新世纪俄罗斯找矿地球化学

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中文摘要:在系统跟踪研究国内外地质期刊文献的基础上，梳理了新世纪找矿地球化学面临形势和存在的重大问题，全面总结了近十年来，俄罗斯有关找矿地球化学基础理论和方法论域地球化学调查方法与应用，以及地质-地球化学找矿模型的研制与应用等众多方面的思路和做法。研究认为，俄罗斯首创的多目标地球化学填图技术可有效地提高国家地质图的质量矿产资源量的综合评价和生态环境的评估及一系列基础问题的解决，提供详细的信息。同时，还指出俄罗斯地球化学家为解决新世纪的找矿问题，加大了技术创新，重点聚焦于提高地学找矿信号的衬度和强度，提高运用地质－地球化学找矿模型的效用，完善处理地球化学数据的计算技术，以实现地球化学场与地质、地球物理场的综合等，诸创新点和思路值得参考鉴。

中文关键词:找矿地球化学 俄罗斯 新世纪 矿产勘查

Geochemical Mineral Exploration in the New Century: Russian Experience

Abstract:Based on studies of geological literature both in China and abroad, this paper analyzes the situation and important problems facing the exploration geochemistry i new century, and summarizes last decade’s basic theories and methodologies related to the exploration geochemistry, regional geochemical survey methods and applica as well as the ideas and practices in the establishment and application of geological-geochemical exploration models and quite a few other aspects developed in Russia. T authors’ researches show that the technology of multi-target geochemical mapping initiated by Russian experts can effectively improve the quality of the geological map of China and provide detailed information for the comprehensive evaluation of the mineral resources, the assessment of the ecological environment, and the solution of a num of basic problems.Meanwhile, this paper also points out that, for solving the mineral prospecting problems in the new century, Russian geochemists have strengthened the technical innovation work with emphasis placed on enhancing the contrast and intensity of the geochemical exploration signal and the effectiveness of the geological-geochemical exploration model and perfecting the calculative techniques for geochemical data processing so as to realize the integration of the geochemical field with the geological and geophysical fields. It is held that Russian geoscientists’ innovative ideas and experience mentioned above are worthy of being used as reference.