

***2.1 Ba, Pre C-  
Gunflint Chert  
Stromatolites &  
Associated  
Cyanobacterial  
Microfossils***

# Mirogeo



[mikrogeo.com](http://mikrogeo.com)

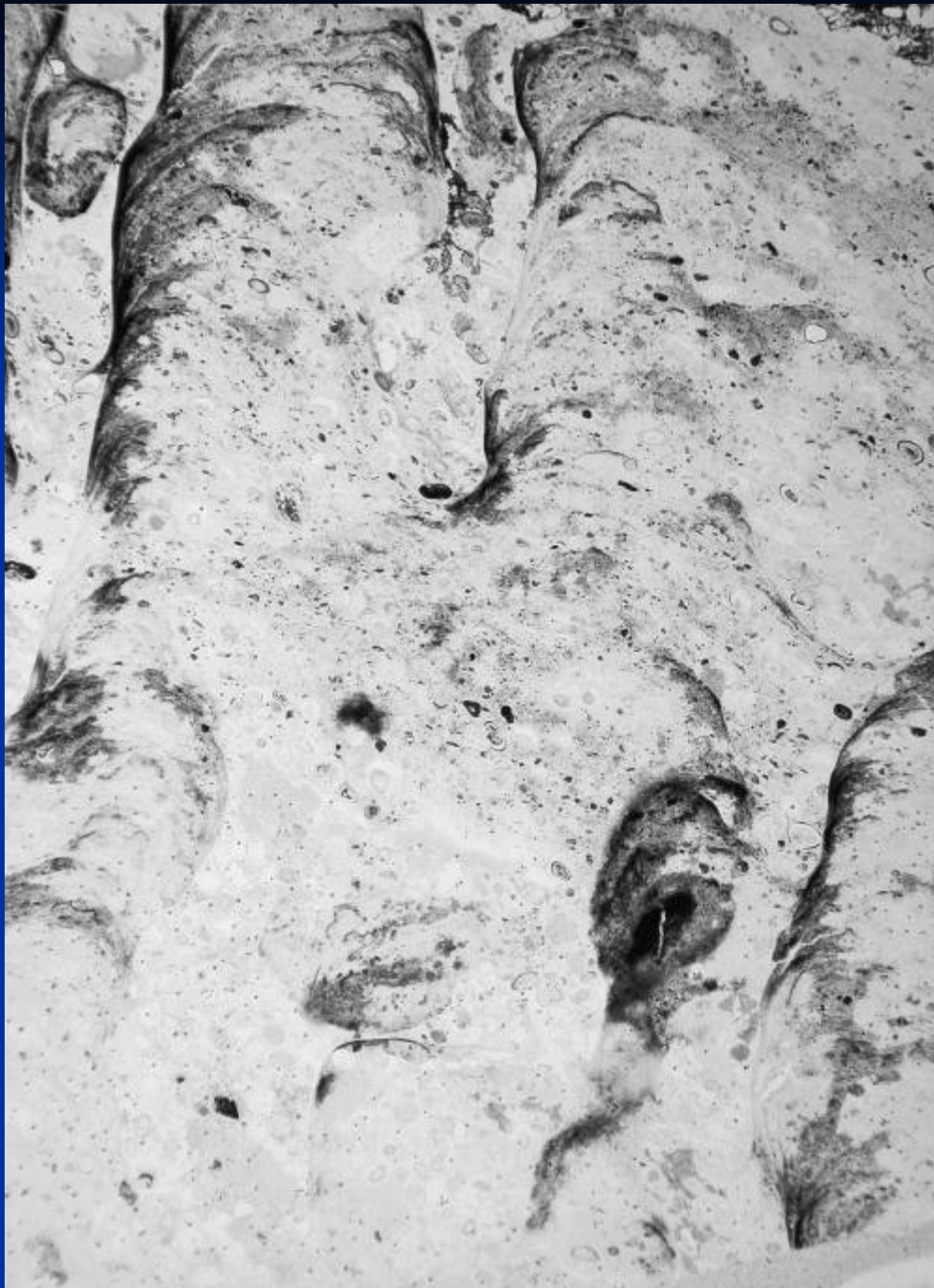


3 cm

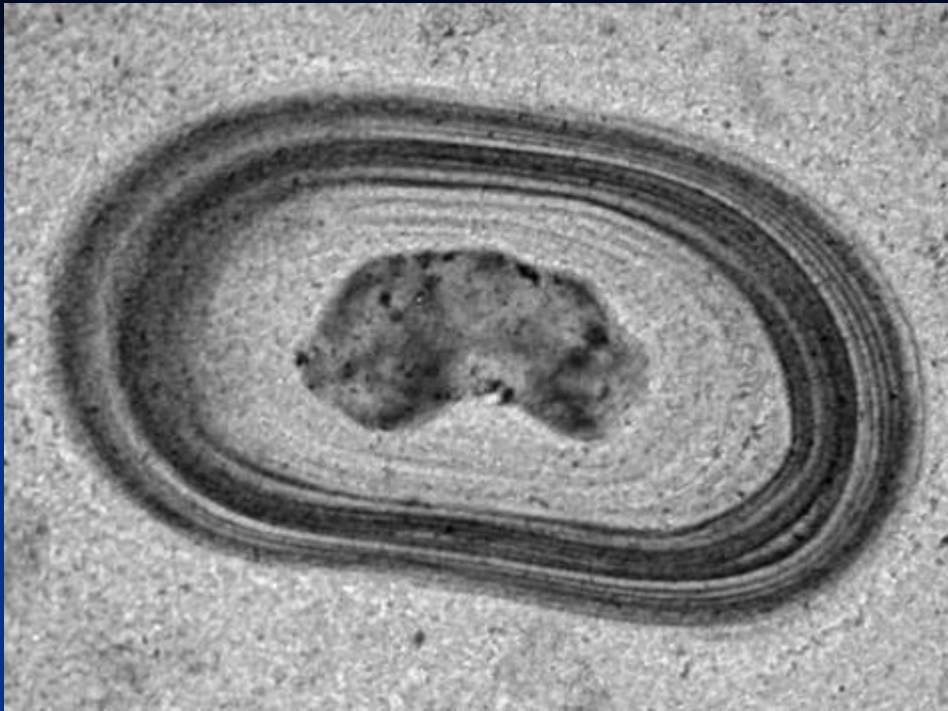
