



Giorgi Chichinadze

Position

Chief Scientist of the Department of Petrology, Volcanology, Mineralogy and Lithology; Deputy Director of the Alexandre Janelidze Institute of Geology of Ivane Javakhishvili Tbilisi State University

Scientific/academic degree, title

Candidate of geological-mineralogical sciences (1978). Dissertation - Petrology of crystalline rocks of South-Eastern part of the Greater Caucasus Sofia uplift.

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Education

1958-1963 – Ivane Javakhishvili Tbilisi State University, Geological Mapping and Exploration of Natural Resources, Engineer-geologist.

Employment history

2017 - up to date – Alexandre Janelidze Institute of Geology of Ivane Javakhishvili Tbilisi State University, Department of Mineralogy, Petrology, Lithology and Volcanology, Chief Scientist.

2012 – up to date – Deputy Director of Alexandre Janelidze Institute of Geology of Ivane Javakhishvili Tbilisi State University.

2007-2017 – Alexandre Janelidze Institute of Geology of Ivane Javakhishvili Tbilisi State University, Department of Mineralogy, Petrology, Lithology and Volcanology, Senior scientist.

1981-1984 – Department of Petrology of the Institute of Geology of Georgian Academy of Sciences - Senior scientist.

1976-1981 – Department of Petrology of the Institute of Geology of the Georgian Academy of Sciences - Junior scientist.

Research interests

Petrology of igneous and metamorphic rocks; isotope geochronology.

Publications

1. *D. Shengelia, L. Shumlyanskyy, G. Chichinadze, T. Tsutsunava, G. Beridze, I. Javakhishvili* (2022). U–Pb LA-ICP-MS geochronology of polygenetic zircons from Beshta and Kamenistaya intrusions (the Greater Caucasus). *ActaGeochimica*.
<https://doi.org/10.1007/s11631-022-00558-7>
2. *I. Javakhishvili, D. Shengelia, L. Shumlyanskyy, T. Tsutsunava, G. Chichinadze, G. Beridze* (2021). Metamorphism of the Dizi Series Rocks (the Greater Caucasus): Petrography, Mineralogy and Evolution of Metamorphic Assemblages. *Baltica*, 34 (2), 185–202. Vilnius. ISSN 1648-858X. <https://doi.org/10.5200/baltica.2021.2.5>
3. *I. Gamkrelidze, D. Shengelia, G. Chichinadze, Yuan-Hsi Lee, A. Okrostsvardze, G. Beridze, K. Vardanashvili* (2020). U–Pb LA-ICP-MS dating of zoned zircons from the Greater Caucasus pre-Alpine crystalline basement: Evidence for Cadomian to Late Variscan evolution. *GEOLOGICA CARPATHICA*, Vol.71, №3, pp. 249–263. <https://doi.org/10.31577/GeolCarp.71.3.4>
4. *D. Shengelia, G. Chichinadze, T. Tsutsunava, G. Beridze, I. Javakhishvili* (2020). On the Regional Metamorphism of pre-Variscan Orthogneisses of Beshta and Mount Kamenistaia Inlier. Proceedings of the Al. Janelidze Institute of Geology, New Series, №132, pp. 26-36. (in Georgian).
5. *I. Gamkrelidze, D. Shengelia, G. Chichinadze, T. Tsutsunava, G. Beridze, I. Javakhishvili* (2019). Geology of the Loki Crystalline Massif (Caucasus) (Explanatory note of the 1:50 000 Scale Digital Geological Map). Proceedings of the Al. Janelidze Institute of Geology, New Series, no. 131. 87 p. (in Georgian).
6. *I. Gamkrelidze, D. Shengelia, G. Chichinadze, T. Tsutsunava, G. Beridze, T. Tsamalashvili, K. Tedliashvili, I. Javakhishvili* (2018). Petrology, Geochemistry and Formation Conditions of Pre-Alpine Metabasites of the Loki Crystalline Massif (the Caucasus). *Bulletin of the Georgian National Academy of Sciences*. Vol.12, №4. pp. 78-86.
7. *G. Chichinadze, D. Shengelia, T. Tsutsunava, N. Maisuradze, G. Beridze* (2018). Jalovchat Gabbroic Intrusive of the Caucasus: Petrological Study, Geochemical Peculiarities and Formation Conditions. *World Academy of Science, Engineering and Technology International Journal of Geological and Environmental Engineering*. Vol.12, №5, pp. 1700-1704.
8. *K. Vardanashvili, D. Shengelia, T. Tsutsunava, G. Chichinadze, N. Maisuradze*. (2017). New Geologic-petrological Data on the Klich Gabbro-diorite Intrusive (the Caucasus)”, *Bulletin of the Georgian National Academy of Sciences*, vol. 11, №2, pp. 76-80.
9. *D. Shengelia, T. Tsutsunava, G. Chichinadze, G. Beridze* (2015). New Data on the Metamorphism of the Dizi Series. Proceedings of the Al. Janelidze Institute of Geology. New Series, № 127, pp. 117-123. (in Georgian).

