dokuchaev



Vasily Dokuchaev
Archive CSM F.2. I. 39. D.1. P.2



Order of St. Stanislaus,
third class
Source: <http://www.cabinet-auction.com/auction/9287/085/>



Order of St. Stanislaus,
2nd class
Source: <http://medalirus.ru/rus-ordena/orden-stanislava-2.php>



Order of St Anne,
2nd class.
Source: <http://medalirus.ru/rus-ordena/orden-stanislava-3-kapitulnyy.php>



The main building of the New Alexandria Institute.
Photo from the album.
CSM GIK №2-9



The album presented to Vasily
Dokuchaev by the first class of the New
Alexandria Institute in 1892-1896.
CSM GIK №2-9

Vasily Dokuchaev was engaged in the development of agricultural education in Russia under the Ministry of Public Education and the Department of Agriculture. In 1892, he was appointed the director of New Alexandria Institute of Agriculture and Forestry and proceeds to radical reorganization of teaching and curricula of the Institute. In 1894, the first department of genetic soil science was established at the New Alexandria Institute. Higher agricultural education in Russia was reorganized according to this model.



Soil exposition at the All-Russian Industrial and Art Exhibition of 1896 in Nizhny Novgorod.
 Archive CSM F.2. I.39. D.II. P.1, 2.



All-Russian Industrial and Art Exhibition in Nizhny Novgorod, 1896.

Source:
<https://alumni.mgimo.ru/page/adaptive/id31258/blog/4819502/?ssoRedirect=true&ssoRedirect=true&ssoRedirect=true>



Soil sample No. 131 presented at the exhibition.
 CSM GIK №2-100

Vasily Dokuchaev organized the Department of Soil Science at the All-Russian Exhibition in Nizhny Novgorod in 1896.



Russian Pavilion. World Fair in Paris, 1900
Source: <https://foto-history.livejournal.com/5163604.html>.



Cavalier Order of Merit for Farming.

Source:

<https://www.monnaiedeparis.fr/en/shop/national-orders/order-of-the-agricultural-merit-knight-miniature-o>



Vasily Dokuchaev.
Fragment of the photo.
Archive CSM

The soil collections were particularly successful at the World Exhibitions in Paris. In 1889 Vasily Dokuchaev was awarded a gold medal and the Chevalier du mérite agricole (Order of Merit for Farming). In 1900, Vasily Dokuchaev and his pupils Vladimir Vernadsky, Nikolay Sibirtsev, Pavel Ototsky and others were awarded the highest award - the Grand Prix.

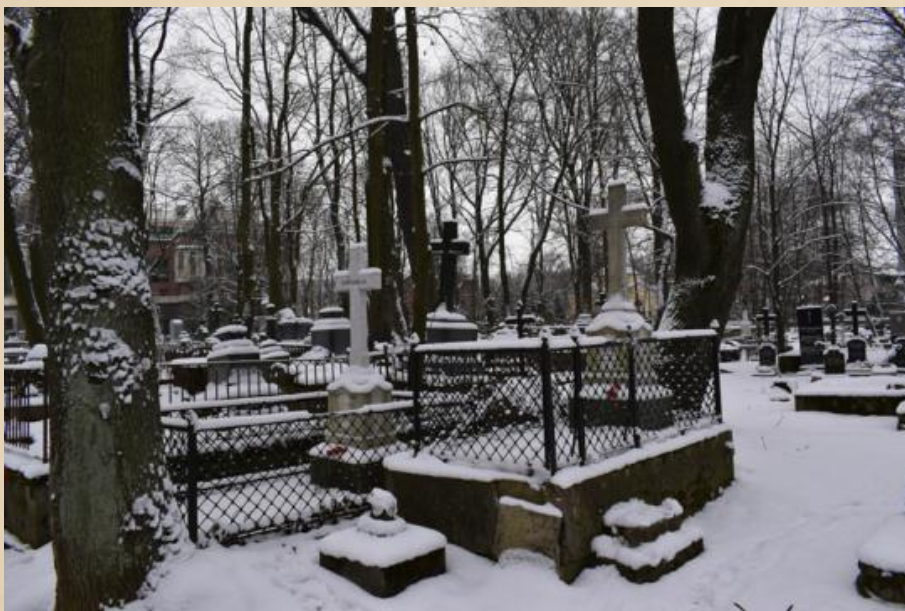
Visitors particularly remembered a monster sample of chernozem from the Voronezh Province (Paninskiy district) in 1900. It was about 9.7 m³ in size and was mounted on a high pedestal. After the exhibition it was decided not to cut the monolith. It was given by lot to the Sorbonne, where it was kept until 1968, when the sample and its display case were destroyed as a result of student riots. Today, the remains of the monolith are preserved in the National Agronomic Institute.

In the autumn of 1900, Vasily Dokuchaev practically ceases all communication with the outside world.

Vasily Vasilyevich Dokuchaev died on November 8, 1903 after a long illness.

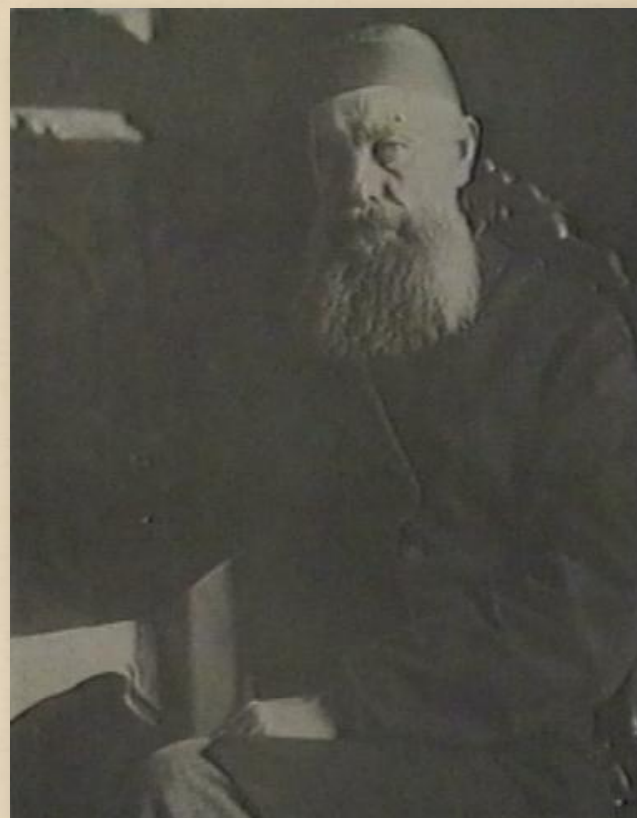
The funeral was attended by Alexander Karpinsky, Dmitry Mendeleev, Alexander Inostrantsev, numerous friends and pupils of Dokuchaev, students, and delegates from many educational institutions.

He is buried next to his wife Anna Egorovna Dokuchaeva at the Smolensky Lutheran Cemetery in St. Petersburg.



Smolensky Lutheran cemetery in Saint Petersburg. The graves of Vasily Vasilyevich and Anna Yegorovna Dokuchaev.

Archive CSM



Vasily Dokuchaev. Fragment of the photo.

Archive CSM