CONTRIBUTIONS BY MEMBERS

Carboniferous of Central and Western Bohemia (Czech Republic)

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(61 pages, 33 figures in text, 57 photographs, 26 folders in a separate jacket; published (1994) by the Czech Geological Survey, Klárov 3, 118 21 Prague 1, Czech Republic - Price US$15.00).

The Carboniferous of Central and Western Bohemia consists of continental sediments of the Westphalian C to Stephanian C. The knowledge of sedimentary filling is based upon the results of geological mapping, extensive studies of about 1200 boreholes drilled into the basement, geophysical surveys and other special investigations. The publication describing the geology of sedimentary filling is confined to four basic Upper Carboniferous units and their basement within the Upper Carboniferous basins. Description is supplemented by maps 1:400,000. Besides the basic characteristics, a list of plant micro- and macrofossils is provided for each unit. Brief characteristics of sub-units (beds, layers, seams) as well as the occurrence and distribution of volcanics, cyclic structure of sediments and other features are described in the paper. Particular attention is paid to their colour and paleogeography. Each basic unit and its important subunits are shown in isopach maps, sand, volcanics and grey sediments abundance distribution, paleogeographic and paleofacies maps. Tectonic development of the studied area and a detailed list of references are presented.

European Coal Conference 1995 - Report

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The European Coal Conference '95 (ECC '95) was held at the Faculty of Science of Charles University, 26 June - 1 July 1995. It was organised by this Faculty in co-operation with the Czech Geological Survey, the Institute of Geonics of the Czech Academy of Science and the Coal Geology Group of the Geological Society of London, UK.

The meeting itself took three days and was attended by 113 registered participants and about 20-30 guests from 13 (mostly European) countries. Presentations of 55 papers and 28 posters were made covering the following major topics related to coal-bearing units: geology, coal reserves, tectonics, geophysics, coal bed methane, coal petrology, coalification, coal technology, mineral matter and paleontology.

The three day meeting was preceded by two parallel one day field trips: the first to the north Bohemian Tertiary brown coal basin which was organised by Geological Service Co.Ltd, and the second to the limnic Carboniferous of the central and western Bohemia. The latter excursion was repeated after the conference and partly coincided with a three day field trip to the Carboniferous of the Upper Silesian Basin.

Participants in EEC '95 received a volume of abstracts of all presented papers and posters. Proceedings of the Conference, which will include the most important papers, will be published by the Publishing House of the Geological Society of London in 1996. Anticipated cost of the Proceedings will be around UK£50. There is still a limited number of Abstracts available which can be ordered at the following address: Professor Jirí PESEK, Faculty of Science, Charles University, Albertov 6, 128 43 Prague 2, Czech Republic. Cost of the copy is US$20.

The next meeting of coal geologists is scheduled for 1997 at the University of Izmir, Turkey.

Palynology of the Itararé Subgroup (late Paleozóic) in northern Paraná Basin, Brazil

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Analysis of surface and subsurface samples from the Itararé Subgroup (C-P) by SOUZA (1996) contributes to the biostratigraphy and paleoenvironmental interpretation of the northern Paraná Basin, Brazil.

One hundred and ten taxa were found, related to the twenty-six genera of spores, nine of pollen grains and three of microplanktonic elements. Forty-eight species are registered for the first time in the Paraná Basin, demonstrating the previous lack of knowledge of this part of the section.

The following taxa indicate a Westphalian age for the sections examined: *Granulatisporites varigranifer* Menéndez & Azcuy, 1969; *Raistrickia rotunda* Azcuy, 1975; *Dictyotriletes muricatus* (Kosanke) Smith & Butterworth, 1967; *Ahrensisporites cristatus* Playford & Powis, 1979; *Ancistrospora inordinata* Menéndez & Azcuy, 1972; *Ancistrospora verrucosa* Menéndez & Azcuy, 1972; *Florinites guttatus* Felix & Burbridge, 1967; *Florinites occultus* Habib, 1966; and *Florinites* sp.

Biostratigraphic analysis indicates that the palynological content is new for the Brazilian part of the Paraná Basin. In terms of Gondwana, correlation is best made with the oldest Argentinian Carboniferous palynozones and equivalent palynozones in Australia.

Among the sporomorphs, the new species *Ancistrospora reticulata* n. sp. is described and another two are transferred to distinct genera: *Dictyotriletes pseudopalliatus* (Staplin) new comb. and *Vallatis-*

potites punctatus (Marques-Toigo) new comb.

In paleoenvironmental terms, the presence of microplanktonic elements referred to *Navifusa* Combaz, Lange & Pansart, 1967 indicates a marine influence for the great part of the sections studied.

