Gražina Skridlaitė

CONTACT INFORMATION

Address	Akademijos Str. 2, Vilnius LT-08412, Lithuania
Tel. No.:	+370 5 210 4710
E-mail:	grazina.skridlaite@gamtc.lt https://orcid.org/0000-0002-8980-0324 https://www.researchgate.net/profile/Grazina-Skridlaite

EDUCATION AND ACADEMIC DEGREE

1987 – 1993	Doctor degree, Natural Sciences, Geology (Geologija, N 005,); thesis at Vilniaus university and Institute of Geology. Title of the thesis: "*Metasomatism in the Varena Iron Ore Zone, southern Lithuania"*, supervisors: prof., dr. habil. V.A. Glebovickyi and dr. Gediminas Motuza-Matuzevičius. Research area: mineralogy, petrology, geochemistry, ore forming processes.
1976 – 1981	Master degree; Mining Institute of G. Plechanov in St. Petersburg (former Leningrad), Russia, Faculty of Geological Exploration. Title „Geological mapping, exploration of mineral resources". Qualification: mining engineer/geologist. Master thesis: "*Exploration and feassibility study of the copper-nicel deposit Karikjarvi 2 at the Verchne-Titovskaya area*". Research conducted at the Karikjarvi 2 deposit, Kola peninsula and the Mining Institute. Field of investigations: geological mapping, exploration of mineral deposits, evaluation of exploitation measures.

PROFESSIONAL EXPERIENCE

2010 01 – until now	**Head of the department, senior researcher** Department of Bedrock geology, Nature Research Centre
2013 09 – until now	**Associated professor** Department of Geology and Mineralogy, Faculty of Chemistry and Geosciences, Vilnius University
2003 12 – 2009 12	**Senior researcher, head of the department** Department of Bedrock Geology, Institute of Geology and Geography
1996 09 – 2006 09	**Lecturer (associated professor)** Department of Geology and Mineralogy, Faculty of Natural Sciences, Vilnius University
2007 09 – 2008 01	**Lecturer** Civil Engineering Faculty of Vilnius College of Technologies andf Design
2008 09 – 2013 09	**Lecturer (associated professor)** Department of Geotechnics, Faculty of Civil Engineering, Vilniaus Gediminas Technical university

1985 01 – 2003 12 **Assistent, PhD student, researcher, senior researcher**
Department of Bedrock Investigations, Institute of Geology
1981 09 – 1984 12 **Geologist**
Central Kola geology party, Murmansk geological expedition, Apatitai, Russia

RESEARCH INTERESTS

Research area: rock geology, geochemistry, mineralogy, petrology, tectonics, structural geology, geo-heritage, geological education and outreach. Investigations of macro and -micro rock mineral composition, rock and mineral chemistry and isotopic composition. Rock forming conditions (pressure and temperature) have been studied using GEOTHERMOBAROMETRY and other computer programmes. Temperature and pressure as well as their evolution may be obtained from the applied calculations. A variety of methods for measuring of U-Pb isotopic relationships have been used for age determination. Sm-Nd and Rb-Sr methods are applied for implications on rock origin and evolution. As a result of the above investigations, large structures of the upper Earth crust in Lithuania and surrounding areas are outlined and their origin and evolution are described. Useful mineralizations (with special emphasis to so-called 'critical minerals "), ore deposits, formation of energy resources are a special subject of scientific investigations. Participation in world-wide reconstructions of super-continents and ancient continents. The obtained scientific data is used for education of student and society. In addition, methodic concerning an application of Scanning Electron Microscopy to different fields of sciences have been prepared. Collaboration with archeologists, civil engineers, chemists etc. Preparation of exhibitions and shows in museums, national and regional parks and educational institutions.

PUBLIKACATIONS (5 YEARS)

Scientific articles published in journals (books), indexed in „Clarivate Analytics Web of Science" database (with citation index):