→ ooids

OOIDS & STROMATOLITES



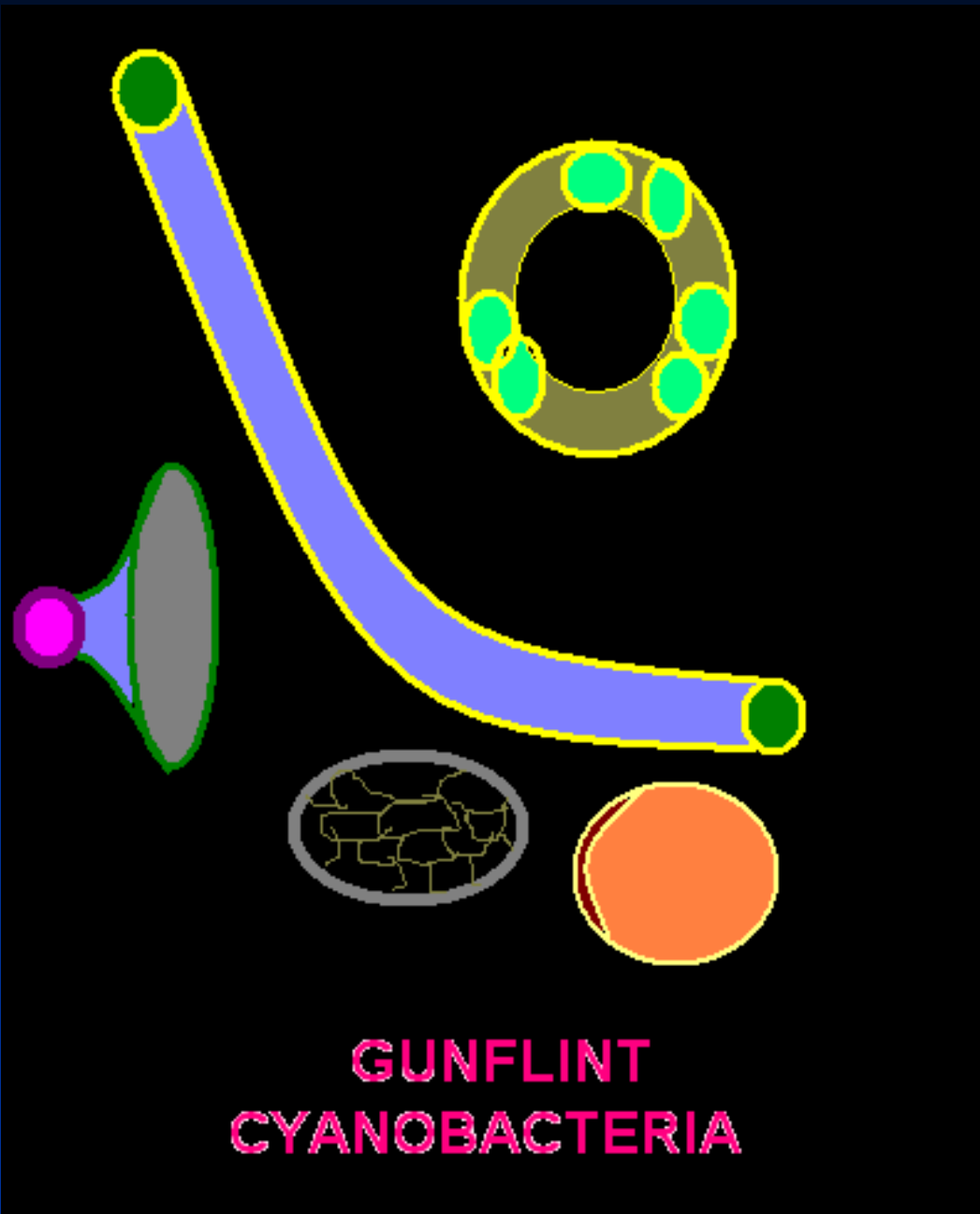


**In the middle of the Banded Iron Formation Period of the early PROTEROZOIC: each wispy, thin, stromatolitic , concentric lamellae is a diurnal deposit... but