



Rimatskaya Nadezhda

Personal data: Rimatskaya Nadezhda Valerievna, December 7, 1986

last name, first name, patronymic, date of birth

Mobile Phone Number: 8-923-784-01-37

Personal Email Address: Shmanko_Nadya@mail.ru

Name of educational institution: Siberian Federal University (SFU), Institute of Fundamental Biology and Biotechnology (IFBiBT), Department of Biophysics.

Main place of work: Junior Researcher, Laboratory of Bioluminescent Biotechnology, Department of Biophysics, IFBiBT SFU

ResearcherID: C-7818-2017

GoogleScholar:

<https://scholar.google.com/citations?hl=en&user=1zNxCCwAAAAJ>

Education

2010-2013

Siberian Federal University, Institute of Fundamental Biology and Biotechnology, Department of Biophysics, Graduate School 03.01.02 - "Biophysics"

2011-2013

Siberian Federal University, Institute of Business Process Management and Economics, Department of Marketing
Qualification: Master in "Management" profile Marketing

2004-2009

Siberian Federal University, Institute of Fundamental Biology and Biotechnology, Department of Biophysics
Qualification "Physicist" in the specialty of biochemical physics

Additional education

February-June, 2010 Advanced training course "Methodology of innovative design", as part of the SibFU program

May 25-27, 2010 "Commercialization of scientific technologies" / Technology Commercialization Practicum. 3-day training by American mentors as part of the CRDF (Civilian Research and Development Foundation) program, Vladivostok

December, 2010 Advanced training course "Development of small and medium-sized businesses" as part of the SibFU program

November 2011 - February 2012 Course "Management of innovative development of industries and regions" FSBEI HPE "Russian Presidential Academy of National Economy and Public Administration", Faculty of Innovative and Technological Business

November 2011 - March 2012 Education at the Krasnoyarsk youth business school, MBA teachers in the Siberian Federal District

April 15-21, 2012 Participation in the seminar "Fundamentals of technology transfer: the experience of leading universities and technical schools in creating start-up projects", Nantes, Bordeaux, France

September 10 - October 20, 2012 Training under the program "Marketing in small and medium-sized businesses" FSAEI HPE SFU Higher School of Management and Business

September 10 - October 20, 2012 Training in the program "Theory of accounting for beginners" FSAEI HPE SFU Higher School of Management and Business

September 05 - December 15, 2012 Training under the program "Fundamentals of Innovative Thinking", FPKP "FSAEI HPE SFU

April-June 2014 Program "Development of electronic courses in the LMS Moodle system"

October 6-7, 2016 Project Management (Basic) Program

December 1-2, 2016 Training B.M. Ostrovsky "Development of a list of problems and design solutions in the field of education management." Ostrovsky Boris Markovich - professor of practice at the Moscow School of Management SKOLKOVO, project manager of the programs of the Moscow School of Management SKOLKOVO, member of the Governing Council of MKKI, president of the training and gaming corporation "TRIK".

December 9-10, 2016 Professional Development Program P.L. Shestopalova "Project Management". Shestopalov Pavel Leonidovich - Head of the Directorate for Project Management in the Public Sector of the Analytical Center under the Government of the Russian Federation, Ph.D. tech. Sciences, PMP (PMI), IPMA Level D.

December 12-14, 2016 Professional Development Program "Scientific Communications"

Rimatskaya Nadezhda Valerievna, has been engaged in research since 2006. In 2009 she graduated from the Siberian Federal University, Institute of Fundamental Biology and Biotechnology with a degree in Biochemical Physics. In July 2009, she began working at the university as an engineer at the Department of Biophysics, IFBiBT, from October 2009 to September 2010 she worked as an intern researcher, in 2010 she entered graduate school, and since September 2012 she has been an assistant at the Department of Biophysics IFBiBT to the present. Concurrently, since January 2012, he has been working as a junior researcher at the Laboratory of Bioluminescent Biotechnologies of Siberian Federal University.

Scientific interests N.V. Rimatskoy are mainly associated with studies of assessing the quality of media of complex composition, such as soil, air, biological fluids, animal feed, etc. using platform technology for bioluminescent testing. The results will serve as an excellent basis for expanding the use of biosensors in the Krasnoyarsk Territory for a preliminary rapid assessment of the state of the environment, which will reduce the cost of labor-intensive physical and chemical analysis.