10. *E. Gamkrelidze, D. Shengelia, O. Dudaury, T. Tsutsunava, G. Chichinadze.* (2014). Precambrian regional Metamorphism and Magmatism of the Georgia and Geodynamics of the Caucasus. *Mineralogical Journal (Ukraine)*. Vol. 36, N3. pp. 98-113.
11. *D. Shengelia, T. Tsutsunava, G. Chichinadze, G. Beridze* (2014). Some Questions on Structure, Variscan Regional Metamorphism and Granitoid Magmatism of the Caucasian Terrane Crystallinum. *Bulletin of the Georgian National Academy of Sciences*. Vol.8, №3. Pp. 56-63.
12. *G. Chichinadze* (2010). On the geological structure of the Buulgen series (the Greater Caucasus). *Proceedings of Al. Janelidze Institute of Geology. New Series, № 125*, pp. 123-129.
13. *D. Shengelia, I. Gamkrelidze, T. Tsutsunava, G. Chichinadze, K. Vardanashvili, N. Maisuradze.* (2010). Petro- and geochemistry of Early Variscan granitoids of Caucasus. *Proceedings of Al. Janelidze Institute of Geology. New series, vol. 125*, pp. 8-24.
14. *N. Maisuradze, G. Chichinadze.* (2010). Petro-geochemical Characteristics of Jalovchat Gabbroid Intrusive (the Caucasus). *Proceedings of Al. Janelidze Institute of Geology. New series, vol. 125*. pp.188-198.
15. *D. Shengelia, I. Gamkrelidze, T. Tsutsunava, G. Chichinadze, N. Maisuradze, K. Vardanashvili* (2008). About Geochemistry of Early Variscan Granitoids of the Main Range of the Caucasus. *Bull. Acad. Sci. of Georgia*. V.2, N2, pp. 59-63.
16. *G.L. Chichinadze* (2008). Contact metamorphism of host rocks and xenoliths of the Jalovchat gabbroid intrusion (Greater Caucasus). *Proceedings of Al. Janelidze Institute of Geology, New series, vol. 124*, pp.113-117.
17. *G.L. Chichinadze* (2008). Model of a working reference legend of geological formations in the Main Range zone of the Greater Caucasus. *Proceedings of Al. Janelidze Institute of Geology. New series, vol. 124*, pp.222-225.
18. *G.M. Zaridze, D.M. Shengelia, G.L. Chichinadze, G.I. Baranov* (1999). Map of metamorphic formations of the crystalline basement of the Greater Caucasus, scale 1:200 000. Tbilisi. Size: 210x120 cm.
19. *D. Shengelia, S. Korikovskiy, G. Chichinadze, R. Kakhadze, M. Somin, V. Potapenko, A. Okrostsvaridze, N. Poporadze* (1997). The Map of Metamorphic facies of the Crystalline Basement the Greater Caucasus; Scale 1:200 000. The Georgian Technical University, Institute of Ore Deposits, Petrography, Mineralogy and Geochemistry of Rus. Tbilisi. Size – 210x120 cm.
20. *I. Gamkrelidze, D. Shengelia, G. Chichinadze* (1996). Macera Nappe in the Crystalline Core of the Greater Caucasus and its Geological Significance. *Bull. Acad. Sci. of Georgia*, 154, N1, pp.84-89.
21. *D. Shengelia, S. Korikovskiy, G. Chichinadze, R. Kakhadze, M. Somin, V. Potapenko, A. Okrostsvaridze, N. Poporadze* (1995). Metamorphic facies of the Great Caucasus. Moscow-Tbilisi: Metsniereba, 71 p.
22. *D.M. Shengelia, S.P. Korikovskiy, G.L. Chichinadze, et al* (1991). Petrology of Metamorphic Complexes of the Greater Caucasus. M., publishing house “Nauka”, 232 p.
23. *D.M. Shengelia, G.L. Chichinadze, A.V. Okrostsvaridze* (1989). New data on plagiogranite gneisses of Beshta and Mount Kamenistaya (Mountainous Abkhazia)//*Bulletin of the Acad. Sci. of the GSSR*, 135, No. 2, pp. 393-396.

