

## **Re-Os isotopic ages of Molybdenum in Zhongjia Tin polymetal Deposit and its geological meaning**

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The mineralization age of deposit is an important feature of studying on metallogenesis, and it is always obtained by means of indirect methods. The Re-Os Isotopic dating technique is a newly effective method for the pattern age of molybdenum and correlative mineralization. The alkali fusion combined with ICPMS is used in this study for Re-Os Isotopic ages of molybdenum in zhongjia tin and polymetal deposit. The results indicate that the pattern age of zhongjia tin and polymetal deposit is from 193-196Ma, which is associated with early Yenshanian orogenesis. And thus, metallogenic source rock—biotite granite was emplaced during late indosinian orogenesis. It is well known that transformation of tectonic domain in Southeast China from Tethys to circum Pacific ocean took place in early Triassic epoch and became the significant event in geological history. So we can determine that the tin polymetal mineralization in early Jurissic period resulted from the transformation of the two tectonic domain. According to the age and regional geology of this area, in regional prospecting of tin polymetal deposit, we should consider the mineralization in low and middle Jurissic.