The results of scientific research Rimatskaya N.V. were successfully represented at the following events:

1. The district stage of the Russian Youth Innovation Convention in the framework of the International Youth Innovation Forum "Interra", Novosibirsk, September 9-12, 2009 (project "Development of an Express Bioluminescent Method for Determining the Integral Toxicity of Water, Air and Soil").

2. XXXVIII Scientific Conference of Physics Students (took third place with the report "Assessment of air toxicity using bioluminescent test objects"), 2009

3. XIV International Ecological Student Conference "Ecology of Russia and Neighboring Territories" with elements of a youth science school October 30 - November 1, 2009. Novosibirsk, MESK-2009.

4. 3 regional scientific conference on biology "Modern problems of biology: successes of scientific youth". " - Krasnoyarsk, 2009

5. 4 regional scientific conference on biology "Modern problems of biology: successes of scientific youth". " - Krasnoyarsk, 2010

6. Summer International School "Biotechnology - the basis of sustainable development and scientific and technological progress of society" (poster 1.2 place)

7. 17th All-Russian Conference of Students of Physicists and Young Scientists, Yekaterinburg, 2011
8. UMNIK-2011, 2012.
9. Competition "Innovation Breakthrough 2011"
10. "Zvorykin Prize", 2010
11. TIM Forum (Territory of Initiative Youth) Biryusa July 28 - August 8, 2011 Participation in contests: UMNIK 2011,, Innovative breakthrough them. Academician Kirensky 2011.
12. International Youth Innovation Forum Interra Novosibirsk, September 22-25, 2011 Startup Campus Fellow (Participation in the BEST project (Bioluminescent enzyme system technology))
13. IV St. Petersburg International Innovation Forum, September 28-30, 2011, St. Petersburg
14. TIM forum (Territory of initiative youth) Biryusa July 25-31, 2012 Project: "Living Glow" - winners in the "Successful Start" nomination. 3rd place in the game "Business elevator".

As well as the results of the study were presented and discussed with foreign colleagues at international scientific conferences:

1. Participant of CRDF WORKSHOP ON COMMERCIALIZATION OF TECHNOLOGIES Russia, Vladivostok May 25-27, 2010.
2. 17th International Symposium on Bioluminescence and Chemiluminescence (17th international symposium on bioluminescence and chemiluminescence) May 27 - June 2, Guelph, Canada. Report: Bioluminescent assays for monitoring of air pollution (Analysis of the possibilities of using bioluminescent biotests to control air pollution).
3. International Pan-REC Conference, Yaroslavl State University, "RUSSIAN UNIVERSITIES: EVOLUTION AND REFORMS" September 20-21, 2012, Yaroslavl. Report: Development of enzymatic bioluminescent bioassay for soil, air and body fluids ("Development of methods for bioluminescent enzymatic biotesting of soil, air and physiological fluids."

4. International bioluminescent seminar, Krasnoyarsk, June 2012. Report: Bioluminescent assays for monitoring of air pollution (Analysis of the possibilities of using bioluminescent biotests for air pollution control).
5. 5th Annual International Conference on Education and New Learning Technologies (Barcelona, Spain, July 1-3, 2013);
6. 3rd Joint Seminar on Environment and Climate Change (Cadiz, Spain, July 8-11, 2013)

Rimatskaya N.V. was the head of grants:

- A grant from the Prokhorov Foundation as part of the Academic Mobility contest for a trip to Canada at the 17th International Symposium on Bioluminescence and Chemiluminescence).
- Mini-grant CRDF (US Civilian R&D Foundation) # RUX0-002-KR-06 / BG2102 “Development of enzymatic bioluminescent bioassay for soil, air and body fluids” (“Development of methods for bioluminescent enzymatic biotesting of soil, air and physiological fluids”) Grant Leader and Executive.
- Mini-grant CRDF (US Civilian R&D Foundation) # RUX0-002-KR-06 / BG2302 “The organization of a training seminar for teachers of the Krasnoyarsk Region 'Bioluminescence - a workshop for high school students'” (for teachers of the Krasnoyarsk Territory "Bioluminescent workshop for students")
- KGAU "Krasnoyarsk Regional Fund for the Support of Scientific and Scientific and Technical Activities", Competition for individual projects of students and post-graduate students, the project "Application of the bioluminescent method for assessing air and soil quality", (supplementary settlement No. 46/12 of September 4, 2012 to Agreement No. 7 of August 6, 2009).
- KGAU "Krasnoyarsk Regional Fund for the Support of Scientific and Scientific and Technical Activities", Competition for the organization of career guidance for young people in the natural sciences and technical sciences, the project "Festival of

Natural Sciences", (supplementary agreement No. 59/12 of November 29, 2012 to the Agreement No. 7 dated August 6, 2009).

