Scientific objectives

The training course organised in Cologne from 7th to 12th February 2022 will focus on introducing and updating knowledge on the characterisation of silicites (flint, chert, silcrete, jasperoids) used to make tools by prehistoric communities. Integrated into action III of the GDR «Silex» (directed by C. Bressy-Leandri, French ministry of culture and communication), its objective is to promote the conceptual advances and the most recently developed characterisation methods, to explain them, and to encourage their dissemination with a view to harmonising, networking and pooling siliceous geomaterial references on a European scale. Recent methodological advances, taking into account the concept of the 'evolutionary chain' make it possible to overcome many dead ends in terms of characterising the origins of rocks. This will be applied to the Upper Cretaceous flints of the Benelux (silicites from the Mons Basin, the Hesbaye and Limburg), in order to reinforce the skills of petroarchaeologists and archaeologists and enabling them to develop more reliable models. reinforcing the skills of petroarchaeologists and archaeologists and enabling them to develop more reliable models. These models, which concern individual or collective behaviour, territoriality and mobility systems, or transfers and exchanges during prehistory, are at the heart of the research of many laboratories.

Language: The manifestations will be held in English. Help can be provided in French and German.

Registrations: The proposed Scientific Event will be open to all young researchers from Master to postdoctoral fellows and current researchers. Travel and accommodation costs will be covered by the UFA for 12 participants. Therefore, potential participants are asked to send a short letter of motivation. Call for applications closes on **5th December 2021.**

Please send your letter of motivation to:
ufa.cologneparis@gmail.com

Organisation Committee

Silviane SCHARL, Solène DENIS and Jean-Philippe COLLIN (project holders), with Vincent DELVIGNE, Birgit GEHLEN and Ingrid KOCH

Speakers

Vincent Delvigne, *CNRS, UMR 8068 TEMPS*
Paul Fernandes, *UMR 5199 PACEA and Sarl Paléotime*
Patrick GRUNERT, *Cologne University, Geology Department*
Jean-Philippe Collin, *Namur University and UMR 8215 Trajectoires*
Erwan Vaissié, *UMR 5199 PACEA*
Christophe Tufféry, *DST INRAP*

With the support of the French-German University

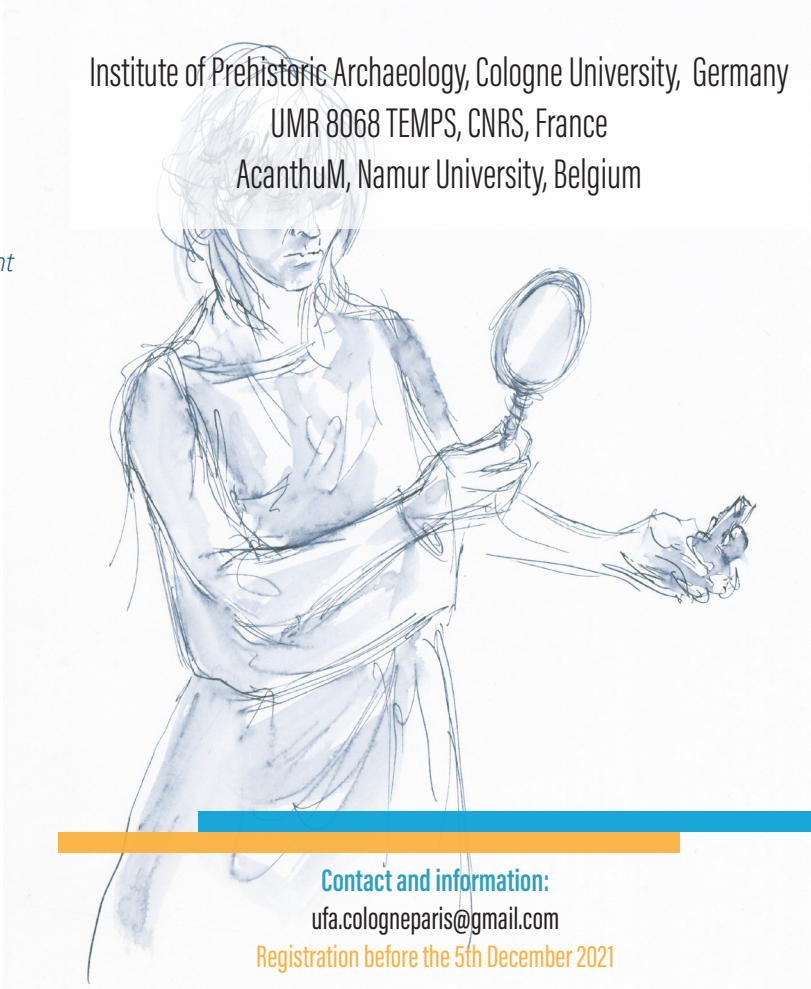
Université franco-allemande
Deutsch-Französische Hochschule
Scientific Events for young Researchers