24. *D.M. Shengelia, G.L. Chichinadze, I.Z. Mgaloblishvili, R.G. Kakhadze, N.G. Poporadze* (1989). New data on metamorphic facies of the crystalline substrate of the Greater Caucasus. Proceedings of GTU, pp.31-32.
25. *D.M. Shengelia, G.L. Chichinadze, D.N. Ketskhoveli, I.Z. Mgaloblishvili, R. G. Kakhadze, N.G. Poporadze, T.N. Tsutsunava, M.D. Shengelia* (1986). Petrology of metamorphites of the Atsgara nappe in the North Caucasus // *Izvestiya of the Academy of Sciences of the USSR, ser. geol.*, No. 5, pp. 17-27.
26. *D.M. Shengelia, G.L. Chichinadze* (1985). Large-scale geological mapping of metamorphic formations on the example of the Caucasus. Collective monograph and geological map. Proceedings of Geological Institute of the Acad. Sci. of GSSR, new series, no. 87, 107p.
27. *D.M. Shengelia, G.L. Chichinadze, D.N. Ketskhoveli, I.Z. Mgaloblishvili, R. G. Kakhadze, N.G. Poporadze* (1984). New data on the Atsgara nappe in the North Caucasus. *Doklady of the Acad. Sci. of the USSR*, vol. 274, №6, pp.1450-1453.
28. *G.L. Chichinadze, R.G. Kakhadze, N.G. Poporadze* (1982). On the issue of alteration of the Upper Svaneti amphiboles during regional metamorphism. *Bulletin of the Acad. Sci. of the GSSR*, vol. 105, No. 1, pp. 93-96.
29. *G.L. Chichinadze, R.G. Kakhadze, N.G. Poporadze* (1982). Amphiboles from CaO-rich rocks of Upper Svaneti (Greater Caucasus). Proceedings of Georgian Polytechnic Institute. No. 3(248), pp. 229-242.
30. *D.M. Shengelia, G.L. Chichinadze, R.G. Kakhadze* (1981). New data on the geological structure of the eastern part of the Sophia uplift. *Bulletin of the Acad. Sci. of the GSSR*, vol. 103, №2, pp.361-364.
31. *G.L. Chichinadze* (1979). On the issue of the tectonic position of amphibolites in the Greater Caucasus Main Range zone. *Bulletin of the Acad. Sci. of the GSSR*, vol .95, №2, pp. 365-368.
32. *G. L. Chichinadze, R. A. Akhvlediani* (1979). Ugrandites in the Greater Caucasus Buulgen series rocks. *Bulletin of the Acad. Sci. of the GSSR*, vol.93, №3, pp.633-636.
33. *G.L. Chichinadze* (1978). Petrology of crystalline rocks of the southeastern part of the Sophia uplift (Greater Caucasus). Abstract of Ph.D. thesis. Tbilisi, 28p.
34. *D.M. Shengelia, D.N. Ketskhoveli, G.L. Chichinadze* (1978). Paleozoic leucocratic garnet gneisses and granitoids of Abkhazia. In: *Problems of Geology of Georgia // Proceedings of Geological Institute of the Acad. Sci. of GSSR*, new series, issue 59, pp.147-159.
35. *D.M. Shengelia, D.N. Ketskhoveli, I.Z. Mgaloblishvili, G.L. Chichinadze* (1978). New finds of gedrite in the Greater Caucasus. Proceedings of Georgian Polytechnic Institute. №4(205), pp. 56-63.
36. *G.L. Chichinadze* (1977). On the genesis of the Jalovch gabbroid intrusive. *Bulletin of the Acad. Sci. of the GSSR*, vol. 85, №1, pp.113-116.
37. *G.L. Chichinadze* (1977). On the genesis of amphibolites of the Buulgen Series in Abkhazia. *Bulletin of the Acad. Sci. of the GSSR*, vol. 85, №2, pp. 393-396.
38. *G.L. Chichinadze* (1977). Progressive regional metamorphic zoning in crystalline rocks of the Buulgen Series. *Bulletin of the Acad. Sci. of the GSSR*, vol. 86, №2, pp. 381-384.
39. *D.M. Shengelia, D.N. Ketskhoveli, G.L. Chichinadze, I.Z. Mgaloblishvili* (1976). Discovery of gedrite in the Greater Caucasus. *Bulletin of the Acad. Sci. of the GSSR*, vol. 84, №3, pp. 641-644.

