



This book focuses on the mineral deposits from the mining complex of Kazakhstan, including copper ores from the Nikolayevsky and Shemonakhinsky open-pit quarries, and from the Kazchrome and Konyrat mines in Balkhash.

This study assesses the geomechanical conditions of the rock massive, as well as strengthening and reinforcing processes. It develops methods for their assessment and provides detailed instructions on applying the methods. The book also summarizes the latest research and developments in formulating cement solutions to reinforce slopes and suppress dust on the roads of the quarry. The book's overarching goal is to promote geological and mining engineering conditions that ensure the ecologically safe development of the mineral resource fields.

Given its scope, the book will be of interest to mining engineers, researchers, and students in a broad range of geomechanical, geodesic, mining and environmental fields.