Siliceous raw materials between Rhine and Scheldt:
constitution of a rock library using international standards

Cologne University, 7th - 12th February 2022

TRAINING COURSE ON THE PETROLOGY OF SILICITES

Institute of Prehistoric Archaeology, Cologne University, Germany
UMR 8068 TEMPS, CNRS, France
AcanthuM, Namur University, Belgium



Contact and information:
ufa.cologneparis@gmail.com
Registration before the 5th December 2021

PROGRAMME

7th February: Arrival of participants and classroom training

9:30 am: arrival of participants and introduction to the course

10:00-12:00 am: Theoretical approach: the concept of the evolutionary chain (definition, presentation, implications) *(P. Fernandes and V. Delvigne)*

1 pm-3 pm: State of research and presentation of problems specific to the Benelux silicites: History, litho-stratigraphy & concordance of geological deposits, availability of raw materials, archaeological questions (Neolithic, Mesolithic and Palaeolithic), contribution of the evolutionary chain *(J.Ph. Collin and V. Delvigne)*

3 pm – 5 pm: Prospecting method, development of reference collections (lithotheques), presentation of available tools *(E. Vaissié and C. Tufféry)*

5 pm – 6 pm: debate

8th February: Field trip

9 am - 5 pm: Practical application in the field of the tools presented the day before (123 Survey for Arcgis, sampling protocol, presentation of stratotypes, etc.). The selected areas are the Hesbaye (Orp-Jauche and Oupeye region) and the Middle Meuse basin between Braives and Maastricht. Samples will be collected and analysed during the practical work sessions on days 4 and 5 (below)

9th February: Classroom course: analytical method in petrology of silicites

9 am-12 am: Explanation of grid 1: «Petrography» *(V. Delvigne, P. Fernandes, E. Vaissié)*
Grid 1 contains 82 entries describing the main criteria for defining microfacies, the formation environment and the age of the silicite that allow the genetic type to be characterised.

1 pm – 4 pm: Explanation of grid 2: «Gitology» *(V. Delvigne, P. Fernandes, E. Vaissié)*
The grid 2, consisting of 44 entries, aims to identify the different facies of each genetic (sub)type defined in grid 1.

4pm – 5pm: Explanation of grid 3: «Taphonomy» *(V. Delvigne, P. Fernandes, E. Vaissié)*
Grid 3 consists of 38 entries and aims to describe the type and intensity of post-depositional processes. These elements give us information about the edaphic processes that have occurred since the object was abandoned by man and inform us about the integrity of the archaeological levels.

10th February: Practical exercises

9 am – 11 am: Introduction to the identification of foraminifera (P. Grunert)

11am - 5pm: Observation in pairs of geological samples collected during the field trip according to the characterisation grids presented on day 3 *(supervised by V. Delvigne, P. Fernandes, E. Vaissié)*

11th February: Practical exercises

9 am – 12 am: Observation in pairs of geological samples collected during the field trip according to the characterisation grids presented on day 3 *(supervised by V. Delvigne, P. Fernandes, E. Vaissié)*

1pm-4pm: Observation in pairs of selected archaeological objects

4pm-6pm: debriefing of the training and future projects