

ation the Leszczyńiec Shear Zone across the Intra-Sudetic Fault into the so called Kaczawa Line, and thus ignores a significant strike-slip displacement on it (Aleksandrowski et al., in press).

References

- ALEKSANDROWSKI P., KRYZA R., MAZUR S., PIN C. and ZALASIEWICZ J. A. (in press). The Polish Sudetes: Caledonian or Variscan? *Trans. Royal Soc. Edinburgh*.
- BARANOWSKI Z., HAYDUKIEWICZ A., KRYZA R., LORENC S., MUSZYŃSKI A., SOLECKI A. and URBAŃEK Z. 1990. Outline of the geology of the Góry Kaczawskie (Sudetes, Poland). *N. Jb. Geol. Palaont. Abh.*, 179, 223-257.
- CHÁB J. and VRÁNA S. 1979. Crossite-actinolite amphiboles of the Krkonoše-Izera crystalline complex and their geologic significance. *Věstník Ústř. Ústavu Geol.*, 54, 143-150.
- CYMERMAN Z., PIASECKI M. A. J. and SESTON R. 1997. Terranes and terrane boundaries in the Sudetes, northeast Bohemian Massif. *Geol. Mag.*, 134, 717-725.
- KRYZA R. and MAZUR S. 1995. Contrasting metamorphic paths in the SE part of the Karkonosze Izera block (W. Sudetes, SW Poland). *N. Jb. Geol. Palaont. Abh.*, 169/2, 157-192.
- KRYZA R., MUSZYŃSKI A. and VIELZEUF D. 1990. Glaucophane-bearing assemblage overprinted by greenschist-facies metamorphism in the Variscan Kaczawa complex, Sudetes, Poland. *J. Metamorphic Geology*, 8, 345-355.
- MALUSKI H. and PATOČKA F. 1997. Geochemistry and ^{40}Ar - ^{39}Ar geochronology of the mafic metavolcanic rocks from the Rýchory Mts. complex (west Sudetes, Bohemian Massif): palaeotectonic significance. *Geol. Mag.*, 134, 703-716.
- MAZUR S. 1995. Strukturalna i metamorficzna ewolucja wschodniej okrywy granitu Karkonoszy w południowej części Rudaw Janowickich i Grzbiecie Lasockim. *Geologia Sudetica*, 29, 31-98.
- MUSZYŃSKI A. and KRYZA R. 1993. Pierwsze znaleziska jadeitu w Górach Kaczawskich (Sudety). *Przegląd Geol.*, 1, 24-26.
- PATOČKA F., PIVEC E. and OLIVERIOVÁ D. 1996. Mineralogy and petrology of mafic blueschists from the Rýchory Mts. crystalline complex (West Sudetes, Bohemian Massif). *N. Jb. Miner. Abh.*, 170/3, 313-330.
- SMULIKOWSKI W. 1995. Evidence of glaucophane-schist facies metamorphism in the East Karkonosze complex, West Sudetes, Poland. *Geol. Rundsch.*, 84, 720-737.
- THOMPSON A. B., SCHULMANN K. and JEŽEK J. 1997. Extrusion tectonics and elevation of lower crustal metamorphic rocks in convergent orogens. *Geology*, 25, 491-494.

Late Palaeozoic Sedimentation in the Intra-Sudetic Basin (Western Sudetes, SW Poland)

Leszek KUROWSKI

Institute of Geological Sciences, University of Wrocław, pl. Maksa Borna 9, 50-204 Wrocław, Poland

The Intra-Sudetic Basin, situated at the northern margin of the Bohemian Massif in the West Sudetes, represents one of larger intramontane troughs widespread along the Variscan belt of Europe. It is filled with a Lower Carboniferous to Lower Permian volcano-sedimentary molasse sequence, overlain by Upper Permian, Lower Triassic and Upper Cretaceous continental and shallow-marine deposits. The total thickness of sediments filling up the basin range up to 12 km. The Intra-Sudetic Basin corresponds to a large fault-bounded synclinal structure, 70 km long and 35 km wide, extended in the WNW-ESE direction. It is framed by crystalline basement units of the Variscan consolidation and, locally, by another Late Palaeozoic sedimentary basins.

The Intra-Sudetic Basin was initiated at the beginning of Early Carboniferous as an intramontane depression bounded by tectonically active margins (Teisseyre 1968). Its NW part was framed by the Góry Kaczawskie metamorphic complex, Rudawy Janowickie complex and, hypothetical, South massif which were rapidly uplifted and eroded during Early Carboniferous. Since Late Tournaisian to Middle Visean the basin was filled with non-marine, clastic deposits comprising mainly coarse-grained conglomerates and sedimentary breccias. This part of the Lower Carboniferous molasse sequence of 5 km thick was formerly referred to as "Older Culm" (Dathe 1892; Teisseyre 1975). It represents deposits of transverse alluvial fans developed along active fault scarps bounding the basin. Alluvial fans grew centripetally towards the axial fluvial belt

with easterly inclined palaeoslope (Teisseyre 1968, 1975; Dziedziec and Teisseyre 1990). The upper Tournaisian - Middle Visean succession shows a distinct cyclic organisation (Teisseyre 1968, 1975). It comprises several megacyclothems which are distinguished as individual lithostratigraphic units: the Ciechanowice, Stare Bogaczowice and Lubomin Formations.

During the Late Visean a marine transgression invaded westwards along the northern margin of the Intra-Sudetic Basin (Żakowa 1963). The western part of the basin was covered by a shallow marine embayment passing southwards into an extensive fluvial/deltaic system. At the same time, the eastern part of the basin was overlaid, in contrast, by a relatively deep sea. The Upper Visean sedimentary succession was referred to as the Szczawno formation ("Younger Culm"). Its thickness increases gradually from 600 m in vicinities of Wałbrzych to approximately 2 km in the western part of the basin. Sediments include fossiliferous shales containing brackish fauna (Żakowa 1963).

A tectonic uplift of the east and south basin borders led, at the turn of Early and Late Carboniferous, to palaeogeographical rearrangement of the Intra-Sudetic Basin and to reorganisation of its depositional system. In consequence of a marine regression, the consecutive Upper Carboniferous to Lower Permian sedimentary successions were formed in a continental setting. The Upper Carboniferous sequence consists of few individual fining upwards megacyclothems, typical of

