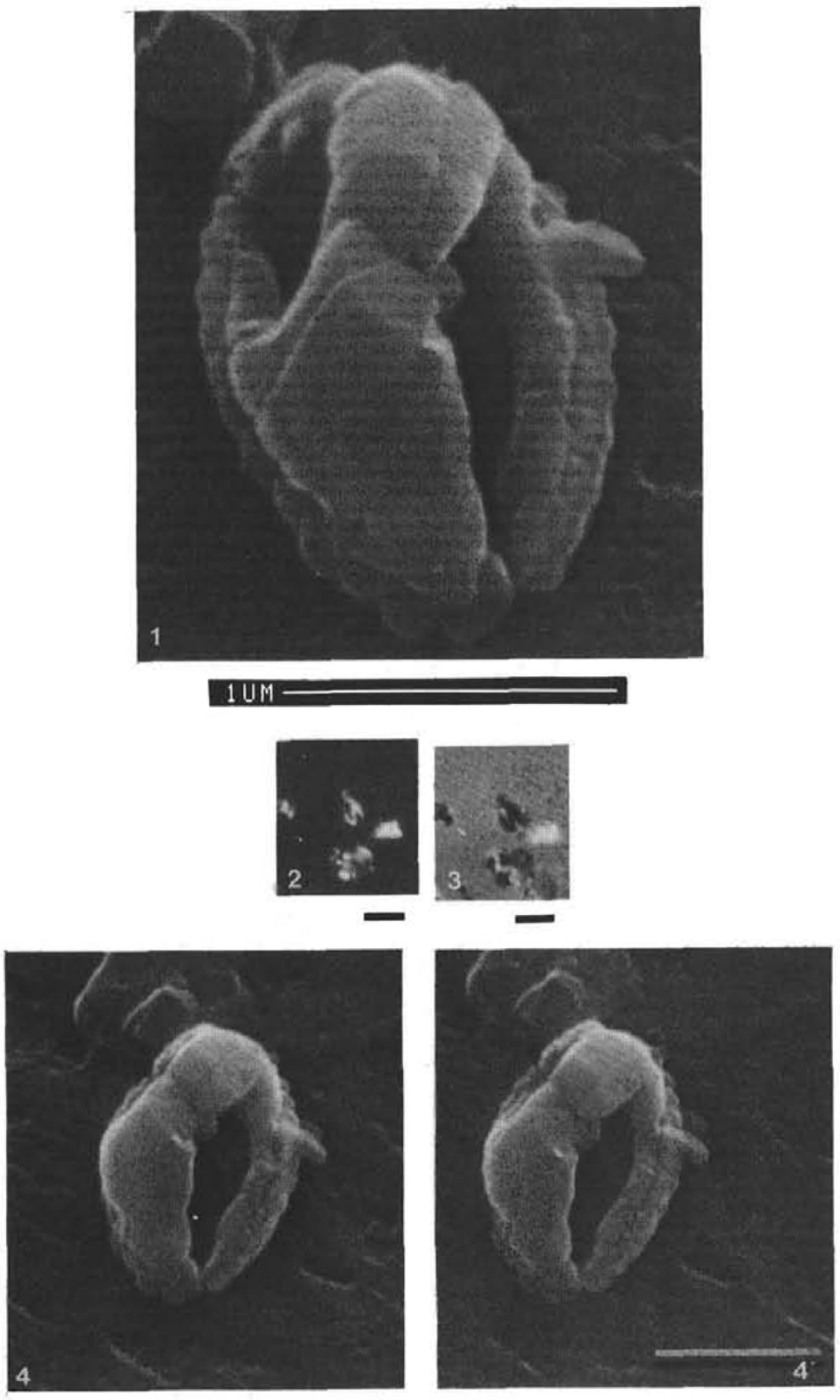
112. Gephyrocapsa theyeri Pujos (1987)



Pl. 3, figs 1-4

= *Gephyrocapsa* sp. 1 SAMTLEBEN, pl. 12, figs. 23, 26, 27.

Diagnosis: very small species belonging to the *Gephyrocapsa* genus, with a broad and clearly elevated cross-bar.

Description: it is a very small *Gephyrocapsa* (length = 1,65 μm; width = 1,125 μm) with a wide open central area (length = 1,3 μm; width = 0,65 μm). The distal shield has 30 regular elements and the proximal one has about 24 elements. The most characteristic feature is a heavy cross-bar which covers most of the central area; it is 0,925 μm wide at its base and 0,375 μm wide in its middle part; each half-bar is made of 4 elongated elements stemming from 6 elements of the proximal shield. This cross-bar is elevated above the plane of the shields like a bridge; there is a kind of break in the bridge roundness, like a plane face of calcite crystal on each half part of the bridge just at the place where they meet. The bar makes an angle of 34° with the long axis of the coccolith. With an optical microscope, G. *theyeri* gives a Z figure, like *G. sinuosa* does occasionally.

I name this species *theyeri* in honour of FRITZ THEYER who was a chief scientist of DSDP Leg 85.

Differences: G. *theyeri* resembles many small Pleistocene *Gephyrocapsa.* It can be distinguished by its dimension (in μm) and morphological details:

Gephyrocapsa species	Total length	Total width	Shield thickness	Bar thickness	Bar angle	No. of distal elements
sinuosa +)	2.4	2.0	?	0.75	43°	?
aperta f. 1*)	1.55	1.10	0.30	0.15	32°	26
aperta f. 2*)	2.10	1.35	0.45	0.15	32°	26
ericsonii *)	2.20	1.70	0.55	0.275	30°	32
sp. 1°)	2.10	1.6	0.40	1.0-0.425	40°	24-34
theyeri	1.65	1.125	0.30	0.925-0.375	34°	30

*) in Pujos-Lamy (1976); +) in Hay & Beaudry (1973); °) in Samtleben (1980)

Except for G. *aperta* f. 1, G. *theyeri* is the smallest of these *Gephyrocapsa.* It resembles G. *ericsonii,* because they both have an elevated bridge, but the bridge of G. *theyeri* is much wider at its base. The general appearance of *G. sinuosa* is similar to that of *G. theyeri,* but the original diagnosis of *G. sinuosa* HAY & BEAUDRY (1973) gives only an optical microscope picture which does not show enough detail.

Type level: early Late Miocene to Late Pliocene.

Type locality: central equatorial Pacific Ocean, DSDP Leg 85, Site 572.

Depository: Département de Geologie et Océanographie -Université de Bordeaux I, Talence, France.

G. theyeri is often frequent in abundance at Site 572. Another *Gephyrocapsa* is also present in the same samples. Their coccoliths are slightly longer than those of *G. theyeri* (L = 2 μm) and their appearance is really different: they are very close to some *"G. sinuosa"* by SAMTLEBEN (1980). I have very few photos of this type, so I name it *G. cf. sinuosa.*

Pujos, A., 1987. Late Eocene to Pleistocene Medium-Sized and Small-Sized "Reticulofenestrids". *Abh. Geol. B.-A.,* **39:** 239-277.