- KSAU "Krasnoyarsk Regional Fund for the Support of Scientific and Scientific-Technical Activities", a competition to organize the participation of students, graduate students and young scientists in all-Russian, international conferences and scientific events, participation in 3 Russian-Spanish scientific seminars "Environment and Global Change" in University of Cadiz, (additional agreement No. 24/13 dated July 2, 2013 to Agreement No. 7 dated August 6, 2009).
- FSBI "Fund for the Promotion of the Development of Small Forms of Enterprises in the Scientific and Technical Field", UMNIK contest, project "Development of a bioluminescent enzymatic method for monitoring air pollution"

Performs work and participated as an executor on the following grants:

- Project "New methodology for the comprehensive rapid assessment of soil quality and pollution based on enzymatic bioluminescent systems", RSF, competition for grants in the priority area of the RSF "Conducting basic research and exploratory research by individual research groups, 2016" No. 16-14- 10115
- KSAU "Krasnoyarsk Regional Fund for the Support of Scientific and Scientific and Technical Activities", competition "Scientific and Technical Research, Development, Innovative Programs and Projects to Ensure the Competitive Advantages of the Economy of the Krasnoyarsk Territory", the project "Bioluminescent Express Analysis for Monitoring Soil Pollution in the Krasnoyarsk Territory", Head V. Kratasyuk, supplementary agreement No. 46/15 of June 19. 2015 to Agreement No. 7 of August 6, 2009
- Ministry of Education and Science of the Russian Federation, Federal Target Program "Research and Development in Priority Directions for the Development of the Scientific and Technological Complex of Russia for 2007-2013", state contract 14.513.11.0123, application code 2013-1.3-14-513-0119-037, project "Development of scientific and technical foundations for creating an express bioluminescent test system for assessing the toxicity of nanomaterials ", issue", 2013.
- Mega-project "Bioluminescent Biotechnologies" (agreement No. 11.G34.31.0058) as part of Decree of the Government of the Russian Federation No. 220 of April 9, 2010 "On measures to attract leading scientists to Russian higher education institutions".
- Mega-project "Biotechnology of new biomaterials" (No. 11.G34.31.0013). in the framework of Decree of the Government of the Russian Federation No.

220 of April 9, 2010 “On measures to attract leading scientists to Russian educational institutions of higher professional education”.

