

CURICULLUM VITAE

Name in Full

Travin Alexey Valentinovich

FAMILY First Middle

Date of Birth: **22 November, 1961**Nationality: **Russian**Current Appointment **Head of Lab**Academic Degree **Doctor of Geological and Mineralogical Sciences**Type (PhD. Etc.) **PhD**; Date Obtained **25 May 2016**Fields of the Degree: **Petrology, Volcanology**Institution: **Institute of Geology and Mineralogy, SB RAS (IGM SB RAS)**

Official Address: Koptuyuga ave. 3, Novosibirsk, 630090, Russia

Tel. **+7-383-330-7839 (off.)**; passport no. **727923875**, valid until 11 March 2024Home address: **Tsvetnoy street, 15, apt. 8, Novosibirsk, 630090, Russia**e-mail: travin@igm.nasc.ru; AlexTrav555@Yandex.ru**Research interests**

1. Geochronology: $^{40}\text{Ar}/^{39}\text{Ar}$ dating, U/Pb dating, thermochronology, numerical modeling of isotope systems mobility;
2. Geochemistry: stable and radiogenic isotope composition of rocks and its relation to conditions of formation, geodynamics;
3. Plate Tectonics: subduction-collisional, collisional structures, high-grade metamorphic complexes, granite batholithes, tectonic modeling;
4. Ore deposits: Cu-Mo-porphyry deposits, Au-ore deposits, Controls on Distribution of mineral Deposits through time;

Diplomas

1. Doctor of Science: United Institute of Geology, Geophysics and Mineralogy SB RAS, Novosibirsk : 2016. PhD (Doctor of Geologo-Mineralogical Sciences) in one field: Volcanology&Petrology.
2. PhD : United Institute of Geology, Geophysics and Mineralogy SB RAS, Novosibirsk : 1994. PhD (Candidate of Geologo-Mineralogical Science) in one field: Geology&Search and Exploration of ore deposits and rock products&Metallogeny.
3. MS; Novosibirsk State University, Novosibirsk; 1984, M.S. in Physics (Honors)

Professional experience and grants (*h-index = 19, total citations = 1646*)

- Institute of Geology and Mineralogy SB RAS; junior research scientist, 1991-1992; research scientist, 1992-1994; senior scientist, 1994-1999; Head of Analytical Centre of IGM SB RAS, 1999-2006; leading researcher, 2006-2010; Head of Isotope Laboratory, 2010-present.
- Novosibirsk State University; leading researcher, 2013-present.
- Tomsk State University; senior researcher, 2014-present.

Reviewer

- journal reviewer: Russian Geology and Geophysics, Geology of Ore Deposits, Geosciences Frontiers.

Research projects*Principal Investigator (Leader):*

1. RFBR (Russian Foundation for Basic Research), “Thermochronology of granitoid batholithes as indicator for geodynamic reconstructions”; no. 14-05-00712; 2014-2016.
2. RFBR (Russian Foundation for Basic Research), “Isotope dating of Central Aldan Au ore deposits”; no. 11-05-00758; 2011-2015.

3. Ministry of Education and Science of RF, SB RAS Program VIII.67.2, “Thermochronology, Isotope geochemistry of CAOB complexes (development of techniques and interpretations)”;
2013-2016.
4. RFBR (Russian Foundation for Basic Research), “Isotope dating of Au-sulfide ore deposits”;
no. 08-05-00733; 2008-2010.
5. RFBR (Russian Foundation for Basic Research), “Extraordinary support of material and technical resources of scientific investigations of the Analytic centre of general use and the Paleomagnetic centre of IGM SB RUS”;
no. 06-05-01817; 2006-2006.
6. RFBR (Russian Foundation for Basic Research), “Development of material and technical resources for Earth Sciences scientific investigations”;
no. 05-05-67023; 2005-2005.
7. RFBR (Russian Foundation for Basic Research), “Development of material and technical resources for Earth Sciences scientific investigations”;
no. 05-05-67005; 2004-2004.
8. RFBR (Russian Foundation for Basic Research), “Participation in 12 Goldschmidt
9. RFBR (Russian Foundation for Basic Research), “Isotope dating of high-pressure mineral paragenesis”;
no. 05-05-64438; 2005-2007.
10. RFBR (Russian Foundation for Basic Research), “ $^{40}\text{Ar}/^{39}\text{Ar}$ dating of mineral paragenesis from shear zones: problems of methodology and interpretation”;
no. 02-05-64455; 2002-2004.
11. Conference (Davos, Switzerland)”;
no. 02-05-74742; 2002-2002.
12. RFBR (Russian Foundation for Basic Research), “The Centre of multi-element and isotope analysis of general use, SB RUS”;
no. 00-05-72004; 2000-2003.

