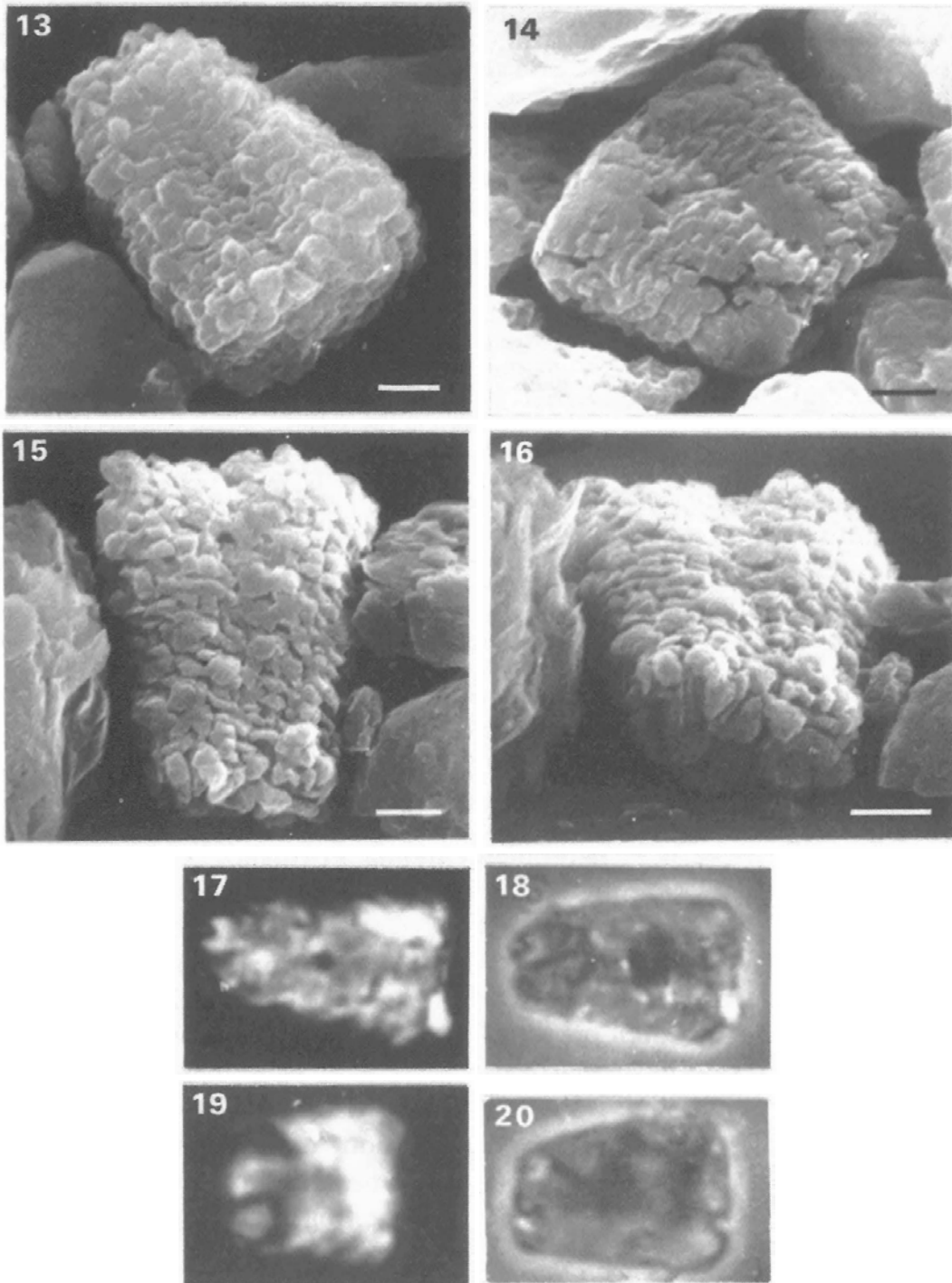


184. *Pseudoconus enigma* Bown & Cooper (1987)



Pl. 5.2, figs 13-20

**Diagnosis:** truncated cone-like nanofossil with a subrectangular cross-section constructed from numerous, small, roughly equidimensional crystallites which may be cubic to prismatic or slightly irregular. The crystallites show some degree of organisation forming strips parallel to the top and bottom of the nanofossil. In the light microscope

the structure divides into three longitudinal parts, implying the presence of a wall surrounding a central space. An additional proximal structure is seen as two bright nodes.

**Description:** each face of the nannofossil is formed from the equidimensional crystallites; no internal structure has been observed. In plan view at least one of the sides may have a shallow median furrow running down its length. Greater irregularity of the crystallites and general structure may be introduced owing to varying states of preservation.

**Remarks:** the name *enigma* refers to the puzzling structure of this nannofossil and the apparent lack of any similar forms in the Jurassic. *P. enigma* has been recorded from both Tethyan and Boreal areas and appears to have a restricted range within the Middle Jurassic.

**Holotype:** UCL-25 12-2 (Plate 5.2, Fig. 13).

**Isotypes:** UCL-2512-1, UCL-2512-3 (Plate 5.2, Figs. 15, 14).

**Type locality:** Watton Cliff, Dorset, England.

**Type level:** Upper Fuller's Earth, *aspidoides* Zone, Upper Bathonian. Sample D24 (Lord and Bown 1987).

**Range:** Upper Bajocian-Upper Bathonian (Dorset, England). Lower to Upper Bathonian (Brenha, Portugal).

**Dimensions:** length 4.0-6.2 (6.0)  $\mu\text{m}$  distal width 4.0-4.9 (4.8)  $\mu\text{m}$  proximal width 2.0-3.5 (3.2)  $\mu\text{m}$  thickness 2.0-2.3 (2.0)  $\mu\text{m}$  (dimensions of holotype in parentheses).

Bown, P.R. & Cooper, M.K.E., 1987. Conical microfossils in the Mesozoic. In Crux, J.S. & van Heck, S.E. (eds.). Nannofossils and their Applications. Ellis Horwood, Chichester, UK, 98-106.