- Grant of the Federal Target Program “Scientific and scientific-pedagogical personnel of innovative Russia for 2009-2013”, the project “Bioluminescent analysis of molecular processes in cells and their physicochemical models; creation on their basis of a new generation of bioluminescent sensors for biology and medicine ”, contract No. 02.740.11.0766.
- KSAU "Krasnoyarsk Regional Fund for the Support of Scientific and Scientific-Technical Activities", Competition of scientific and technical research, development, innovative programs and projects to ensure the competitive advantages of the economy of the Krasnoyarsk Territory in accordance with the priority areas of state support of scientific, scientific-technical and innovative activities in Krasnoyarsk Territory, approved by the Decree of the Legislative Assembly of the Krasnoyarsk Territory of July 7, 2009 No. 8-3635P; The project "Modern school bioluminescent workshop";, head V. Kratasyuk (Supplement No. 14/12 of July 12, 2012 to Agreement No. 7 of August 6, 2009)
- KSAU "Krasnoyarsk Regional Fund for the Support of Scientific, Scientific and Technical Activities" in accordance with the state task holds the Competition on the organization of career guidance for young people in the natural sciences and technical sciences, the project "Natural Science Quest", (additional agreement No. 60/12 of November 29) 2012 to Agreement No. 7 of August 6, 2009)
- Grant No. 2.2.2.2/5309 of the Ministry of Education and Science of the Russian Federation, Federal Agency for Education, Analytical departmental target program "Development of the scientific potential of higher education", project "Modeling the functioning of conjugated enzymatic systems in a cell using the example of enzymes of luminous bacteria", 2009- 2010.
- American Civil Research Support Foundation (CRDF), No. RUX0-002-KR-06 / BP4M02 “Bioluminescent Biosensors for Environmental Monitoring: Stabilization of the Biological Module”, 2009-2010.
- Department of Education and Science of the Russian Federation and the American Civilian Research and Development Foundation (CRDF) No. REC002, No. RUX0-002-KR-06 program "Fundamental Research and Higher Education", 1999-2010, "Scientific and Educational Center" Yenisei: the greening of technology and education. "
- Grant of the Federal Target Program “Scientific and Scientific-Pedagogical Personnel of Innovative Russia” for 2009-2013 ”, lot“ Conducting research by teams of research and educational centers in the field of biocatalytic, biosynthetic, biosensor technologies and the creation of biocompatible materials ”, code“ 2010-1.1- 201-058 ”, a project on the topic:“ Bioluminescent analysis of molecular processes in cells and their physicochemical models; creation on their basis of a new generation of bioluminescent sensors for biology and medicine "(application code" 2010-1.1-201-058-013 "), contract No. 02.740.11.0766

- Youth grant SFU No. 52 as part of “Programs for the development of SibFU for 2007-2010”, 2009.
- Grant No. 19 “Biosensors for the detection of toxicity in biological systems” as part of the “SFU Development Program for 2007-2010”
- Grants in the framework of the long-term target program of the Governor of the Krasnoyarsk Territory “Gifted Children of Krasnoyarsk 2011-2016”
- “Selected chapters of mathematics and physics”
- "Selected chapters of biophysics"
- "Modern problems of biophysics"
- "Makes robots"

Development and reading of courses: Ecology, Special Physical Workshop, Fundamentals of Biology, Environmental Law and Regulations

Achievements Rimatskaya N.V. awarded with:

1. Laureate of the Mayor’s Prize to young talents in the nomination “For high achievements in scientific and educational activities”, 2014
2. Laureate of the State Prize of the Krasnoyarsk Territory in the field of professional education for graduate students of educational institutions of higher and postgraduate professional education, 2013
3. A diploma in the framework of the competition Innovative breakthrough them. Academician Kirensky 2011, participation with the project "Technology for the rapid assessment of the integrated toxicity of feed and feed additives by the intensity of bioluminescence of immobilized enzymes"
4. Diploma in the framework of the contest Innovative breakthrough them. Academician Kirensky 2011, participation with the project “Development of a mini-complex for the analysis of soil samples based on a bioluminescent reagent”
5. Certificate of participation "startup-Campus" in the framework of the MIIF "Interra-2011"
6. Certificate of completion of the educational program in the framework of the MIIF "Interra-2011"
7. A letter of gratitude from the Interdistrict Resource Center for the Work with Gifted Children of KGAOU SPO "Kansky Pedagogical College" for fruitful cooperation and success in implementing additional education programs for students of the Eastern Territorial District.
8. A letter of appreciation from the inter-district resource center for gifted children KGBOU SPO Krasnoyarsk Pedagogical College No. 1 named after Gorky "for his

great contribution to the development of the cognitive interest of gifted children in the field of biology and physics in the implementation of the program" Selected chapters of biophysics ".

9. A letter of appreciation from the Interdistrict Resource Center for Gifted Children KSAEI SPE "Kansky Pedagogical College" for assistance in implementing the program of the school of intellectual growth in the physical and mathematical direction "Selected Heads of Physics and Mathematics".

10. Diploma of the Krasnoyarsk Regional Innovation and Technology Business Incubator (KRITBI).

11. A letter of thanks from the administration of the MKOU DOD Children's Ecological and Biological Center of Zheleznogorsk for methodological support for working with gifted children, organization of research work with students of the center.