Co-Principal Investigator:

1. RFBR (Russian Foundation for Basic Research), “Fluid-rock interaction during exhumation of high-pressure metabasic rocks in subduction channel”;
no. 12-05-00759; 2012-2014.
2. RFBR (Russian Foundation for Basic Research), “The ore-magmatic systems of mantle plume and prognosis of precious and rare metals ores”;
no. 11-05-12058-OFI; 2011-2012.
3. RFBR (Russian Foundation for Basic Research), “Geochemistry, Age and formation settings of granites and alkaline rocks from western framework of the Siberian craton”;
no. 11-05-00131; 2011-2013.
4. RFBR (Russian Foundation for Basic Research), “Paleotectonic reconstruction of Southern Siberia for Late Precambrian - Early Paleozoic on the base of geological, structural, paleomagnetic and geochronologic data”;
no. 10-05-00230; 2010-2012.
5. RFBR (Russian Foundation for Basic Research), “Tectonics and Geodynamic evolution of marginal-continental structures of the Central Arctic including areas of Kara and Barents sea”;
no. 10-05-00128; 2010-2012.
6. RFBR (Russian Foundation for Basic Research), “Structure and evolution of the Siberian craton on the base of geochemical and petrological study of mantle xenoliths from Siberian kimberlites”;
no. 09-05-93106; 2009-2011.
7. RFBR (Russian Foundation for Basic Research), “Thermochemical model of Tarim (P) and Siberian (P-T) superplumes as base for forecast and substantiation of regularity of formation of Cu-Ni-PGE, noble- and rare- metal jre deposits”;
no. 09-05-12015-OFI; 2009-2010.
8. RFBR (Russian Foundation for Basic Research), “Dynamics of origination and formation of tin-bearing ore-magmatic systems under conditions of interference of Geodynamic regimes (on the example of Vietnam)”;
no. 08-05-90303; 2008-2009.
9. RFBR (Russian Foundation for Basic Research), “Geochemistry of sin- metamorphic granites and basic-ultrabasic rocks at deep levels of collisional-shear systems”;
no. 07-05-00980; 2007-2009.
10. RFBR (Russian Foundation for Basic Research), “Tectonics of Central Asia folded belt and geodynamic models of post- accretional magmatism”;
no. 07-05-00703; 2007-2009.
11. RFBR (Russian Foundation for Basic Research), “Chronicles of changing of environment in borderland seas (Okhotsk, Japan and Bering) and Siberia (Baikal lake) in past, as a key for understanding of sharp millennial- centennial climate changes”;
no. 06-05-91576; 2006-2007.

