

## **IN-SITU MINOR AND TRACE ELEMENTS IN SULPHIDES OF THE ÖTZTAL-STUBAI UNITS: FIRST RESULTS FROM MXRF AND EPMA**

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Here we present first results of a regional survey study that focusses on the distribution of minor and trace metal in Cu-Zn-Pb ores of the metamorphic Ötztal-Stubai units. The sample set derives from various ore deposits and occurrences in the Austrian part of this tectonostratigraphic super-unit and the parageneses of the ores have been described earlier (Vavtar, 1998, Die Erzanreicherungen im Nordtiroler Stubai-, Ötztal-und Silvrettakristallin, Arch. f. Lagerst.forsch. Geol. B.-A., 9, pp. 103-153). The study is part of a large-scale survey initiated and financed by the Ministerium für Wissenschaft, Forschung und Wirtschaft and carried out by Montanuniversity Leoben, University Innsbruck and Geologische Bundesanstalt. The aim of the survey is to evaluate the economic potentials and the fundamental enrichment processes of High-Tech metals, such as Gallium, Germanium, Indium, in Austrian sulphide ore. In the reconnaissance study presented here, we employ element mapping and spot analyses by means of micro X-Ray fluorescence ( $\mu$ XRF) and electron microprobe analyzing (EMPA). The combined approach allows us to investigate the ore mineral parageneses in whole samples and at the microscale, and also the quantification of elements down to ~50-100ppm.