

Origin, facies: Marine limestone, pelagic unit.

Chronostratigraphic age: Famennian.

Biostratigraphy: Conodonts restrict the unit to Upper Famennian (SCHÖNLAUB, 1971c), but a distinct zone is not mentioned.

Thickness: Approx. 2 m.

Lithostratigraphically higher rank unit: Althofen Group (see remarks at Lower Althofen Limestone).

Lithostratigraphic subdivision: -

Underlying unit(s): Upper Auen Dolomite (conformable contact), Althofen Limestone Breccia (conformable contact).

Overlying unit(s): Shale, Lydite Breccia (unconformable contact).

Lateral unit(s): -

Geographic distribution: Carinthia, in the area between Althofen and Töscheldorf.

Remarks: -

Complementary references: SCHÖNLAUB (1979, 1992), NEUBAUER & PISTOTNIK (1984), KREUTZER et al. (1997).

Tonschiefer, Lyditbrekzien / Shale, Lydite Breccias

THOMAS J. SUTTNER

Validity: Invalid; first observations within the deposits near Althofen were made by REDLICH (1905) and later described more in detail by HABERFELNER (1936) and SCHÖNLAUB (1971c: Figs. 1, 2, p. 301).

Type area: ÖK50-UTM, map sheet 4102 Althofen (ÖK50-BMN, map sheet 186 Sankt Veit an der Glan).

Type section: Ancient quarry of Aich (SCHÖNLAUB, 1971c: Figs. 1, 2, p. 289) some hundred meters NNW of Treibach-Althofen (N 46°52'46" / E 14°28'03").

Reference section(s): -

Derivation of name: After lithological features.

Synonyms: Schiefer-Lyditbreccien-Komplex (SCHÖNLAUB, 1971c); Pelite-Chert-Formation (SCHÖNLAUB, 1992).

Lithology: Grey siliceous shale, lydites and lydite breccias.

Fossils: Radiolarians.

Origin, facies: Marine siliciclastics, pelagic unit.

Chronostratigraphic age: Tournaisian–Serpukhovian (see remarks).

Biostratigraphy: -

Thickness: Approx. 15 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): Upper Althofen Formation (unconformable contact).

Overlying unit(s): -

Lateral unit(s): -

Geographic distribution: Carinthia, in the area between Althofen and Töscheldorf.

Remarks: Due to the lack of stratigraphically relevant fossils, the age assignment follows the suggestions of CLAR et al. (1963) and SCHÖNLAUB (1971c: p. 301), who considered the Shale and Lydite Breccias being deposited above

the Upper Althofen Formation. Since the contact between these two units is unconformable, the Shale and Lydite breccias are probably restricted to lower Carboniferous deposits.

Complementary references: HABERFELNER (1936), SCHÖNLAUB (1979), NEUBAUER & PISTOTNIK (1984).

„Gurktaler Quarzphyllit-Komplex“ / Gurktal Quartzphyllite Complex

BERNHARD HUBMANN

Validity: Invalid; description by BECK-MANNAGETTA (1959: "(Quarz-) Phyllitserie").

Type area: ÖK50-UTM, map sheet 4101 Gurk (ÖK50-BMN, map sheet 185 Straßburg).

Type section: No type section published; BECK-MANNAGETTA (1964) mentioned a typical occurrence of the Gurktal quartzphyllite at Weitensfeld (N 46°50'54" / E 14°11'30"), approximately 50 km north of Klagenfurt.

Reference section(s): -

Derivation of name: After the valley Gurktal, north of Feldkirchen in Carinthia.

Synonyms: Gurktaler Phyllit (SCHWINNER, 1932, 1936); (Quarz-) Phyllitserie (BECK-MANNAGETTA, 1959); Gurktaler Quarzphyllit (BECK-MANNAGETTA, 1964; KERNER, 1988; KERNER & LOESCHKE, 1991); Gurktaler Quarzphyllit-Komplex [sic!] (SCHÖNLAUB, 1979); Gurktal Quartzphyllite Complex (SCHÖNLAUB & HEINISCH, 1993); partly: Gurktaler Komplex (ZADORLAKY-STETTNER, 1961); Gurktaler und Mittelkärntner Quarzphyllitreal (SCHÖNLAUB, 1979); Altpaläozoischer Phyllit i.a. (FLÜGEL & NEUBAUER, 1984).

Lithology: Various epimetamorphic rocks; mostly dark-grey phyllites; in the upper parts dolomitic lenses up to 20 m in thickness may occur.

Fossils: Unknown.

Origin, facies: ?

Chronostratigraphic age: Presumably Ordovician–Carboniferous.

Biostratigraphy: -

Thickness: About 250 m.

Lithostratigraphically higher rank unit: -

Lithostratigraphic subdivision: -

Underlying unit(s): ?

Overlying unit(s): ?

Lateral unit(s): ?Murau Group.

Geographic distribution: Gurktal range; ÖK50-BMN, map sheets 184 Ebene Reichenau, 186 Stankt Veit an der Glan.

Remarks: -

Complementary references: NEUBAUER & SASSI (1993).

Stangnock-Formation / Stangnock Formation

HANS P. SCHÖNLAUB

Validity: Valid; the term was introduced and formalized by KRAINER (1989: p. 568) at the northwestern margin of the Gurktal Nappe System of Carinthia.