12. RFBR (Russian Foundation for Basic Research), “A Role of Precambrian plume-lithospheric processes in formation of Kolskaya Paleozoic alkaline province”; no. 06-05-64130; 2006-2008.
13. RFBR (Russian Foundation for Basic Research), “Correlation of Paleogene and Neogene-Quaternary sediments accumulation and volcanism in Pribaikalye and Transbaikalia”; no. 05-05-97254; 2005-2007.
14. RFBR (Russian Foundation for Basic Research), “Granitoid magmatism evolution in Late Precambrian Structures of the Yenisei ridge”; no. 03-05-65090; 2003-2005.
15. RFBR (Russian Foundation for Basic Research), “Dynamics of origination, intrusion and tectonic exhumation of granitoid batholithes at Californian active continental margins (on the example of Caledonian Altay-Sayan folded region)”; no. 03-05-65081; 2003-2005.
16. RFBR (Russian Foundation for Basic Research), “Paleozoic dike magmatism in Kolskiy region: isotope-geochemical data, comparative analysis and development of numerical model of evolution of alkaline series”; no. 03-05-64066; 2003-2005.
17. RFBR (Russian Foundation for Basic Research), “Sedimentary and Isotope events in Riphean basins of the Eastern Siberia: global and regional correlations”; no. 02-05-65097; 2002-2004.
18. RFBR (Russian Foundation for Basic Research), “Contemporary geodynamic condition of Baikal rift system in a context of space-time development of magmatism”; no. 01-05-97245-p2001baikal; 2001-2004.
19. RFBR (Russian Foundation for Basic Research), “Late Phanerozoic magmatic impulses and geodynamics of the Central and Eastern Asia”; no. 01-05-65005; 2001-2003.
20. RFBR (Russian Foundation for Basic Research), “Geodynamic evolution of Late Precambrian fold-thrust belts of Western framing of the Siberian craton”; no. 01-05-64732; 2001-2003.
21. RFBR (Russian Foundation for Basic Research), “Sea level variations in Riphean basins of south of Eastern Siberia”; no. 99-05-64671; 1999-2001.
22. RFBR (Russian Foundation for Basic Research), “Time factor during formation of large-scale Cu-Mo-porphyry ore-magmatic systems”; no. 99-05-64648; 1999-2001.
23. RFBR (Russian Foundation for Basic Research), “Precambrian ophiolites of western framing of the Siberian craton as indicator of evolution of paleo-oceans: petrologic-geochemical and geodynamic aspects”; no. 98-05-65241; 1998-2000.
24. INTAS-RFBR “INTAS-RFBR 97-1435”; no. 97-05-71085-INTAS; 1997-2001.
25. RFBR (Russian Foundation for Basic Research), “Structural-thermal model of Caledonian collision system of South-Eastern Tuva (on the base of structural analysis, P-T estimations and $^{40}\text{Ar}/^{39}\text{Ar}$ ages of cooling”); no. 97-05-65223; 1997-1999.

Field trips:

1. Sora Cu-Mo-porphyry ore deposit, SW Siberia, Russia, Ordovician-Devonian; 1991-1993.
2. Tuva, Russia, Tuva-Mongolian massif, Early Caledonian, 2001.
3. Russian Altay Mts., SW Siberia, Russia: Kurai and Chagan-Uzun HP metamorphic complexes, Kuraiskaya metamorphic zone, Early Caledonian; 2000-2003.
4. East Kazakhstan: Irtysh suture-shear zone, North-Eastern suture-shear zone, Kalbinsky granite batholite L. Carboniferous-Permian; Char suture-shear zone L. Devonian-E. Carboniferous; 1996-2016.
5. Western Baikal (Ol'khon) region, Eastern Baikal region, Early Caledonian collision system, Russia; 2004-2016.

Symposia and Workshops attended:

2016:

- Vietnam Academy of Technology and Science; International Symposium

“Geodynamics&Geohazards in Vietnam and Neighboring Regions; Hanoi, Vietnam, October 24-27,

- 3rd Int'l conf. "Correlation of the Altaides and Uralides"; Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia, March 29- April 1, 2016.

2015:

- VI Conference on Isotope geochronology "Isotope dating of geological processes", Institute of Precambrian Geology and Geochronology RAS, Sankt-Petersburg, Russia; June 2-5, 2015.
- International conference "Large igneous provinces, mantle plumes and metallogeny in the Earth's history, A.P. Vinogradov Institute of Geochemistry, SB, RUS, Irkutsk - Listvyanka, Russia, September 1-8, 2015.

2014:

- 2nd Int'l conf. "Correlation of the Altaides and Uralides"; Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia, April 1-4, 2014.
- 2nd Int'l geological conf. "Granites and Earth's evolution: granites and continental crust"; Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia, August 17-20, 2014.
- 46 (XLVI) Tectonic conf. "Tectonics of folded belts of Eurasia: similarity, distinction, typical features of contemporary orogenesis, regional generalizations", Scientific council on problems of tectonics and geodynamics Earth Sciences department RAS, Geological Institute RAS, Geological department of Moscow State University, Moscow, Russia, January 28 – 1 February, 2014.

2013:

- IV All-Russian theoretical and practical conf. "Geodynamics and Mineralogy of North-Eastern Asia", Geological Institute SB RAS, Ulan-Ude, Buryatia, August 26-31, 2013.

2012:

- 5-th Russian conf. on isotope geochronology "Geochronometries Isotope systems, methods of studying, chronology of geologic processes", Institute of geology of ore deposits, petrography, mineralogy and geochemistry RAS, Moscow, Russia, June 4-6, 2012.
- 1st Int'l conf. "Correlation of the Altaides and Uralides"; Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia, June 13-20, 2012.

