



Nikolay GROSHEV

Geological Institute KSC RAS

PGE-ore genesis laboratory (research associate)

Young Scientists Council (chairman 2011-2016)

E-mail: nikolaygroshev@gmail.com

MSc (Murmansk University, Apatity, 2006)

PhD (Institute of Geology of Ore Deposits,
Mineralogy, Petrography and Geochemistry RAS,
Moscow, 2011)

Main fields of specialization

Geology, mineralogy and genesis of PGE deposits; petrology of layered intrusions.

Principal results

The data on geology, mineralogy and isotope geochronology of the Fedorovatundra massif (Fedorova-Pana Complex) have shown that lower taxitic zone with contact style economic PGE-Cu-Ni mineralization is formed as a result of the emplacement of gabbro-noritic magma in the second intrusive phase of the massif (Groshev et al., 2009; Groshev, 2010).

PGE mineralization of reef style was found in the Fedorovatundra massif. Composition of reef style mineralization is characterized by predominantly occurring sulfide-intermetallide and arsenide assemblages of platinum group minerals (PGM), which are in contrast with sulfide-bismuthide-telluride assemblages of PGM in contact style ores (Groshev, 2010; Groshev et al., 2012).

Current research interests

Geology and genesis of recently discovered (JSC “Pana”) PGE and PGE-Cu-Ni deposits and occurrences of the Fedorov-Pana Complex of (1) reef and (2) contact style (1 – deposits: Kievey, Kamennik; occurrences: the South Reef, mineralization in the Olivine horizon, Reefs of the Fedorovatundra massif ect.; 2 – Fedorovotundrovskoe deposit; occurrences: Maliy Ihtegipahk, Sredniy Ihtegipahk, mineralization in quartz-hypersthene diorites).

Petrology and Fe-Cr-PGE-Cu-Ni deposits of the Monchegorsk Complex.

Publications

Korchagin, A.U., Goncharov, Yu.V., Subbotin, V.V., *Groshev, N.Yu.*, Gabov, D.A., Ivanov, A.N., Savchenko, Ye.E. Geology and ores composition of the North Kamennik low-sulfide PGE deposit in the West-Pana massif (Kola Peninsula, Russia) // *Rudy i Metally*. **2016**. № 2. (in press)

Groshev, N.Yu., Rundkvist, T.V., Bazai A.V. Find of cordierite hornfels in the Upper Layered Horizon of the West-Pana platinum-bearing massif at Kola Peninsula // *Zapiski RMO*. **2015**. 144 (2). pp. 82–98. ([Full Text in Russian](#))

Groshev, N.Yu., Rundkvist, T.V., Korchagin, A.U., & Ivanov, A.N. Concentrations of trace elements in rocks of the Lower layered horizon of the West-Pana intrusion / Abstracts, 12th

International Platinum Symposium, 11–14 August 2014. – Ekaterinburg, **2014**. pp. 65–66. ([Full Text](#))

Mitrofanov F. P., Bayanova T. B., Korchagin A.U., *Groshev N.Yu.*, Malitch K. N., Zhirov D. V. and Mitrofanov A. F. East Scandinavian and Noril'sk Plume Mafic Large Igneous Provinces of Pd–Pt Ores: Geological and Metallogenic Comparison // *Geology of Ore Deposits*, **2013**. Vol. 55, pp. 305–319. DOI: 10.1134/S107570151305005X

Groshev, N., Voloshin A., Subbotin V., Savchenko Ye. Pd₂Tl и Pd₃Tl – New Alloys in the Fedorov-Pana Layered Complex / *Geology and Strategic Mineral Resources of the Kola Region. Apatity*, **2012**. pp. 238–241. ([Full Text in Russian](#))

Groshev, N., Savchenko Ye. The Invisible Reef – New Level of Low-Sulfide PGE Mineralization in the Fedorov Tundra Intrusion (Kola Peninsula, Russia) // *Rudy i Metally*. **2011**. № 5. pp. 15–26. ([Full Text in Russian](#))

Groshev, N. The Two-Phase PGE-bearing Fedorov Tundra Massif (Kola Peninsula): Geology and PGE Mineralization. PhD abstract. Apatity. **2010**. 24 p. ([Full Text in Russian](#))

Groshev, N. Yu., Nitkina, E. A., and Academician Mitrofanov, F. P. Two-Phase Mechanism of the Formation of Platinum-Metal Basites of the Fedorova Tundra Intrusion on the Kola Peninsula: New Data on Geology and Isotope Geochronology *Doklady Earth Sciences*, **2009**. Vol. 427A, No. 6, pp. 1012–1016.