Ecogeochemistry in Mountain Region—Definition, Progress and Prospection

WU Yanhong¹⁾, BING Haijian^{2,3)}

- Alpine Ecosystem Observation and Experiment Station of Mt. Gongga, Chengdu Institute of Mountain Hazards and Environment, Chinese Academy of Sciences, Chengdu, 610041;
 - State Key Laboratory of Lake Science and Environment, Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences, Nanjing, 210008;
 - 3) Graduate University of Chinese Academy of Sciences, Beijing, 100049

Abstract: Ecogeochemistry is the scientific discipline that combines ecology and geochemistry. Ecogeochemistry involves in the studies of chemical, physical, geological and biological process and their interactions which control the ecosystem and its environment evolutions. In particular, ecogeochemistry is to describe and assess the state and development direction of ecosystem based on the study of the rule of chemical matters' distribution, allocation, transportation and transformation in the ecosystem. Although the history of ecogeochemistry is relative short and scientists from western countries even seldom use the word "ecogeochemistry", great progresses in this discipline have been achieved in the past decades. Several special ecogeochemistrical directions, such as urban ecogeochemistry, wetland ecogeochemistry and so on, has developed on the purpose of assessment of ecosystem safety and health, based on the ecogeochemistry mapping. Mountain is the major geomorphological unit and possesses the unique ecological characteristics. The ecogeochemistry in mountain region has not been systemically launched, although a large amount of achievements have been obtained in element geochemistry, biogeochemistry and ecogeochemical assessment. For the further work in ecogeochemistry in mountain region, more theoretical research should be propelled; meanwhile impeccable method system, research system and assessment system should be established.

Key words: ecogeochemistry; biogeochemistry; chemical matters cycle; ecosystem; mountain region

中国地质学会 2011 年学术年会在北京召开

2011年11月2日至5日,中国地质学会2011年学术年会在北京成功召开。孟宪来常务副理事长出席大会并致辞。会议以"支撑、引领——为实现地质找矿重大突破服务"为主题,旨在认真学习贯彻中央领导重要讲话精神,落实《找矿突破战略行动纲要》,展示近年来地质找矿及研究的工作成果,促进全国地质领域的学术交流,发挥地质科技在地质找矿中的支撑引领作用,为增强矿产资源保障能力、实现地质找矿重大突破服务。

开幕式后,13 位知名专家以燕山运动——次突发的大地构造变动(张宏仁教授)、我国人地计划的新进展(董树文研究员)、亚洲风成系统地球化学示踪研究(陈骏教授)、白垩纪大洋红层与深时(Deep - Time)研究(王成善教授)、进化论十大假说及寒武纪大爆发的本质属性(舒德干教授)、5.12 汶川地震地质构造成因(王二七研究员)、古亚洲洋构造域与北亚造山区——定义、结构与演化(李锦轶研究员)、岩石高边坡稳定性评价及崩滑地质灾害机理(黄润秋教授)、矿井水害预报预测与应急救援(武强教授)、青藏高原——大陆碰撞过程与成矿作用(侯增谦研究员)、综合信息地壳稳定性区划研究初步结果(王世称教授)、新疆富铁矿成矿地质特征

及主攻类型成矿模式(董连慧高级工程师)、矿物学环境属性研究进展(鲁安怀教授)等内容做大会主题报告。

本次会议共设置 13 个分会场,分别就我国深部探测与地壳结构、全国固体矿产勘查方法与技术、勘查地球化学理论与技术、地质与城市化、地质科技期刊在推动科技创新中的引领作用、地质灾害与环境安全、金矿找矿理论培训、矿山地质环境防治研究、水文地质学科发展的机遇与挑战、天山找矿、中国主要陆块聚散过程、裂变径迹年代学及其地质应用、资源及环境研究中现代矿物学的地位与作用等方面开展研讨和交流。会议共审核刊印论文摘要 233 篇,内容涵盖范围广泛,反映了我国当前地质科学的研究现状和最新成果。

中国科学院或中国工程院院士沈其韩先生、裴荣富先生、张国伟先生、翟裕生先生、杨文采先生等和来自中央及部分省(区、市)地勘、科研单位的专家,部分省级地质学会、分支机构的代表等约800人参加了年会。学术年会以科学发展观为指导,以搭建学术平台、促进学术交流为宗旨,以面向地质科研生产、服务国家宏观建设为目标,广泛邀请海内外地质相关领域的专家学者,围绕着"支撑、引领——为实现地质找矿重大突破服务"的主题开展深入的学术交流活动。会



