1. Prusinskiene, S., Siliauskas, L., **Skridlaite, G**., 2017. Varieties and chemical composition of magnetite in the Var?na Iron Ore deposits. *Chemija* , vol. 28, N1, 39-57.
2. Motiejunaite, J., **Skridlaite, G**., 2017. New records of lichens and lichenicolous fungi from several quarries and outcrops in Lithuania. *Herzogia*, Vol. 30, N1, 126-137. https://doi.org/10.13158/heia.30.1.2017.126
3. Siliauskas, L., **Skridlaite, G**., Baginski, B., Whitehouse M. & Prusinskiene, S., 2018. What the ca. 1.83 Ga gedrite-cordierite schists in the crystalline basement of Lithuania tell us about the late Palaeoproterozoic accretion of the East European Craton, *GFF*, 140:4, 332-344, DOI: 10.1080/11035897.2018.1544588
4. **Skridlaite, G.,** Šiliauskas L., Prušinskiene S., Baginski B. 2019. Petrography and mineral chemistry of the Varena Iron Ore deposit, southeastern Lithuania: implications for the evolution of carbonate and silicate rocks and ore mineralization. *Baltica*, 32 (1), 107-126. Vilnius. ISSN 0067-306.
5. Melvydas, V., Svediene, J., **Skridlaite, G**., Vaiciuniene, J., Garjonyte, R., 2020. In vitro inhibition of Saccharomyces cerevisiae growth by Metschnikowia spp. triggered by fast removal of iron via two ways. *Brazilian Journal of Microbiology*. https://doi.org/10.1007/s42770-020-00357-3, https://link.springer.com/article/10.1007/s42770-020-00357-3
6. Mažeika, K., Šiliauskas, L., **Skridlaitė, G.,** Matelis, A., Garjonytė, R., Paškevičius, A., Melvydas, V. 2021. Features of iron accumulation at high concentration in

pulcherrimin-producing Metschnikowia yeast biomass. *Journal of Biological Inorganic Chemistry*, 26 (2-3): 299–311.

7. **Skridlaite, G**., Siliauskas, L., Whitehouse, M. J., Johansson, Å., Rimsa, A., 2021. On the origin and evolution of the 1.86–1.76 Ga Mid-Baltic Belt in the western East European Craton. *Precambrian Research*, v. 367, https://doi.org/10.1016/j.precamres.2021.106403
8. Åke Johansson, Bernard Bingen, Hannu Huhma, Tod Waight, Rikke Vestergaard, Alvar Soesoo, **Grazina Skridlaite**, Ewa Krzeminska, Leonid Shumlyanskyy, Mark E. Holland, Christopher Holm-Denoma, Wilson Teixeira, Frederico M. Faleiros, Bruno Ribeiro, Joachim Jacobs, Chengcheng Wang, Robert J. Thomas, Paul H. Macey, Christopher L. Kirkland, Michael I.H. Hartnady, Bruce M. Eglington, Stephen J. Puetz, Kent C. Condie, 2021. A geochronological review of magmatism along the external margin of Columbia and in the Grenville age orogens forming the core of Rodinia. *Precambrian Research*, https://doi.org/10.1016/j.precamres.2021.106463
9. Šatavice, E.; **Skridlaite, G.;**Grigoraviciene-Puroniene, I.; Kareiva, A.; Selskiene, A.; Suzdalev, S.; Žaludiene, G.; Taraškevicius, R., 2022. CordedWare and Contemporary Hunter-Gatherer Pottery from Southeast Lithuania: Technological Insights through Geochemical and Mineralogical Approaches. *Minerals*, 12, 1006. https://doi.org/10.3390/min12081006

Other reviewed scientific publications (books, books chapters, collections of articles, articles, textbooks etc.):

1. **Skridlaitė, G**., 2017. Japonija: vulkanai,žemės drebėjimai, granitų intruzijos arba kitoks kvarteras. *Geologijos akiračiai,* v.3(107), 34-45.
2. Vaškiene, V. ir **Skridlaite, G**., 2018. Ką pasakoja Mosedžio rieduliai? *Geologijos akiraciai*, Nr. 4(112), 29-34; www.lgeos.lt/GA/(ISN2424-3612)
3. Gedminienė, L., Vaznytė, J., **Skridlaitė, G**., 2018. 8-oji geologinio paveldo diena. *Geologijos akiračiai*, Nr. 4(112), 26-28. www.lgeos.lt/GA/(ISN2424-3612)

Reviewed scientific articles, published in Lithuania:

-

PARTICIPATION IN INTERNATIONAL AND NATIONAL SCIENTIFIC PROGRAMMES AND PROJECTS

2020 – 2021	**Project leader.** Project funded from European Social Fund (project No 09.3.3-LMT-K-712-22-003) under grant agreement with the Research Council of Lithuania. Improvement of student skills by conducting scientific research during their studies. Project „Modelling of metamorphic parameters for crystalline rocks of western Lithuania" (student J. Putnaitė).
2019 – 2020	**Project leader**, project of the Lithuanian Student' Non-formal Education Center (financed by European Social Fund) project "Preparation of tasks for a State Contest in Geology for school pupils", Agreement No A9-39.
2020-2021	**Project executive**. Kaunas City Municipality, expertise of dimension and building stones for street and square renovation.
2019-2020	**Project executive**. State museum „Royal Palace" (Valdovų rūmai), Expertise of rock, mineral and other artefacts.
2021	**Project executive.** Kaunas University of Technology. Petrographic analysis of

building and dimension stones.

2017 **Project participant.** Project "Integration of geological information and actualization for general public via creative learning at natural localities and different working environments" supported by the Research Council of Lithuania.

