spatial locations to dam reservoir. This study addresses the need to quantify and link dam reservoir sedimentation, land use and different landscape locations using the ^{137}Cs and ^{210}Pb techniques within a GIS frame. A brief description of the basis for the site selection, sampling strategy, and the first results on the spatial distributions of ^{137}Cs content and the possible sources of sediment and the relative contributions of these potential sources within the Yangjuangou dam reservoir catchment, Loess Plateau, are provided.

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大型、超大型火山岩型铀矿床找矿模式及闽粤赣边区成矿远景评估/谢佑新，卫三元，刘小宇(核工业北京地质研究院)

总结了俄罗斯的斯特莱列措夫、蒙古的多尔诺特及我国的相山等三个当今世界上最大的中生代火山岩中的铀矿床的地质背景、矿化特征、控矿因素，由此建立起一个大型、超大型火山岩型铀矿床的以地质工作为核心的多元信息综合找矿模式，并用于对照评价我国南岭闽、粤、赣边区中生代火山岩分布地区的铀成矿前景。从深部构造特征到火山构造、火山期后构造特征以及区域地球化学场来看，认为该地区不具备形成大型、超大型火山岩型铀矿床的地质条件，而只能在局部有利地段形成一些单独的大型或中、小型的火山岩型铀矿床。指出该区今后的工作重点地段是菖蒲盆地和仁居盆地。

PROSPECTING MODEL FOR SUPER-LARGE SIZE URANIUM DEPOSIT AND PROSPECTING ASSESSMENT IN FUJIAN, JIANGXI AND GUANGDONG PROVINCES/XIE Youxin, WEI Sanyuan, LIU Xiaoyu (Beijing Research Institute of Uranium Geology, CNNC) (*In Chinese*)

Uranium deposits which are located in Streltsov of Russia, Dornod of Mongolia and Xiangshan of China respectively are considered to be the largest volcanic uranium deposits in Meso-Cenozoic basin in the world. Their geologic setting, minerallization characteristics and ore-controlling factors have been summarized and multi-information comprehensive prospecting model for searching for large and super-large scale uranium field have been established. Based on the established model, uranium metallogeny prospect in Meso-Cenozoic volcanic basins located in Nanling districts of Fujian, Jiangxi and Guangdong provinces, China, has been evaluated. According to structures in depth, volcanic and post-volcanic phase structure characteristics and regional geochemistry field analysis, above districts are considered not to be favourable for forming large and super-large scale uranium field. But large or medium and small scale volcanic uranium deposits can be found in local favourable districts. In the light of above-metoined, further reconnaissance should lay emphasis on

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Changpu basin and Renju basin.

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铀矿地勘测量中光电测距仪检测方法与优化研究/吴景勤(核工业华东地质局,南昌)

铀矿地质勘查工程测量,已普遍使用光电测距仪,而仪器的检测,因传统检测方法的局限性,已很难适应测量工作的需要。针对这一问题,在分析S检测方法的基础上,研究提出了三种净化加常数的优化检测方法。三种方法各有特点,作业时应依次轮用,可克服周期误差的污染。这不但能以可靠的精度确定加常数,还能在检测加常数的同时准确地得出周期误差,无需事先进行检验,即可获得更多更可靠的检测结果。

OPTIMIZE STUDY OF PHOTOELECTRIC RANGEFINDER TEST METHOD IN URANIUM MINE GEOLOGICAL SURVEY/WU Jingqin (East China Geology Bureau of Nuclear Industry, Nanchang) (*In Chinese*)

In the engineering measurement of uranium mine geological survey, the photoelectric rangefinder has been widely used, but the test of the instrument has been difficult to meet the need of the measurement because of the limitation of the traditional method. For this problem, three optimizing test methods for clarification additive constant based on analysing the S test method are devised. The three methods having respective characters should be used in turn at practice to avoid the effect of periodic error. Thus it not only can identify the additive constant at reliable precision, but also can calculate the periodic error excactly; while test the additive constant, it can obtain much more and more reliable test results without preliminary test.

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辉绿岩中的铀矿床蚀变分带研究/李秀珍,黄志章,韩泽宏,蔡根庆(核工业北京地质研究院)

目前已知辉绿岩中铀矿床主要分布在贵东岩体东部的下庄矿田,这类铀矿床受控于近东西向的辉绿岩带与北北东向硅化断裂带的交叉部位,被称为交点型铀矿床。交点式矿床不仅品位高,且储量占该矿田的一半。因此,研究辉绿岩中铀矿床蚀变分带,不仅对老矿区扩大具有现实意义,而且能为找寻富铀矿提供重要的识别标志。在研究辉绿岩产出地质环境、岩石学特征的基础上,着重探讨了辉绿岩中铀矿床产出特征、矿床侧缘蚀变分带和空间结构,阐明了蚀变分带在找矿中的作用。将辉绿岩中铀矿床蚀变类型划分为8类,总结了这些蚀变类型的侧缘蚀变分带模型和666矿床辉绿岩中铀矿床蚀变在垂向上为叠套的漏斗状结构。

AN INVESTIGATION ON ALTERATION ZONATIONS RELEVANT TO URANIUM DEPOSITS IN DIABASES/LI Xiuzheng, HUANG Zhizhang, HAN Zehong, CAI Genqing (Beijing Research Institute of Uranium Geology) (*In Chinese*)

It is known that uranium deposits in diabases are mainly located in the

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