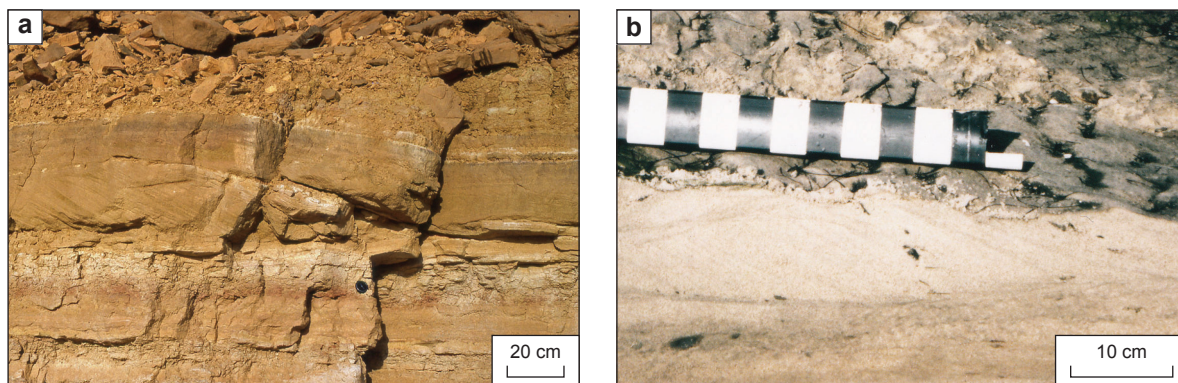
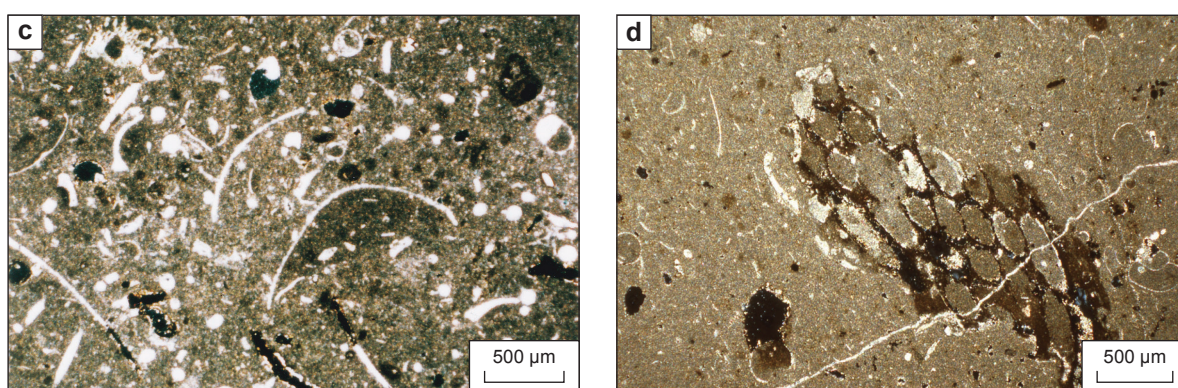


## Plate 2: Marrat Sequence II

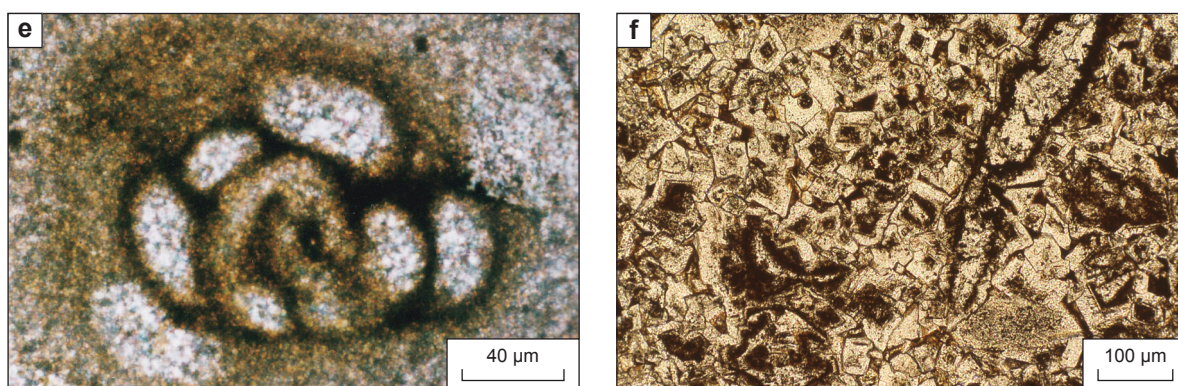


**Plate 2:** (a) Sigmoidal megaripple (Lower Marrat, Yanbu-Abqaiq pipeline trench in Wadi ash Shams, Darma' Quadrangle); and (b) present-day analog in a tidal channel (mesotidal regime), Arcachon Bay (Photo by Y.M. Le Nindre; courtesy ASF 1986, H. Feniès). This bedform and internal bundles are determined by variation of current velocity during a neap tide–spring tide cycle.



**Plate 2:** (c) Photomicrograph of wackestone with thin-valve lamellibranches and rare echinoderms, near top Lower Marrat (Sample JMA82-103, natural light), Khashm adh Dhibi, Darma' Quadrangle.

**Plate 2:** (d) Photomicrograph of bryozoa fragment with thin-shell lamellibranches and gastropods, basal Middle Marrat (Sample JMA82-107, natural light), Khashm adh Dhibi, Darma' Quadrangle.



**Plate 2:** (e) Foraminifer *Glomospira* is characteristic of uppermost Marrat Sequence II (Samples JMA82-103, 104 and 107); photo-micrograph from Sample VD80-332, polarized and reflected light), Khashm al Jufayr, Wadi ar Rayn Quadrangle).

**Plate 2:** (f) Photomicrograph of zoned dolosparite with ghosts of bioclasts (bivalves, echinoids), basal Middle Marrat beneath Red Claystone (Sample JMA82-108 – B40323, natural light), Khashm adh Dhibi, Darma' Quadrangle.