INTERNSHIP AND TRAINING

2017 m. 04 U-Pb in zircon isotopic investigations by the NORDSIM (ion microprobe) at the Geochronology laboratory, Swedish Museum of Natural History, Stockholm, Sweden.

2018 m. 01, 12 Investigations of U-Pb in zircon, monazite and baddeleyite minerals by LA-ICPMS and article preparation (Lund university, Lund, Sweden).

2018 m. 01 Visit to the Warsaw University, EPMA laboratory for estimation of chemical composition of magnetite from the Varena Iron Ore deposit and age determination of monazites from the same deposit (Warsaw, Poland).

2019 m. 11 EPMA analysis of monazites and magnetites (Warsaw University, Poland).

PARTICIPATION IN SCIENTIFIC CONFERENCES

International scientific conferences:

1. Skridlaite, G., Siliauskas, L., Söderlund, U., Naeraa, T., 2022. Fluid-driven reactions in Ca-Mg-skarns from the SW East European Craton (Lithuania): microstructural study and dating of ore-forming events. GOLDSCHMIDT conference, Honolulu, Hawaii, July 10-15. https://conf.goldschmidt.info/goldschmidt/2022/meetingapp.cgi/Paper/11987
2. **Skridlaite, G**., Siliauskas, L., Whitehouse, M., Johansson, Å., and Rimsa, A.: Evidence for a ca 1.86 Ga continental margin in the Baltic Sea region: rock chemistry, U-Pb ages, and Nd and Sr isotopic data , EGU General Assembly 2022, Vienna, Austria, 23-27 May 2022, EGU22-2524, https://doi.org/10.5194/egusphere-egu22-2524
3. **Skridlaite, G**., Putnaite, J., Baginski, B., Huc, A., and Siliauskas, L., 2021. High-grade metamorphism in metapelites from the western East European Craton, western Lithuania: challenges of deciphering and dating multi-stage metamorphism, EGU General Assembly 2021, online, 19–30 April 2021, EGU21-16049, https://doi.org/10.5194/egusphere-egu21-16049
4. **Skridlaite, G**., Wiszniewska, J., Krzeminska, E., Baginski, B., Siliauskas, L., Ruszkowski, M., Gorbatschev, R., 2020. Voluminous 1.54-1.40 Ga magmatism and metamorphism in the western East European Craton, Lithuania and Poland: are they manifestations of Danopolonian or other orogenies further west? 34th Nordic Geological Winter Meeting, January 8-10, Blindern, University of Oslo, Norway. NGF Abstracts and Proceedings, N 1, 2020. https://geologi.no/images/NGWM20/Abstractvolume_NGWM20.pdf, p. 197.
5. **Skridlaite, G**., Siliauskas, L., Prusinskiene, S., Baginski, B., 2019. Enigmatic origin of the Varena Iron Ore deposit in the crystalline basement of southern Lithuania: implications from microtextures and mineral chemistry of the carbonate and silicate rocks. XXVIth Meeting of the Petrology Group of the Mineralogical Society of Poland. MINERALOGIA - SPECIAL PAPERS, 49, Checiny, Poland, 2019, October 24-27. https://konferencje.pgi.gov.pl/en/ptmin2019.html
6. Siliauskas, L**., Skridlaite, G.,** Whitehouse, M., Johansson, A., Bogdanova, S., Rimsa, A., 2019. Tracking the 1.86-1.84 Ga continental margin in the concealed basementof Lithuania, western East European Craton: implications from U-Pb, Sm-Nd and Rb-Sr

isotopic investigations. Geophysical Research Abstracts Vol. 21, EGU2019-PREVIEW, 2019 EGU General Assembly 2019, 7-12 April. https://meetingorganizer.copernicus.org/EGU2019/EGU2019-947-1.pdf

National scientific conferences:

1. Putnaitė J., **Skridlaitė G**. 2021. Vakarų Lietuvos kristalinių uolienų metamorfizmo parametrų modeliavimas. Studentų mokslinė konferencija, virtualioje erdvėje, 2021 gegužės 11 d. https://www.lmt.lt/lt/doclib/mkrgz8mv2r5u2ghkkwsgwknwx4b35681
2. Putnaitė, J., **Skridlaitė, G.,** Šiliauskas, L., 2020. Vakarų Lietuvos metapelitinių granulitų fazių pusiausvyros modeliavimas ir iššūkiai dirbant su aukšto metamorfizmo laipsnio uolienomis. Šeštoji Lietuvos geologijos krypties doktorantų konferencija, Vilniaus universitetas, gruodžio 14 d. http://www.geol.gf.vu.lt/en/node/66#overlay-context=lt/node/38
3. L. Šiliauskas, **G. Skridlaitė**, M. Whitehouse, J. Putnaitė, 2018. Vidurio Lietuvos tektoninės zonos tęsinys ŠV Lietuvos kristaliniame pamate. Ketvirtoji Lietuvos Geologijos krypties doktorantų konferencija. VU Chemijos ir geomokslų fakultetas, Vilnius, 2018 gruodžio 14 d. https://www.lmaleidykla.lt/ojs/index.php/geologija-geografija/article/view/3890/2689
4. L. Šiliauskas**, G. Skridlaitė**, M. Whitehouse, J. Putnaitė, 2018. Vidurio Lietuvos tektoninės zonos tęsinys ŠV Lietuvos kristaliniame pamate. Bioateitis: gamtos ir gyvybės perspektyvos. Lietuvos mokslų akademija, Vilnius, 2018 gruodžio 14 d. http://www.lma.lt/uploads/2017-12-07_BIOATEITIS_pranesimu_santraukos.pdf

