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## Preface

This book contains my new data on the geology, geochemistry, and mineralogy of rocks and ores from the Noril'sk region collected during the last 20 years. Majority of the reported data was obtained personally by me and minority in collaboration with other researchers, i.e., A. V. Sobolev, V. N. Mikhailov, D. V. Kuzmin, and A. A. Ariskin, during our joint fieldworks, sample analysis, and computer modeling. The book also contains several novel unpublished geological large-scale maps that were kindly given by NorilskGeology Ltd.

I tried to examine magmatic rocks of trap formation in Noril'sk area including both lavas and intrusions. The latter are represented by massifs of Talnakh and Noril'sk Troughs since they are the most mineralized in the whole area. By analyzing geological relationships between lavas and intrusions and their geochemistry, I came into conclusion that they should not be considered as members of the same magmatic system. I have demonstrated limited scale of the assimilation of surrounding rocks by magma inside crystallization chambers for the first time. That's why assimilation had no significant impact on the ore formation.

I have not tried to compile all materials accumulated during almost a century of study of the Noril'sk deposits. The understanding of their origin is very ambitious and important task, and it is still open for geologists who specialized in various fields, i.e., geophysics, stratigraphics, mineralogy, etc.

Note that this book comprises about 70 % of the materials from my monograph titled as "Evolution of trap magmatism and processes producing Pt–Cu–Ni mineralization in the Noril'sk area" published in Russian (2014). I preferred to use the nomenclature of rocks common of Noril'sk geologists instead of international one, because it is being used by both domestic and even some international geologists for the last 60 years.

I hope this book will be interesting for all researches of copper–nickel deposits across the globe.

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