

### Stop 1: Baron von Kottwitz Quarry (S-Burgenland, Austria)

The Baron von Kottwitz Quarry is located south of the village of Kirchfidisch (N 47°09'01''/ E 16°21'10''). It belongs to one of four quarries in southern Burgenland exposing Palaeozoic sediments. Until now several workers tried to establish a composite lithostratigraphic column of these remains, but due to the complexity tectonic situation and the lack of biostratigraphic data of some of these localities this could be achieved only for parts of the sequence (e.g. POLLAK 1962; SCHÖNLAUB 1994 cum lit.).

**Lithology:** In the Kottwitz Quarry the base of the sequence begins near the entrance along the eastern wall and continues to the south-western wall. Within the lower part of the sequence, which is approximately 40 meters in thickness, five units can be discriminated. These units correspond to disconnected outcrops, which are either separated by faults or lack continuous exposure. Unit 1 is found close to the quarry entrance. It measures about eight meters in thickness and consists of unfossiliferous phyllitic shale. Towards south, this unit is followed by tectonically altered white calcareous marls (unit 2, 8 m) and finely laminated limestones (unit 3, 17.5 m). The upper part of unit 3 consists of two dolomite beds containing poorly preserved serpulid tubes and silt- to sandstone beds. The tubes are similar to those found in the overlying interval (unit 5, 2 m), where the tube-bearing beds (SUTTNER & LUKENEDER 2004) are intercalated with thin layers of brownish siltstone. Units 4 and 5 are separated by a faulting zone, thus the stratigraphic position of unit 5 appears to be below unit 4. The latter unit (unit 4, approx. 4 m) consists of well bedded limestones and dolomites. This unit yielded icriodontid and ozarkodinid conodont clusters. Above, the sequence continues with several tens of meters of dolomite and brownish shales and siltstones.

**Biostratigraphy:** Up to now only unit 4 yielded a determinable conodont fauna. A few conodont elements were obtained from unit 5, but were not distinctive enough to be of use for biostratigraphy. Unit 4 is assigned to the Lower Devonian *woschmidti* Zone (SUTTNER 2009).

#### **References:**

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- SUTTNER, T.J. (2009): Lower Devonian conodonts of the "Baron von Kottwitz" quarry (Southern Burgenland, Austria). - *In*: OVER, D.J. (Ed.): Conodont Studies Commemorating the 150<sup>th</sup> Anniversary of the First Conodont Paper (PANDER, 1856) and the 40<sup>th</sup> Anniversary of the Pander Society, *Palaeontographica Americana*, 62: 75-87.
- SUTTNER, T. & LUKENEDER, A. (2004): Accumulations of Late Silurian serpulid tubes and their palaeoecological implications (Blumau-Formation; Burgenland; Austria). - *Annalen des Naturhistorischen Museums in Wien*, 105A: 175-187.

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On the map (A to C) indicate the limestone and dolomite units of the Silurian – Devonian sequence in the Baron von Kottwitz Quarry; A. overview on units 3 to 5 of the Blumau Formation; B. serpulid tubes bearing unit 5; C. Lower Devonian conodont clusters bearing unit 4; D. laminated limestone (unit 3); E. aggregate of serpulid tubes in limestone matrix (unit 5); F. brachiopod shell layers alternating with laminated limestone (unit 4).