PARTICIPATION IN THE STUDY PROCESS

Supervision of PhD students:

Research field: *Natural Sciences* (N000). Research area: *Geology* (N005)

Sabina Prušinskienė	Title of thesis: „Minerals of the Varėna Iron Ore zone as indicators of metasomatism and ore-forming processes““	2015-10-02 – 2018-09-30
Laurynas Šiliauskas	Title of thesis: „Evolution of the Proterozoic magmatic complexes in Southern Lithuania: implications for the formation of the Varena Iron Ore Deposit“	2016-10-01 – 2019-12-19
Olga Demina	Thesis title “Minerals and rock alterations in the Precambrian Varena Iron Ore deposit related to the 1.5 Ga magmatism“.	2022-10-01 – 2026-09-30

Supervision of bachelor and master students

Jolanta Putnaitė	Master thesis: „Application of phase diagrams for the alumina-rich granulites of western Lithuania and related rocks“ (VU CHGF, Geology study programme	2019 – 2021
Auksė Baltulytė	Bachelor thesis: „Characteristics and origin of the Mesoproterozoic intrusions in the E-W tectonic zones of Western Lithuania“ (Faculty of Chemistry and Geosciences, Vilnius University, Geology study programme).	2019-2022

OTHER

1. Honorary member of the Lithuanian Geological Society, member of European Geoscience Union (EGU), and of international Geochemical Society
2. Expertise:
Certification of building and dimension stones: over 20 building, civil engineering and other companies.
Petrographic analysis of building and dimension stones (Kaunas University of Technology).
Identification and description of archeology findings, museum artefacts, minerals and rocks etc: National State museum of Lithuania „Valdovų rūmai“, Faculty of History of Vilnius University, State museum of Erratic Boulders etc.
Identification of minerals, rocks and artificial compounds for individual persons (over 40 per year).
3. Interview, shows:
LRT: show „Histories of things“: Information on geological catastrophes (https://www.lrt.lt/mediateka/irasas/2000096461/mazojo-ledynmecio-didele-itaka-vezimu-per-baltijos-jura-invazines-rusys-ir-nulemtas-badmetis), on erratic boulders and boulder fields (https://www.lrt.lt/mediateka/irasas/2000128704/unikalios-vietos-kurias-verta-aplankyti-savo-istorijomis-turtingi-zemaitijoje-sovietmeciu-ikurti-akmens-parkai), processes of karst, fossils (https://www.lrt.lt/mediateka/irasas/2000130252/gamtos-stebuklai-siaures-lietuvoje-cia-sklando-mitai-apie-dingusias-baznycias-ir-irodymai-apie-dinozaurus) etc.
LRT show „Soup of Science“: information on deep Earth structure, geological processes, volcanism, mineral deposits of Lithuania and other countries (https://www.youtube.com/watch?v=TCVkm3VpJQQ,
https://www.youtube.com/watch?v=6_VVWAF3dPo,
https://www.youtube.com/watch?v=89IO96uDV-o,
https://www.youtube.com/watch?v=FfDQzZT2s7k, : https://youtu.be/xMApUIhUDFI
4. Seminars, lectures, excursions, exhibitions
Seminar at the College of Design and Technologies „Architecture of the upper Earth Crust in Lithuania and its mineral deposits”, 2022/11/10. (https://vtdko.lt/studentams/sf/aktualu/stadi-2022-vyko-seminarai-mokymai-studentams-ir-destytojams).
Seminar at the Palanga Amber Museum, „Geological Circle at the Lithuanian Seashore: from granulites to hydrocarbons, amber and sandy dunes” (2020/02/29).
Consultation on geological time scale and formation of amber at the Palanga Amber Museum for an educational movie “Amber Forest” (www.lndm.lt/pazintinis-filmas-gintaro-miskas/).
Arrangement and consultations for exhibitions at the State Museum of Erratic Boulders of V. Intas.