

Archaeological artefacts made from siliceous rocks form one of the most important categories of early human tools. Hard siliceous rocks are exceptionally resistant and they perceive perfectly in nearly all environments. In Switzerland and France new technologies of classifying large series of prehistoric siliceous lithics through microfossil analysis made spectacular progress from the mid 1990ies on. Raw material determination of siliceous lithics is one of the most efficient methods to study the movement of precious goods and to reconstruct long-distance pre-historic networks in Europe.

We aim to bring together two research traditions: the German-speaking world, which is prone to determination using conventional petrography based on thin-sections and the world of Latin languages, where research focuses on chemical analysis according to various methods. The workshop will enable actors at the forefront of research to pool their knowledge. The International Exploratory Workshop „Rockview: standardizing geochemical and geological methods for analysing prehistoric archaeological flint stone artefacts“ emerges from the SNF funded project 2015-2017 „Mobilities, entanglements and transformations in Neolithic societies on the Swiss Plateau (3900-3500 BC)“, SNF No. 100011\_156205.


- Venue:** UniS Raum A-119, Schanzeneckstrasse 1, 3012 Bern.  
University of Bern, Institute of Archaeological Sciences,  
Muesmattstrasse 27 and Institute of Cell Biology, Baltzerstrasse 4,  
Institute of Geology, Baltzerstrasse 2, 3012 Bern
- Organizers:** Dr. Jehanne Affolter and Prof. Dr. Albert Hafner
- Registration:** noah.steuri@iaw.unibe.ch



# Rockview

## Standardizing geochemical and geological Methods for analysing Prehistoric Archaeological Flint Stone Artefacts.

International Exploratory Workshop  
12<sup>th</sup>-13<sup>th</sup> October 2017, excursion 14<sup>th</sup> October 2017



## Thursday 12 October 2017

- 08:00-09:00 Welcome to participants, registration  
09:00-09:30 Opening of the workshop, welcome address
- 09:30-10:30 Françoise Bostyn, INRAP France, Paris and President UISPP Flint Commission: The importance of raw material studies for the archaeological research.

### Topic 1: "classic methods of determination"

(Mineralogy, geochemistry, sedimentology, palaeontology)


- 10:30-11:30 François Fröhlich, Museum of Natural History, Paris:  
Nanostructures of marine silifications.
- 11:30-12:15 Céline Léandri, DRAC Corse and CNRS Aix-en Provence:  
Siliceous rocks analyses with ICP-MAES.
- 12:15-13:45 break/lunch
- 13:45-14:30 Vincent Delvigne, PACEA and University of Liège (and Paul Fernandes, PACEA and Paleotime):  
Primary or secondary outcrops ? A dynamic methodology for characterization of flint
- 14:30-15:15 Jehanne Affolter and Lea Emmenegger, University of Bern:  
Sedimentary microfacies in silicites, theory and practice.
- 15:15-16:00 Xavier Terradas, Spanish National research Council, Barcelona:  
Siliceous rocks characterization methods used in Catalonia.
- 16:00-16:30 coffee break
- 16:30-18:30 Practical examination of siliceous rocks samples (in microscopy room) with portable X-ray fluorescence (pXRF).
- 19:30 Apèro



## Friday 13 October 2017

### Topic 2: Multidisciplinary approach

- 08:30-09:15 Zlatko Perhoč, University of Heidelberg:  
Archaeometry of Chert in Dalmatia.
- 09:15-10:00 Emanuela Delluniversità, Ignazio Allegretti et al., Università degli Studi di Bari Aldo Moro, Italy:  
Multiparametric protocol for chert: a provenance non destructive approach.
- 10:00-10:30 coffee break
- 10:30-11:15 Michael Brandl, Austrian Academy of Sciences, Vienna:  
Raw material analysis based on the "Multi-Layered Approach" system.
- 11:15-12:00 Antonin Přichystal, Masaryk University Brno:  
Silicites of central Europe: methods of determination.
- 12:00-13:30 break/lunch
- 13:30-15:30 Continuation of examination of samples and measurements.
- 15:30-16:00 coffee break
- 16:00-18:00 Final discussion: Standardizing analytical approach for the determination of the flint artifacts, workshop closure
- 19:30 dinner



## Saturday 14 October 2017

- 10:00-17:45 **Excursion:**  
To Swiss Midland siliceous lithics outcrops at Neolithic mining places of Olten, Chalchofen and Otelfingen, Weierboden.