12. 3rd degree diploma for the best report at the international seminar "Bioluminescent Biotechnology" in the nomination "Applied Research", 2012

13. Letter of appreciation from the Ministry of Investment and Innovation for the great contribution to the lecture program of the project "Week of Nanotechnology", 2012

14. A letter of thanks from the school of Rosatom for attracting young talents to research and participation in the 7th open scientific competition for children and youth "Youth of Science", 2013

15. Thanks to MBOU "Lyceum No. 174" of Zelenogorsk for organizing and conducting an intensive school of intellectual growth "Modern Problems of Biophysics", 2013

16. Letter of appreciation from the Siberian Federal University Vice-Rector for Science and International Cooperation for active participation in organizing and conducting the "Science Days of the Krasnoyarsk Territory - 2013", 2013

17. Certificate the city stage of the NTTM contest in the city of Krasnoyarsk for participating in the nomination "Youth research and innovation projects", 2013

18. Certificate, for the implementation of pedagogical and expert support of gifted children, as well as for the organization and conduct of an intensive school of intellectual growth "Modern Problems of Biophysics" in Dudinka, Krasnoyarsk Territory, 2013

19. A letter of gratitude from the administration of the Achinsk Pedagogical College for conducting an intensive school for gifted children of the western group of

regions of the Krasnoyarsk Territory of the natural sciences direction "Modern Problems of Biophysics", 2013

Publications

a) scientific work

1. N.V. Shmanko, Nemtseva E.V., Kratasyuk V.A. "Assessment of air toxicity using bioluminescent test objects" // Conference proceedings XIV International Ecological Student Conference "Ecology Russia and adjacent territories ", conference proceedings, Novosibirsk: MESK Publishing House 2009, 235 p.
2. N.V. Rimatskaya, V. Kratasyuk. Biotesting of atmospheric air in the city of Krasnoyarsk using bioluminescent test objects // Abstract, materials of the 17th All-Russian Scientific Conference of Physicists and Young Scientists (VNKSF-17), conference materials, abstracts: B1 т. T1 Yekaterinburg: ASF Russia Publishing House, 2011, 432-433s
3. N.V. Rimatskaya, Khoroshavina A.A., Sutormin O.S. Investigation of the influence of computer operation on living organisms // Abstracts, materials of the Eighteenth All-Russian Scientific Conference of Physicists and Young Scientists (VNKSF-18, Krasnoyarsk): conference proceedings, abstracts: B1 T.T1 – Krasnoyarsk: ASF Russia publishing house, 433-434 s
4. N.V. Rimatskaya, Badalyan L.N., Sutormin O.S. Bioluminescent method for testing the toxicity of water samples // Abstracts, materials of the Eighteenth All-Russian Scientific Conference of Physicists and Young Scientists (VNKSF-18, Krasnoyarsk): conference proceedings, abstracts: B1 т .T1 –Krasnoyarsk: ASF Russia publishing house, 651-652 s
5. N.V. Rimatskaya, A. Neverov, O.S. Sutormin. Toxicity assessment of snow by bioluminescent analysis // Abstract, proceedings of the Eighteenth All-Russian Scientific Conference of Physicists and Young Scientists (VNKSF-18, Krasnoyarsk): conference proceedings, abstracts: B1 т .T1 –Krasnoyarsk: ASF Russia publishing house, 659 s
6. N.V. Rimatskaya, O.S. Sutormin, G.V. Ivanova, T.S. Denisova, V.A. Kratasyuk Bioluminescent workshop for the formation of the research competence of schoolchildren // Vestnik SibSAU No. 45, Krasnoyarsk, 2012, p.
7. Rimatskaia N.V., Nemtseva E.V. and Kratasyuk V.A. Bioluminescent assays for monitoring of air pollution // Luminescence V. 27, N 2, 2012, P.154
8. N. Rimatskaia, O. Sutormin, V. Kratasyuk THE BIOLUMINESCENT PRACTICAL COURSE FOR FORMING RESEARCH COMPETENCE PUPILS // EDULEARN13 Proceedings, 2013, p. 394-398, (ISBN: 978-84-616-3822-2, ISSN: 2340-1117)
9. O. Sutormin, N. Rimatskaia, V. Kratasyuk The natural scientific quest as the easiest way to attract young people to science // EDULEARN13 Proceedings, 2013, p. 375-377, (ISBN: 978-84-616-3822-2, ISSN: 2340-1117)
10. Esimbekova E.N., Rimatskaya N.V., Sukovataya I.E., Kratasyuk V.A. Bioluminescent express method for determining the integral toxicity of water and air

pollution // Bulletin of the Orenburg State University, 2013. No. 10. C. 122-127. (impact factor RSCI 0.142).

