Radiolarite Investigations I

Macroscopical properties

Austria

Raw material range:
Feuerstein
Photo: G. Trnka

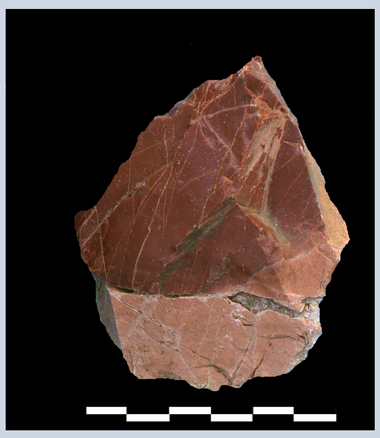
Feuerstein

Vorarlberg, Allgäuer Alps, Kleinwalsertal, Gemsteltal.
Ruhpolding Layers.
Under – Middle Jurassic Beckenfacies.
Auburn – reddish brown – moss green.
Very fine grained.
Very homogenous, partly heavily cleft, shiny gloss on fractured surface, often various colour varieties in one piece.

Grubalacke

Tyrol, Rofan Mountains.
Ruhpolding Layers.
Under - Middle Jurassic Beckenfazies.
Brick-red.
Very fine grained.
Characteristic colour, very homogenous, dull on the fractured surface.

Vienna Mauer



Vienna, 23rd District.
St. Veit Klippen Belt (part of the Sulzer Klippen Belt, Flyschzone).
Upper Jurassic (Thiton) – Lower Crateaceous (Neokom).
Red – auburn; greenish – yellowish, grey – brown.
Fine grained.
Highly variable in colour, often heavily cleft.

Raw material range:
Vienna Mauer
Photo: G. Trnka

Stone tool provenance studies are a challenging undertaking. A multi – layer approach promises to lead to best results. The radiolarite–trilogy illustrates three steps of analytical approaches. When combined they afford the characterization of the raw material known as “radiolarite”. Selected samples from the VLI (Vienna Lithothek) have been analysed and the results are basis for further discussion.

Hungary

Raw
Szentgál - Tüzköveshegy
Photo: G. Trnka

Szentgál - Tüzköveshegy

Veszprém County, Central Transdanubia.
Bakony Mountains.
Middle Jurassic, Dogger, Bathonian – Callovian.
Shiny red, white spots and entire rock parts, typically near the cortex.
Very fine grained.
Characteristic colour range, very homogenous, often contains visible traces of Mg.

Characteristic macroscopical features allow a first rough classification of prehistorically used lithic raw materials. Especially radiolarites show a wide range of variation. The knowledge and standardized description of their macroscopical properties forms the first step in the multi layer approach to analysis of these sources in an archaeological context. Colour, knapping features and texture are basic patterns to be investigated.
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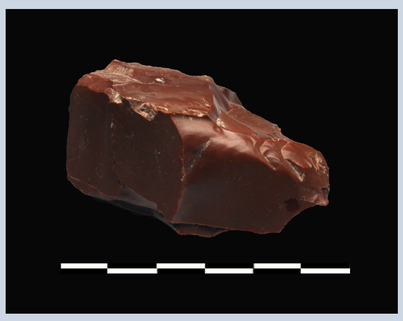
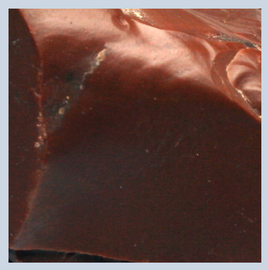
Slovakia

Vlara Bolešov





Bolešov – Tri kopce, okr. Ilava, kraj Trenčín, White Carpathians.
Czorsztyn unit, Klippen Belt.
Middle – upper Jurassic, Dogger – Malm, Callovian – Kimmeridgian.
Red – auburn, greenish – grey, yellowish.
Very fine grained.
Very homogenous, glossy on the fractured surface.

Raw material range:
Vlara Bolešov
Photo: G. Trnka

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