40. *D.M. Shengelia, G.L. Chichinadze, D.N. Ketskhoveli* (1975). Black potassium feldspars from crystalline schists of Abkhazia. Doklady of the Acad. Sci. of the USSR, vol. 244, №1, pp. 86-189.
41. *D.M. Shengelia, D.N. Ketskhoveli, G.L. Chichinadze* (1974). On the identification of the Vertskhlitba suite in the Laba Series in Abkhazia. Bulletin of the Acad. Sci. of the GSSR, 76, №1, pp.121-124.
42. *D.M. Shengelia, D.N. Ketskhoveli, G.L. Chichinadze* (1974). On the discovery of black potassium feldspars in metamorphites. Bulletin of the Acad. Sci. of the GSSR, vol.76, №2, pp.385-388.
43. *G.L. Chichinadze* (1974). New data on the geological structure of the pre-Alpine basement on the left bank of the river Atsgara (Abkhazia). Bulletin of the Acad. Sci. of the GSSR, vol. 76, №1 pp. 113-116.

Citation index

Google Scholar –59, h-index– 4.

Participation in scientific forums

1. Baric zonality in the pre-Alpine basement of the Greater Caucasus. D.M. Shengelia, **G.L. Chichinadze**, R.G. Kakhadze. Abstracts of the Regional Conference on Geology and Mineral Resources of the North Caucasus. 1991, Essentuki. pp. 83-84.
2. Importance of Magmatism in Formation of Continental Crust. Shengelia D., Gamkrelidze I., Tsutsunava T., **Chichinadze G.**, Vardanashvili K., Maisuradze N. The 33th International Geological Congress. Symposium title: General contributions to igneous petrology. 2008, Oslo, Norway.
3. On the geological structure of the Buulgen series (the Greater Caucasus). **G. Chichinadze**. The International Scientific Conference “Problems of Geology of the Caucasus”. Tbilisi, Georgia, 2010. Abstract book, pp. 18-21.
4. Neoproterozoic and Paleozoic suprasubduction regional metamorphism, granitoid magmatism and geodynamics of the Caucasus. I.Gamkrelidze, D.Shengelia, T.Tsutsunava, O.Dudauri, **G.Chichinadze**, M.Togonidze. XIX Congress of the Carpathian-Balkan Geological association. Thessaloniki, Greece. 2010.
5. Main stages of pre-Alpine continental crust formation of the Black Sea – Central Transcaucasian terrane. I.Gamkrelidze, D.Shengelia, T.Tsutsunava, **G.Chichinadze**. 3rd International Symposium on the Geology of the Black Sea Region. Bucharest, Romania. 2011.
6. Main Stages of Geodynamic Evolution of the Caucasian Segment of the Alpine-Mediterranean Belt. E.Gamkrelidze, D.Shengelia, F.Maisadze, T.Tsutsunava, **G.Chichinadze**. European Geosciences Union General Assembly. Viena, Austria. 2013.
7. Comparative characteristic of the Variscan regional metamorphism and magmatism of the Elbrus and Pass subterranean of the Greater Caucasian terrane. D.Shengelia, T.Tsutsunava, **G.Chichinadze**, N.Maisuradze, K.Vardanashvili. 1st International CATM Conference. Georgia, Tbilisi. 2013.
8. Precambrian regional Metamorphism and Magmatism of Georgia and Geodynamics of the Caucasus. E.Gamkrelidze, D.Shengelia, O.Dudauri, T.Tsutsunava, **G.Chichinadze**. Geochronology and geodynamics of the Precambrian (3.6-1.6 Ma) of the Eurasian continent. Mineralogical Journal (Ukraine), 2014, vol.36, N3, pp. 98-113.

9. Petrogenetic and geodynamic types of Late Paleozoic (Sudetic) granitoids of the Caucasus. D.Shengelia, T.Tsutsunava, **G.Chichinadze**, G.Beridze, K.Vardanashvili, I.Javakhishvili. The 14th Swiss Geoscience Meeting. Switzerland, Geneva, 2016. Abstract Volume 2, pp. 98-99.
10. LA-ICP-MS local zircon U-Pb dating of Late Variscan granites of the Dzirula and Khrami crystalline massifs (Georgia). D.Shengelia, T.Tsutsunava, **G.Chichinadze**, G.Beridze, I.Javakhishvili. The 14th Swiss Geoscience Meeting. Switzerland, Geneva, 2016. Abstract Volume 7, pp. 241-242.