there were many more days in the year 2.1 billion years ago**



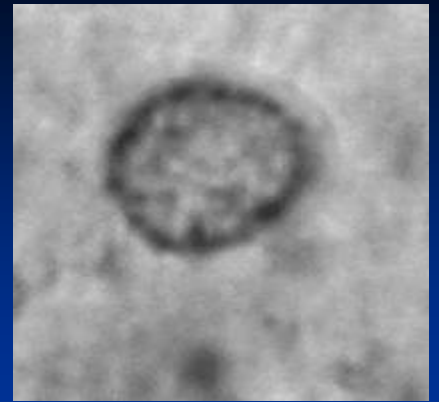
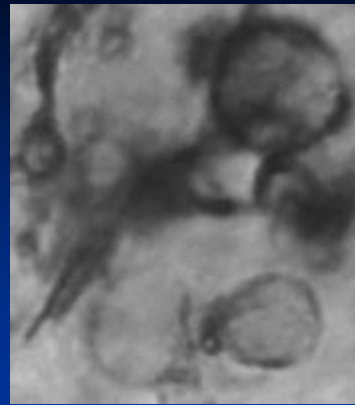
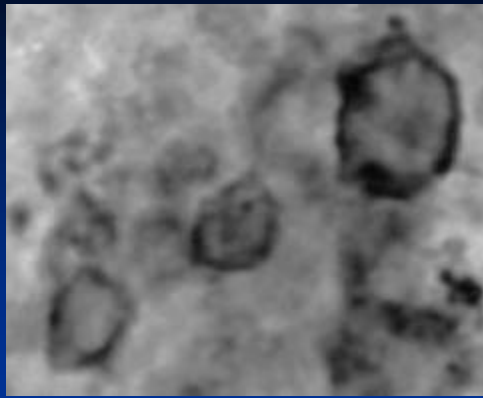
**OOLITIC or PISOLITIC  
Components ~1-2 mm**



