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ABSTRACTS BOOK





Theme 13. Provenance of sediments - from source to sink

General Session

Poster presentation

Košna conglomerates in the Velebit Mt., Croatia: particle composition, provenance and depositional environment

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In the vicinity of the 'Košna voda' spring in the Brušane area (Velebit Mt., Croatia), multicoloured Košna conglomerates attract attention due to their red matrix and clasts of various size and lithological composition (sandstones, limestones, chert and quartz). The conglomerates are poorly sorted, but locally show normal grading, imbricated clasts and stratified matrix, suggesting tractive particle transport. Sandstone clasts are classified as: lithic arenites, subarkoses and arkoses, with fragments of fusulinid foraminifera. Limestone clasts are mostly shallow-marine wackestones to packstones of Late Carboniferous/Early Permian age, with foraminifers, ostracods, echinoid and bryozoan fragments. *Microcodium* and calcispherae are also present in clasts, suggesting different sources and resedimentation. Based on field observations and conducted petrographic, ore microscopy and X-ray diffraction analyses, the Košna conglomerates are defined as Early Permian polymict clast-supported and matrix-supported conglomerates derived from the uplifted Hercynian Mountains and deposited and reworked in a shallow marine environment. Due to their structural and textural features, they are comparable with Late Paleozoic conglomerates from other areas in the Dinarides, Eastern and Southern Alps.

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