11. Data on U/Pb Zircon dating of Late Variscan granitoids of the Greater Caucasian terrane. D.Shengelia, T.Tsutsunava, **G.Chichinadze**, G.Beridze, K.VardanaSvili, I.Javakhishvili. Mineralogical society of Georgia, 2th International scientific-Practical Conference on Up-to-date problems of geology. Tbilisi, Georgia. 2016. Abstract book, pp. 120-122.
12. New U-Pb isotope-geochronological data on the Buulgen metamorphic complex and on the associated with it pre-Alpine magmatites of the Greater Caucasian Main Range zone. I. Gamkrelidze, D.Shengelia, **G.Chichinadze**, A.Okrostsvaridze, Yan-His Lee, T.Tsutsunava, G.Beridze. Mineralogical Society of Georgia, 3th International Scientific-Practical Conference on Up-to-date Problems of Geology. Tbilisi, Georgia. 2017. Abstract book, pp. 43-46.
13. Petrogenetic Model of Formation of Orthoclase Gabbro of the Dzirula Crystalline Massifs. D.Shengelia, T.Tsutsunava, M.Togonidze, **G.Chichinadze**, G.Beridze. WASET, ICGES 2017: 19th International Conference on Geological and Earth Sciences. Italy, Rome. Abstract book, p. 80.
14. Petrogeochemistry of Hornblende-bearing Gabbro Intrusive, the Greater Caucasus. **G.Chichinadze**, D.Shengelia, T.Tsutsunava, N.Maisuradze, G.Beridze. WASET, ICGES 2017: 19th International Conference on Geological and Earth Sciences. Italy, Rome. Abstr.book, p. 81.
15. Petrology, Geochemistry and Formation Conditions of Metaophiolites of the Loki Crystalline Massif (the Caucasus). I.Gamkrelidze, D.Shengelia, **G.Chichinadze**, T.Tsutsunava, G.Beridze, T.Tsamalashvili, K.Tedliashvili. WASET, CGPE 2017: 19th International Conference on Geosciences and Petroleum Engineering. Spain, Madrid. Abstract book, p. 81.
16. U-Pb Dating of zonal zircons from the crystalline rocks of the Gondarai complex of the Greater Caucasian Main Range zone (Greater Caucasian terrane). I.Gamkrelidze, D.Shengelia, **G.Chichinadze**, A.Okrostsvaridze, Yan-His Lee, G.Beridze. Mineralogical society of Georgia, 4th International Scientific-Practical Conference on Up-to-date Problems of Geology. Tbilisi, Georgia. 2018. Abstract book, pp. 32-34.
17. Contact Metamorphism of the Dizi Series (Greater Caucasus). S.Korikovskiy, D.Shengelia, **G.Chichinadze**, T.Tsutsunava, G.Beridze, I.Javakhishvili. Mineralogical society of Georgia, 4th International Scientific-Practical Conference on Up-to-date Problems of Geology. Tbilisi, Georgia. 2018. Abstract book, pp. 55-59.
18. Epidiosites of the Loki Crystalline Massif, the Caucasus: Geological Setting, Mineralogy, Petrogeochemistry and Genesis. D.Shengelia, **G.Chichinadze**, I.Gamkrelidze, T.Tsutsunava, G.Beridze, I.Javakhishvili. Waset, ICMRSA 2018: International Conference on Metamorphic Rocks and Structural Analysis. France, Paris. Abstract book, p. 123.
19. Pre-Alpine Allochthonous Metabasites of the Loki Crystalline Massif, Georgia: Geological Setting, Composition and Formation Conditions. I.Gamkrelidze, D.Shengelia, **G.Chichinadze**, T.Tsutsunava, G.Beridze, I.Javakhishvili. Waset, ICMRSA 2018: International Conference on Metamorphic Rocks and Structural Analysis. France, Paris. Abstract book, p. 124.
20. Digital Geological Map of the Loki Crystalline Massif (the Caucasus) and its Multi-Informative Explanatory Note. I.Gamkrelidze, D.Shengelia, **G.Chichinadze**, T.Tsutsunava, G.Beridze, T.Tsamalashvili, K.Tedliashvili, I.Javakhishvili. Waset, ICPGGS 2019: International