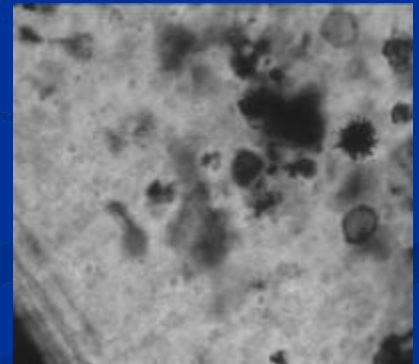
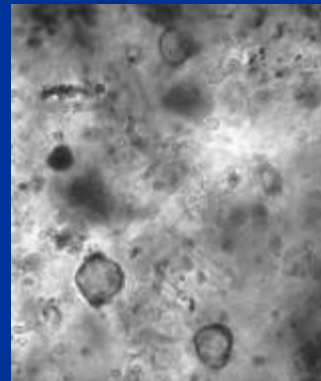
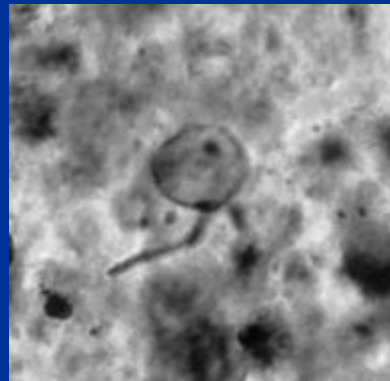
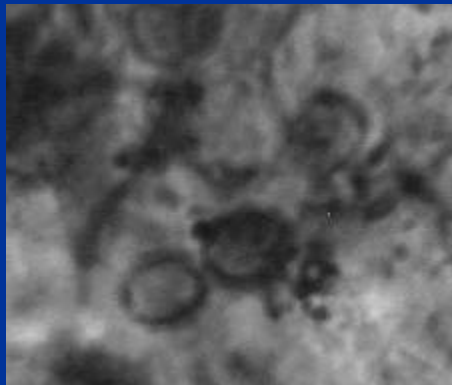
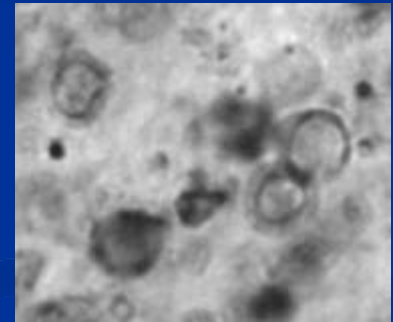
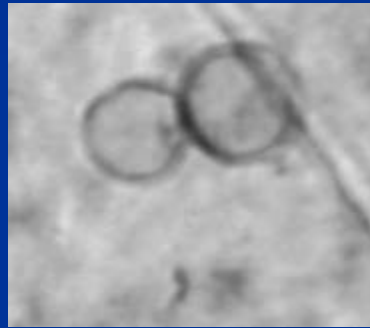
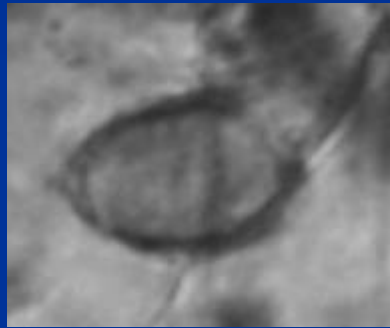