11. N. Rimatskaia, V. Kratasyuk, E. Esimbekova Bioluminescent enzymatic toxicity bioassay: from idea to laboratory // ICEI2013 Proceedings, 2013, p.65, (ISBN: 328-64-578-8745-7)

12. Baigina E.M., Rimatskaya N.V. EVALUATION OF THE POSSIBILITY OF APPLYING A BIOLUMINESCENT BIPRIMENTAL METHOD FOR AN INTEGRAL ANALYSIS OF SOIL TOXICITY // Youth and Science: a collection of materials of the X Anniversary All-Russian Scientific and Technical Conference of Students, Post-Graduate Students and Young Scientists with International Participation dedicated to the 80th anniversary of the formation of the Krasnoyarsk Territory, No. Electronic [, Electron order 1644 / otv. ed. O. A. Kraev - Krasnoyarsk: Sib. Feder. Univ., 2014. Access mode: <http://conf.sfu-kras.ru/sites/mn2014/index.html> (accessed June 15, 2014)

13. 12. Rimatskaia N., Baigina E., Kazanceva M., Stom D.I., Kratasyuk V. Application of bioluminescent enzymatic method for assessment of the state of the soil // LUMINESCENCE. - 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL, 2014 .-- T. 29 .-- S. 76-77.

14. 10. Rimatskaia N., Sutormin O., Sukovataya I., Kratasyuk V. Bioluminescence in education: Contemporary bioluminescent practical training session for research activities in secondary schools // LUMINESCENCE. - 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL, 2014 .-- T. 29 .-- S. 75-76.

15. Elizaveta Baigina, Nadezhda Rimatscaya, Elena Esimbekova & Valentina Kratasyuk. Enzyme Bioluminescent Method For The Integrated Assessment Of Soil Toxicity // Biotesting Technologies in the Environmental Assessment of Agroecosystems and Humic Substances: Materials of the International Youth School / ed. V.A. Terekhova, K.A. Kydraliev, Moscow State University, November 21-23, 2014, Moscow: Publishing House "Kind Word", pp. 103-104

16. Baigina E.M. Evaluation of the possibility of using the bioluminescent bienzyme method for the integrated analysis of soil toxicity // Youth and Science: in 3 volumes: materials conf. T. 2 / holes for the release of A.N. Tamarovskaya. - Krasnoyarsk: Sib. Feder. Univ., 2014 .-- 280 p., pp. 27-31

17. E.M. Baigina, N.V. Rimatskaya, L.V. Stepanova. The use of luminous bacteria enzymes for analysis of soil degradation // Materials of the International scientific conference of the XIX Dokuchaev youth readings "Soil - a mirror of the landscape" / Ed. B.F. Aparina. - St. Petersburg: Publishing House of St. Petersburg State University, 2016. - 400 p., Pp. 259-261

18. Elena N. Esimbekova, Elena V. Nemtseva, Anna E. Bezrukikh, Galina V. Jukova, Albert E. Lisitsa, Viktoriya I. Lonshakova-Mukina, Nadezhda V. Rimatskaya, Oleg S. Sutormin, Valentina A. Kratasyuk. Bioluminescent enzyme inhibition-based assay to predict the potential toxicity of carbon nanomaterials / Toxicology in Vitro Volume 45, Issue 1 2017, December

b) educational work

1. V.A. Kratasyuk, N.V. Rimatskaya, Fundamentals of Biology. CPC (educational-methodical manual) Fundamentals of biology. CPC. // Krasnoyarsk: publishing house of SFU, 2012
2. V.A. Kratasyuk, N.V. Rimatskaya Environmental law and regulations. Discipline program. Environmental law and regulations. Discipline program. // Krasnoyarsk: publishing house of Siberian Federal University 2012
3. V.A. Kratasyuk, N.V. Rimatskaya Environmental law and regulations. CPC Environmental law and regulations. Discipline program. // Krasnoyarsk: publishing house of Siberian Federal University 2012
4. V.A. Kratasyuk, N.V. Rimatskaya, E.N. Esimbekova Ecology (CMD, e-Learning course)