Conference on Physical Geology and Geological Sciences. The Netherlands, Amsterdam. Abstract book, p. 438.

21. Regional Metamorphism of the Loki Crystalline Massif Allochthonous Complex of the Caucasus. D.Shengelia, **G.Chichinadze**, T.Tsutsunava, G.Beridze, I.Javakhishvili. Waset, ICPGGS 2019: International Conference on Physical Geology and Geological Sciences. The Netherlands, Amsterdam. Abstract book, p. 439.
22. Regional and Contact Metamorphism of the Dizi Series (the Greater Caucasus). I. Javakhishvili, T.Tsutsunava, D.Shengelia, **G.Chichinadze**, G.Beridze. EGU2020-2952. <https://doi.org/10.5194/egusphere-egu2020-2952>
23. On the possible analogy between the Dizi Series of the Southern Slope zone of the Greater Caucasus and the folded basement of the Plain Crimea: composition, metamorphism, magmatism and age. I. Javakhishvili, D.Shengelia, T. Tsutsunava, **G.Chichinadze**, G. Beridze, L. Shumlyanskyy. 2021, Vienna, Austria, EGU21-837. <https://doi.org/10.5194/egusphere-egu21-837>

Scientific grants

1. English-Georgian Terminological Dictionary of Geology. 2014-2016. Shota Rustaveli Georgian National Science Foundation, AR/139/9-150/13. Principal investigator.
2. 1:50 000 scale digital geological map of the Loki Crystalline Massif. 2016-2018. Shota Rustaveli Georgian National Science Foundation, N AR-135/789. Principal investigator.

Additional information

Since 2014 - member of Mineralogical Society of Georgia;
1992 - Laureate of the Alexandre Janelidze Prize.