In this course copper mining and metallurgy in prehistoric Europe will be discussed, with a strong focus on the Bronze Age copper production in the alpine area. At first a brief review will be given on copper ore geology and mineralogy, as well as on theoretical models for the pyrometallurgical extraction of copper from its ores. Methods and results of archaeological field investigations will then be presented to demonstrate the evidence of prehistoric copper mining and metallurgical activities. One of the major aims of research in this connection is to reconstruct the process chain of the copper production from ore to metal. This includes ore mining, ore beneficiation and smelting techniques, which are discussed against the background of technological developments in time and space. To identify and to characterise such developments an accurate dating of archaeological structures and findings is an essential necessity. By means of geochemical analysis of raw materials, intermediate and finished products, provenance studies open up exciting perspectives concerning the dynamics of intercultural exchange between the prehistoric societies inside and outside of the Alps. Finally some experimental work will also be presented. Materials “to touch” and to discuss will also be provided during the course.

Location: The lectures (9h15-12h00 – 13h15-17h00) will be given in English at the Department of Geosciences, University of Fribourg, Chemin du Musée 6, CH-1700 Fribourg, Switzerland.

www.unifr.ch/geoscience/geology

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Please send your registration before 8 March 2013

Participation fee: CHF 50.-/day for non-students, students are free of charge.