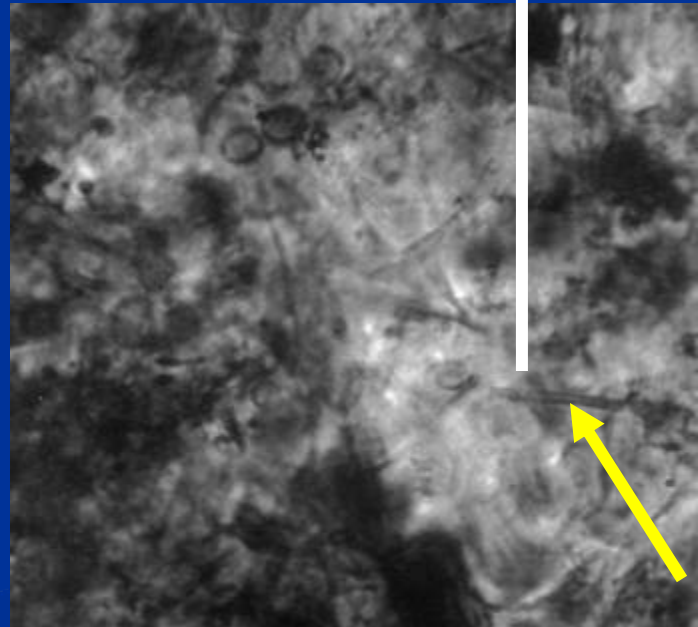
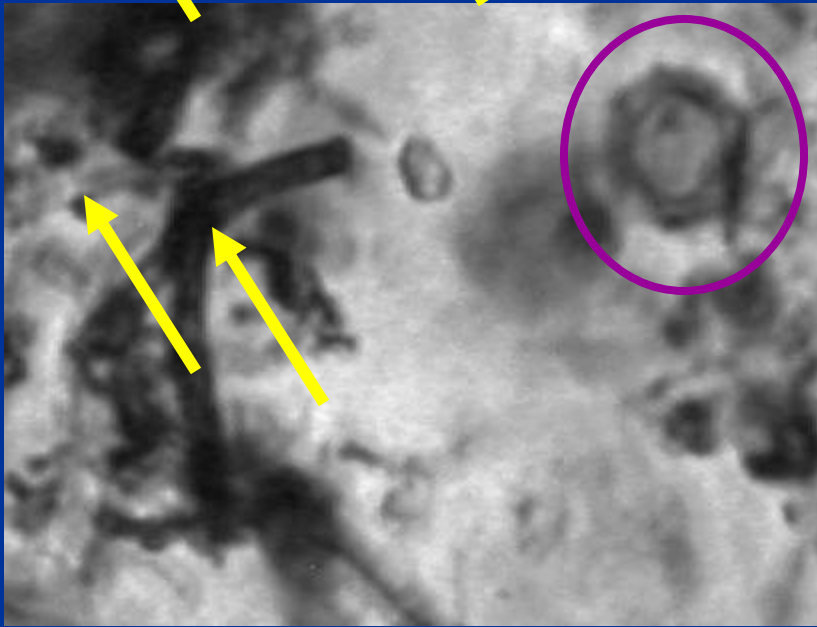
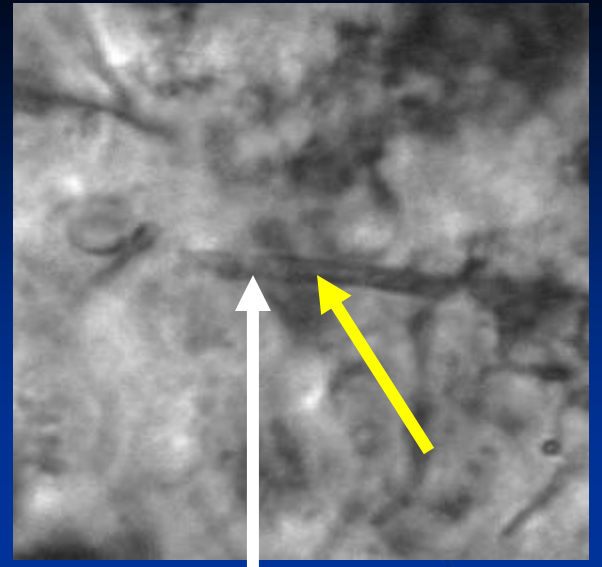
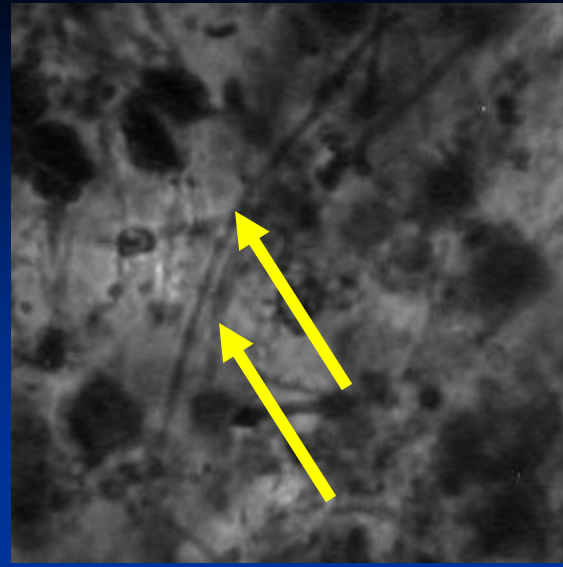
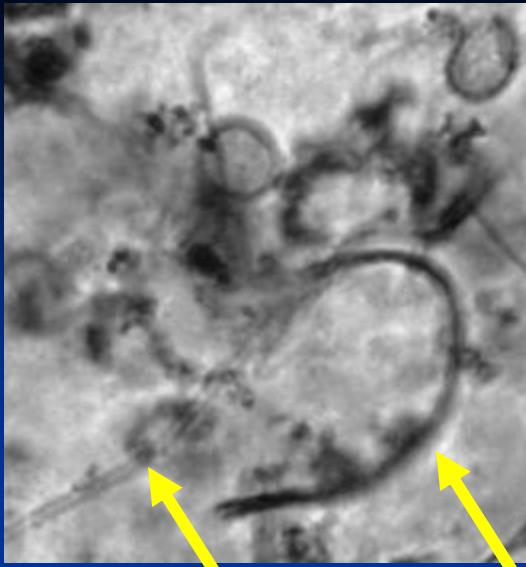
**GUNFLINT  
CYANOBACTERIA**