2009:

- IV Russian Conference on Isotope geochronology "Isotope systems and Time of geological processes", Institute of Precambrian Geology and Geochronology RAS, Sankt-Petersburg, Russia; June 2-4, 2009.
- Scientific Conference "Geodynamic evolution of Lithosphere of Central-Asian folded belt (from ocean to continent)"; Institute of Earth crust SB RAS, Irkutsk, Russia, October 11-14, 2009.

2008:

- Scientific Conference "Geodynamic evolution of Lithosphere of Central-Asian folded belt (from ocean to continent)"; Institute of Earth crust SB RAS, Irkutsk, Russia, October 14-18, 2008.

2007:

- Scientific Conference "Geodynamic evolution of Lithosphere of Central-Asian folded belt (from ocean to continent)"; Institute of Earth crust SB RAS, Irkutsk, Russia, October 9-13, 2007.
- International Symposium "Large Igneous Provinces of Asia, Mantle Plumes and Metallogeny", Institute of Geology and Mineralogy SB RAS, August 13-16, 2007.
- International Conference "Ultramafic-mafic complexes of folded belts", Institute of geochemistry SB RAS, Irkutsk-Chernorud, August 20-25, 2007.

2006:

- 3-rd Russian conf. on isotope geochronology "Isotope dating of processes of ore formation, magmatism, sedimentation and metamorphism", Institute of geology of ore deposits, petrography, mineralogy and geochemistry RAS, Moscow, Russia, June 6-8, 2006.
- International Conference devoted to 100-th anniversary of ac. V.A. Kuznetsov "Actual problems of ore formation and metallogeny", Institute of Geology and Mineralogy SB RAS, Novosibirsk, April 10-12, 2006.

2005:

- Scientific Conference “Geodynamic evolution of Lithosphere of Central-Asian folded belt (from ocean to continent)””; Institute of Earth crust SB RAS, Irkutsk, Russia, October 10-14, 2005.
- 2004:
- Scientific Conference “Geodynamic evolution of Lithosphere of Central-Asian folded belt (from ocean to continent)””; Institute of Earth crust SB RAS, Irkutsk, Russia, October 19-22, 2004.
- 2003:
- 2-nd Russian conf. on isotope geochronology “Isotope geochronology solving problems of Geodynamics and ore formation”, Institute of geology and geochronology of Precambrian RAS, Saint-Peterburg, Russia, November 25-28, 2003.
- 2002:
- 12th Annual V.M. Goldschmidt Conference, Davos, Switzerland, August 18-23, 2002.
- 2001:
- Third Workshop “Continental Growth in the Phanerozoic (Evidence from Central Asia)”, IGCP-420, Novosibirsk, August 6-16, 2001.
- 2000:
- 1-st Russian conf. on isotope geochronology “Isotope dating of geological processes: new methods and results”, Institute of geology of ore deposits, petrography, mineralogy and geochemistry RAS, Moscow, Russia, November 15-17, 2000.
- 1999:
- Fourth International Eclogite Field Symposium “To the diamondiferous and high-pressure metamorphic rocks of the Kokchetav massif (Northern Kazakhstan), Novosibirsk, 1999.
- 1998:
- International Conference organized at the occasion of the end of INTAS Project 134 “Interaction between structural and sedimentary processes”, Gent, Belgium, April 30 – May 2, 1998.
 - XV symposium on Geochemistry of isotopes devoted to A.P. Vinogradov, GEOCHI RAN, Moscow, November 24-27, 1998.
- 1995:
- XIV symposium on Geochemistry of isotopes devoted to A.P. Vinogradov, GEOCHI RAN, Moscow, October 17-21, 1998.

Teaching and lecturing:

Novosibirsk State Technical University

2001-2012 – supervised five undergraduate and master’s students;
2016 – Lecture Course “Isotope Geochronology and Geodynamics”

Novosibirsk State University;

2006-2016 – Lecture “Introduction to Isotope Geology” to the students of Geological Department;

2008 – supervised a post-graduate student (PhD);

2011 – supervised a post-graduate student (PhD).

Additional professional skills:

- Field observation (visual rock diagnostics, regional geology, sampling for Geochronology and Thermochronology);
- Microscopic petrography (diagnostics of minerals suitable for geochronology);
- Sample preparation: grinding and leaching of rocks, mineral separation (magnetic, electromwgnetic, heavy liquids), hand picking (under binocular);
- ⁴⁰Ar/³⁹Ar laser fusion and step heating dating;
- Preparing scientific projects and applications;
- Highly experienced PC user.