Reference:

SOUZA, P.A. 1996. Palinologia e bioestratigrafia do Subgrupo Itararé em Araçoiaba da Serra (Westphaliano, Bacia do Paraná), Estado de São Paulo, Brasil. São Paulo. Masters Dissertation, Instituto de Geociências, USP, 192 pp, unpublished.

Life mode of some Brazilian late Paleozoic Anomalodesmata

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The life position of three late Paleozoic anomalodesmatan pelecypods was recognised in carbonate and siliciclastic rocks from Brazil (ANELLI, L.E. *et al.*, 1995). The *in situ* position was compared with previous interpretations based on functional anatomy.

Shelf-lagoonal carbonate facies of the Piauí Fm. (Morrowan-Atokan; Parnaíba Basin) shows *Wilkingia terminalis*, an immobile infaunal filter-feeding pelecypod, occurring preferentially associated with small bioclastic clumps and inclined 26° - 40° to bedding. Sections of oriented samples show clumps concentration around the ventral margins of the shells. The strong reduction of the anterior portion, the anisomyarian musculature, and the relatively large scar of the anterior (pedal/byssal?) retractor muscle in *W. terminalis* suggest an endobyssate life mode. In the same carbonates, the byssate, semi-infaunal *Pteronites* sp. (Pteriomorpha) occurs also associated with bioclastic clumps, and with the long axes of shells oriented ca. 90° to bedding. Evidence of diagenetic deformation is lacking in both cases. *Allorisma barringtoni* and *Vacunella* cf. *Vacunella etheridgei* from the Rio do Sul Formation (Early Permian, Paraná Basin) occur in shallow marine fine siltstone with long axes inclined ca. 40°-50° to bedding. Specimens have been deformed by sediment compaction and therefore the angle between long axes and bedding has probably been reduced. One inch long tube preserved above the siphonal gape at the dorsal posterior angle of *A. barringtoni* corresponds to the former position of the syphon and reflects a minimum burial depth for the species. Except in the case of *W. terminalis* features described confirm previous interpretations based on functional anatomy.

Reference:

ANELLI, L.E., SIMÕES, M.G. & ROCHA-CAMPOS, A.C. 1995: Life mode of some Brazilian Late Paleozoic anomalodesmatan. *Canadian Paleontology Conference, Program and Abstracts*, 5, p. 2.

Paleobiogeography and evolution of the late Paleozoic pelecypod faunas (Paraná Basin) from Brazil

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In a recent contribution, SIMÕES *et al.* (1995) revise the paleobiogeographic evolution of late Paleozoic pelecypods from the Paraná Basin.

Late Paleozoic marine invertebrate assemblages (Tubarão and Passa Dois groups) in the Paraná Basin are dominated by pelecypods that evolved in an epicontinental sea having a complex geological and ecological history associated with a transgressive/regressive cycle. Tubarão Group assemblages (transgressive phase) are more diversified, with pelecypods, subordinate brachiopods, gastropods, echinoderms and rare arenaceous forams. In the Upper Tubarão Group, the Rio do Sul Formation assemblages (Rio da Areia, Baitaca) show a high proportion of epifaunal (mainly pectinids), filter-feeders together with elements of byssate semi-infauna and shallow infauna. Locally, in an organic-rich substrate (Passinho assemblage), infaunal, detritivorous taxa dominate. Overlying the Rio Bonito and Palermo formations, assemblages are mostly composed of infaunal filter-feeding and semi-infaunal byssate elements, but epifaunal shells are sometimes locally abundant.

A contrasting pattern is shown by Passa Dois Group assemblages (regressive phase) which are dominated by infaunal, shallow-, intermediate-, and deep-burrowing, filter-feeding pelecypods associated with rare epifaunal filter-feeding, byssate elements. These pelecypods may have evolved *in situ*, from ancestors present in the Tubarão Group and in other South American Late Paleozoic marine sequences. Their evolution may have resulted from interruption to larval dispersion, leading to allopatric speciation. Rare elements, however, show wide distribution in the Paraná Basin suggesting dispersion of planktotrophic larvae during a short-lived flooding episode within the predominant regressive cycle.

Reference:

SIMÕES, M.G., ROCHA-CAMPOS, A.C. & ANELLI, L.E.1995: Paleogeography and evolution of Permian pelecypod faunas from the Paraná Basin, Brazil. *Canadian Paleontology Conference, Program and Abstracts*, 5, p. 31.

A correlation chart for Carboniferous-Permian zones in Argentina, Uruguay and Bolivia

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After the XII ICC-P Congress held in Buenos Aires in 1991, the Argentinian and Uruguayan geologists completed the text that was presented as a pre-print during the congress.

The final version is in press at the Córdoba Academy of Sciences and is scheduled to appear late this year. In this book, a chapter devoted to Zone Correlation includes a chart that is reproduced here with its corresponding legend. Data on which the chart was based are those published before the end of 1994 (Figure 1).