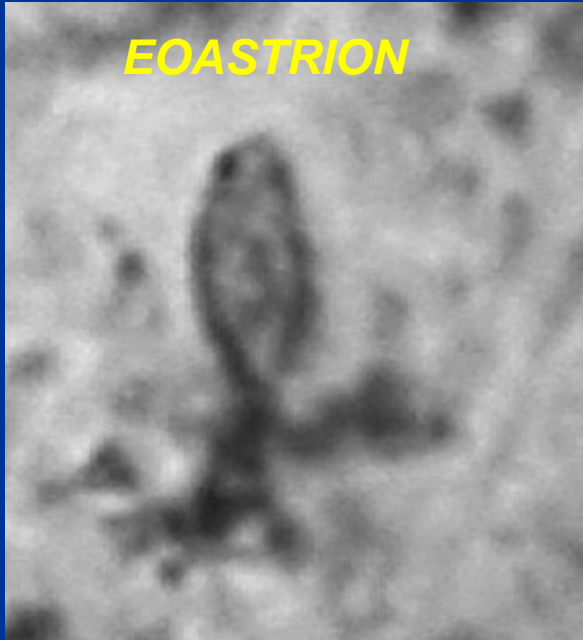
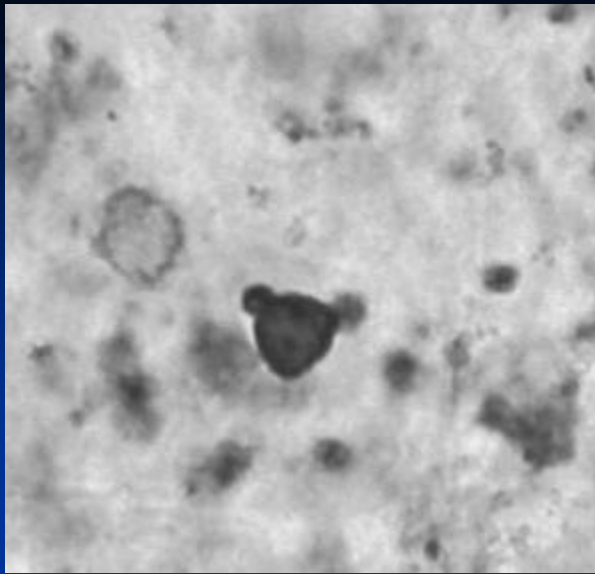
**SPHERICAL**  
**Cyanobacteria 9-**  
**12 um mostly**  
***HURONIOSPORA***