Type area: ÖK50-UTM, map sheet 3106 Radenthein (ÖK50-BMN, map sheet 183 Radenthein) (PISTOTNIK, 1996), Carinthia. Area of Stangnock and mountain Königsstuhl

Austrian Stratigraphic Chart 2004 - Paleozoic

(sedimentary successions)

Austrian Stratigraphic Commission



ERA	SYSTEM / PERIOD / SERIES / EPOCH	STAGE / AGE	DURATION Ma	Global Classification					
				ERATHM / ERA	SYSTEM / PERIOD / SERIES / EPOCH				
PALEOZOIC	PERMIAN	CHANGHSINGIAN / Dorashamian	251	PERMIAN	MID PERMIAN / GUADALUPIAN / LOPINGIAN				
		WUCHIAPINGIAN / Duhullian	255						
		CAPITANIAN	260						
		WORDIAN	265						
		ROADIAN	270						
		PERMIAN	LOWER PERMIAN / CISURALIAN			KUNGURIAN	275		
						ARTINSKIAN	280		
						SAKMARIAN	285		
						ASSELIAN	290		
		PERMIAN	CARBONIFEROUS			GZHELIAN	295	CARBONIFEROUS	U. CARBONIFEROUS / PENNSYLVANIAN
KASIMOVIAN	300								
MOSKOVIAN	305								
BASHKIRIAN	310								
CARBONIFEROUS	LOWER CARBONIFEROUS / MISSISSIPPIAN			SERPUKHOVIAN	315				
				VISEAN	320				
				TOURNAISIAN	325				
PERMIAN	DEVONIAN			FAMENNIAN	350	DEVONIAN	UPPER DEVONIAN		
				FRASNIAN	355				
				GIVETIAN	360				
		EIFELIAN	365						
		DEVONIAN	LOWER DEVONIAN	EMSIAN	370				
				PRAGIAN	375				
				LOCHKOVIAN	380				
		PERMIAN	DEVONIAN	LUDFORDIAN / GORSTIAN	385			DEVONIAN	MIDDLE DEVONIAN
				HOMERIAN / SHEINWOOD	390				
				TELYCHIAN	395				
AERONIAN	400								
RHUDDANIAN	405								
DEVONIAN	UPPER ORDOVICIAN			DARRIWILIAN	410				
				TREMA-DOCIAN	415				
				PAIBIAN	420				
PERMIAN	CAMBRIAN			WEN-LUD-LOCK / LOW	425	CAMBRIAN	UPPER CAMBRIAN		
				HIRNANTIAN	430				
		LLANDOVERY	435						
		AERONIAN	440						
		RHUDDANIAN	445						
		CAMBRIAN	MIDDLE ORDOVICIAN	WOLYER	450				
				UGWA	455				
				BISCHOLAIM	460				
		PERMIAN	CAMBRIAN	WEN-LUD-LOCK / LOW	465			CAMBRIAN	MIDDLE CAMBRIAN
				HIRNANTIAN	470				
LLANDOVERY	475								
AERONIAN	480								
RHUDDANIAN	485								
CAMBRIAN	LOWER CAMBRIAN			WOLYER	490				
				UGWA	495				
				BISCHOLAIM	500				
PERMIAN	CAMBRIAN			WEN-LUD-LOCK / LOW	505	CAMBRIAN	LOWER CAMBRIAN		
				HIRNANTIAN	510				
		LLANDOVERY	515						
		AERONIAN	520						
		RHUDDANIAN	525						
		CAMBRIAN	UPPER ORDOVICIAN	DARRIWILIAN	530				
				TREMA-DOCIAN	535				
				PAIBIAN	540				



- Legend**
- pelagic, offshore, siliciclastic
 - pelagic, nearshore, calcareous
 - shallow marin, neritic
 - terrestrial-continental, coarse clastic
 - terrestrial-continental, fine clastic
 - evaporite (chloride, sulphate)
 - rhyolite, dacite
 - (basaltic) andesite, trachyandesite
 - basalt
 - phyllite
 - mixed-facies (in corresponding colors)
 - coal (may include several seams)
 - ? position/age doubtful/controversial
 - | equal units
 - \ older unit left \ younger unit right
 - hiatus
 - unconformity
 - GSSP
 - Fm. Formation
 - Ls. Limestone

© Commission for the Paleontological and Stratigraphical Research of Austria (CPSA) of the Austrian Academy of Sciences and Austrian Stratigraphic Commission

Cutout and English adaptation of the "Die Stratigraphische Tabelle von Österreich 2004": Geological Survey of Austria

The Austrian Stratigraphic Chart 2004 - Paleozoic is a supplement of:
 Hubmann, B., Ebner, F., Ferretti, A., Kido, E., Krainer, K., Neubauer, F., Schönlaub, H.-P. & Suttner, T.J. (2014): The Paleozoic Era (them), 2nd edition. - In: Pillner, W.E. (Ed.): The lithostratigraphic units of the Austrian Stratigraphic Chart 2004 (sedimentary successions) - Vol. 1 - Abhandlungen der Geologischen Bundesanstalt, 66, 9-133, Wien.

Printing: Grasl Druck & Neue Medien GmbH, Bad Vöslau 2014

Landesmuseum Joanneum

OAW

Geologische Bundesanstalt

UNI GRAZ

OGG

Universität Wien

Naturhistorisches Museum Wien