

metamorphic domain is marked by an antiform in gnaissic diatexites. A normal fault with average northeastward dip limits the fold and juxtaposes upper kyanite-staurolite bearing micaxists. From this limit, the structural pattern of Aiuruoca-Andrelândia Nappe is homogeneous, with sin-metamorphic ductile shear-sense indicators to E-NE.

The alternating of extensional structures in a general compressive regime and in the hind portion of high-pressure nappe, is associated with the extrusion process and with the search, in the collisional orogen, of isostatic balance. — ( *December 14, 2001* ).

\* Supported by FAPESP 00/11390-4 and 98/15624-8.

#### **FACIES AND SEQUENCE STRATIGRAPHY OF THE ITARARÉ AND GUATÁ SUBGROUPS (LATE PALEOZOIC), NORTHERN PARANÁ BASIN, BRAZIL\***

ANTONIO M. CHAVES-JUNIOR AND JOSÉ R. CANUTO\*\*

Instituto de Geociências, USP, São Paulo, SP.

Presented by ANTONIO C. ROCHA-CAMPOS

Glacial advances and retreats influenced relative sea level change, concomitantly to the regional subsidence during the deposition of a 2<sup>nd</sup> order Permo-Carboniferous sequence in northern Santa Catarina State, Paraná Basin.

According to Canuto's (1999) nomenclature, the following facies were recognized in the Itararé and in the lower part of the Guatá Subgroups: a) compacted massive diamictite; b) uncompacted massive diamictite; c) lenticular diamictite; d) low-angle, cross-bedded and truncated wave-ripple-laminated sandstone; e) truncated low-angle, cross-bedded, tabular sandstone; f) low-angle, bidirecional, cross-bedded, tabular sandstone; g) cross-bedded, fining-upward sandstones; h) massive or laminated shale; i) massive siltstone; j) interlaminated very fine sandstone and silty shale. Some of them corresponding to diagnostic facies of facies associations (#).

Facies associations recognized are: A<sub>1</sub>, compacted massive (#), uncompacted massive (#) and lenticular diamictites; A<sub>2</sub>, truncated low-angle cross-bedded tabular sandstone (#); A<sub>3</sub>, massive or laminated shale (#) and massive siltite (#); A<sub>4</sub>, interlaminated (#), low-angle cross-bedded and truncated wave ripple laminated sandstone and low-angle bidirecional cross-bedded tabular sandstone (#); and corresponding, respectively, lowstand, transgressive, highstand and glacio-isostatic regressive system tracts.

In view of the recognized associations of facies, it

is verified that the sedimentary succession comprises two partial 3<sup>rd</sup> order sequences, representing the upper part of one (associations A<sub>3</sub> and A<sub>4</sub>) and the basal and intermediate parts of the overlying one (associations A<sub>1</sub>, A<sub>2</sub> and A<sub>3</sub>).

The analysis of the sedimentary succession shows, from the base to the top, that the shales were deposited in a mudflat environment, followed by the deposition of sandstones in a lower shoreface setting, sandstones in upper shoreface, the interlaminated in tidal flat/foreshore, glacial advance, glacio-isostatic subsidence possibly until a compatible shoreface depth, disintegration and retreat of the glacier, slow rise of the sea level until the establishment of the foreshore/tidal flat, shoreface environment again due to a greater rise of the relative sea level than the last one, beginning of glacio-isostatic uplift by the final retreat of the glacier, return of the foreshore conditions, possibly still the backshore setting, and, finally, deltaic progradation over foreshore and/or backshore settings. — ( *December 14, 2001* ).

\* Supported by FAPESP 97/13973-2.

\*\*E-mail: jrcanuto@usp.br.

#### **THE PIUMHI SUPERGROUP, SW-SÃO FRANCISCO CRATON, MG-BRAZIL**

ALEXANDRE P. CHIARINI<sup>1,2</sup> AND HANS D. SCHORSCHER<sup>1</sup>

<sup>1</sup>Instituto de Geociências, USP, São Paulo, SP.

<sup>2</sup>BTX Serviços Geológicos, São Paulo, SP.

Presented by ANTONIO C. ROCHA-CAMPOS

Field work, petrographical and geochemical studies of the metavolcano-sedimentary sequence (VSS) of Piumhi-MG, a part of an Archaean or Palaeoproterozoic greenstone belt showed that current stratigraphical and petrographical classifications of this sequence require redefinition (Chiarini, 2001). Here, the VSS is formally defined as the Piumhi Supergroup, subdivided into: Lower and Upper groups (grupos *Inferior* and *Superior*) based on the Córrego Araras type-section. From base to top the Lower Group comprises: Andesitic Volcanic Unit (AVU), Magnesian Basaltic Volcanic Unit (MBVU) and Basaltic Volcanic Unit (BVU). The Upper Group, undivided here, comprises clastic and volcanoclastic metasediments with intercalated basic to acid volcanics. The Piumhi Supergroup exhibits middle greenschist facies metamorphism.

In the AVU predominate transitional tholeiitic to calc-alkaline basaltic andesites, dacites and rhyolites of fractional crystallization, altered by pre-metamorphic