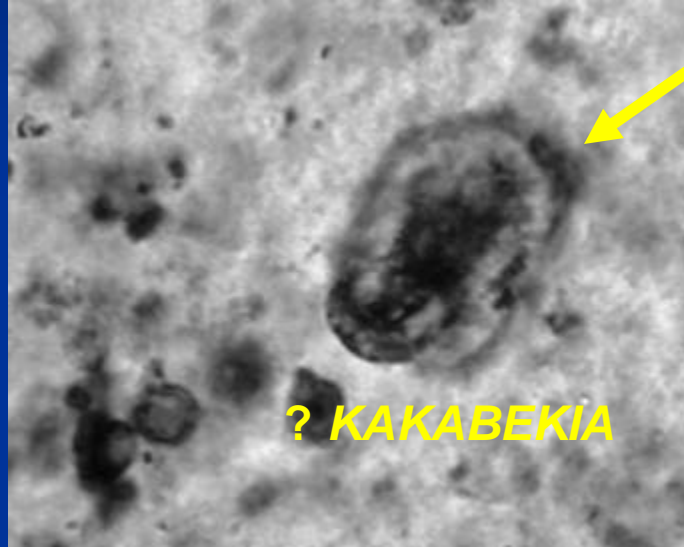


**FILAMENTOUS CYANOBACTERIA**  
thick: *Animikiea*, thin: *Gunflintia*



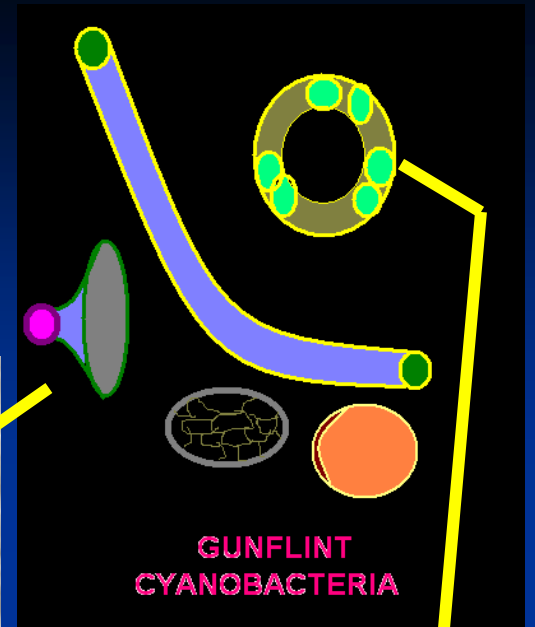


