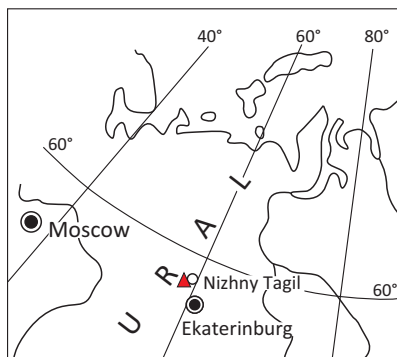


7. Aggregate of **malachite** spherulites. 1.8 cm.

Mednorudnyanskoe deposit. Specimen: V.A. and V.I. Popovs #609, collected by N.I. Kozin. Photo: M.B. Leybov.



INTRODUCTION



8. Geographical location of
(▲) Mednorudnyanskoe deposit

The world renowned Mednorudnyanskoe deposit is known first and foremost for its remarkable malachite. It is located in the Middle Urals, Russia, 130 km north of Yekaterinburg in the western suburbs of Nizhny Tagil (57°54'02"-N, 59°55'35"-E), by the southern base of Mount Vysokaya (Fig. 8).

The largest copper deposit in 19th century in Russia, it was as famous for its rich ore and decorative malachite as it was for its mineral diversity, primarily caused by oxidized ore. Splendid malachite vases, tabletops, columns, pilasters, decorative boxes, and other items grace museum halls, cathedrals, state and private reception halls, as described for instance in *Malakhit [Malachite]*, a remarkable two-volume edition (Semenov, 1987). Nearly three hundred years have passed since the first copper ore was discovered in this area and two hundred years since work at the deposit commenced.

Naturally, more attention has been paid from beginning of investigation to its geological structure, while the mineralogical data obtained throughout the years is reflected in numerous articles and brief notes. Two new minerals were discovered from the Mednorudnyanskoe ore: brochantite and delafossite. At the turn of the 20th-21st centuries the authors of this monograph investigated the deposit's mineralogy studying on more than 1,500 specimens collected throughout the years. This made a substantial contribution to the understanding of this site and expanded the list of mineral species known from here. This monograph overviews data on Mednorudnyanskoe mineralogy, focusing on the oxidation zone as the most fascinating part in this respect.

9. Open quarry of the Mednorudnyanskoe
deposit (view from NW).
Photo: A. Korobkov, 2005.