**EOASTRION**

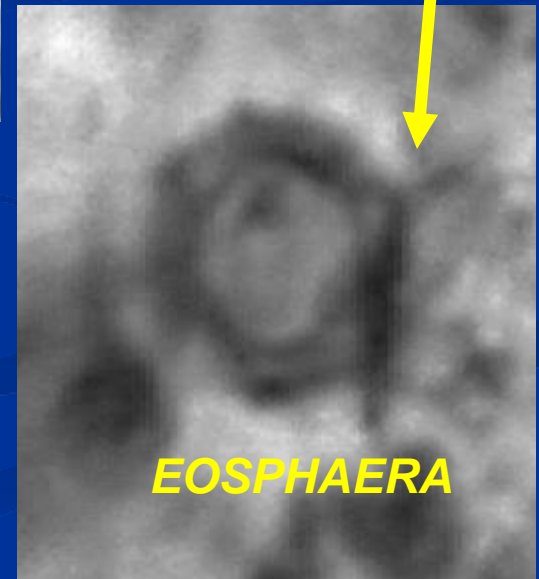


**? KAKABEKIA**

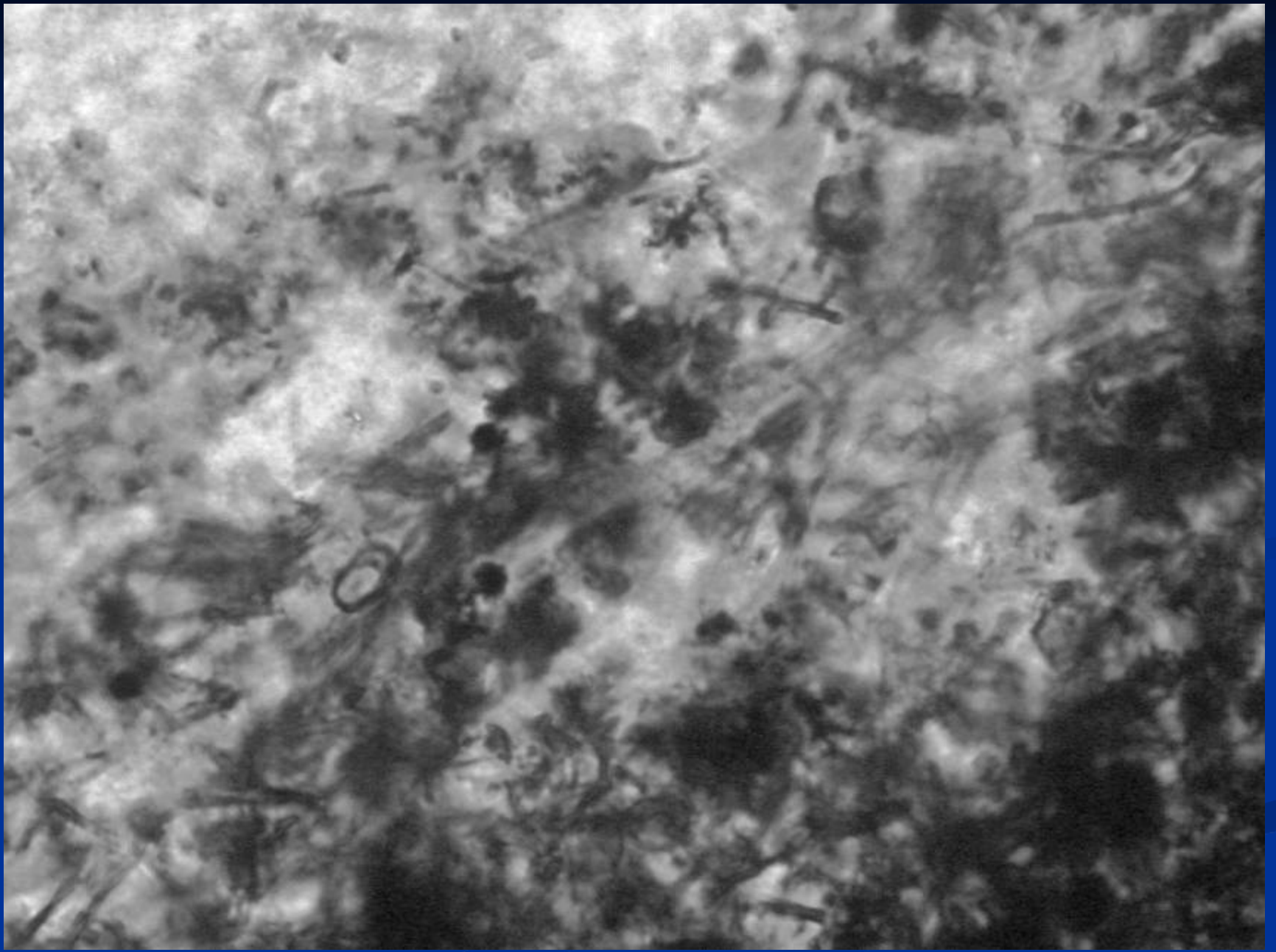
**All 9-12 um**

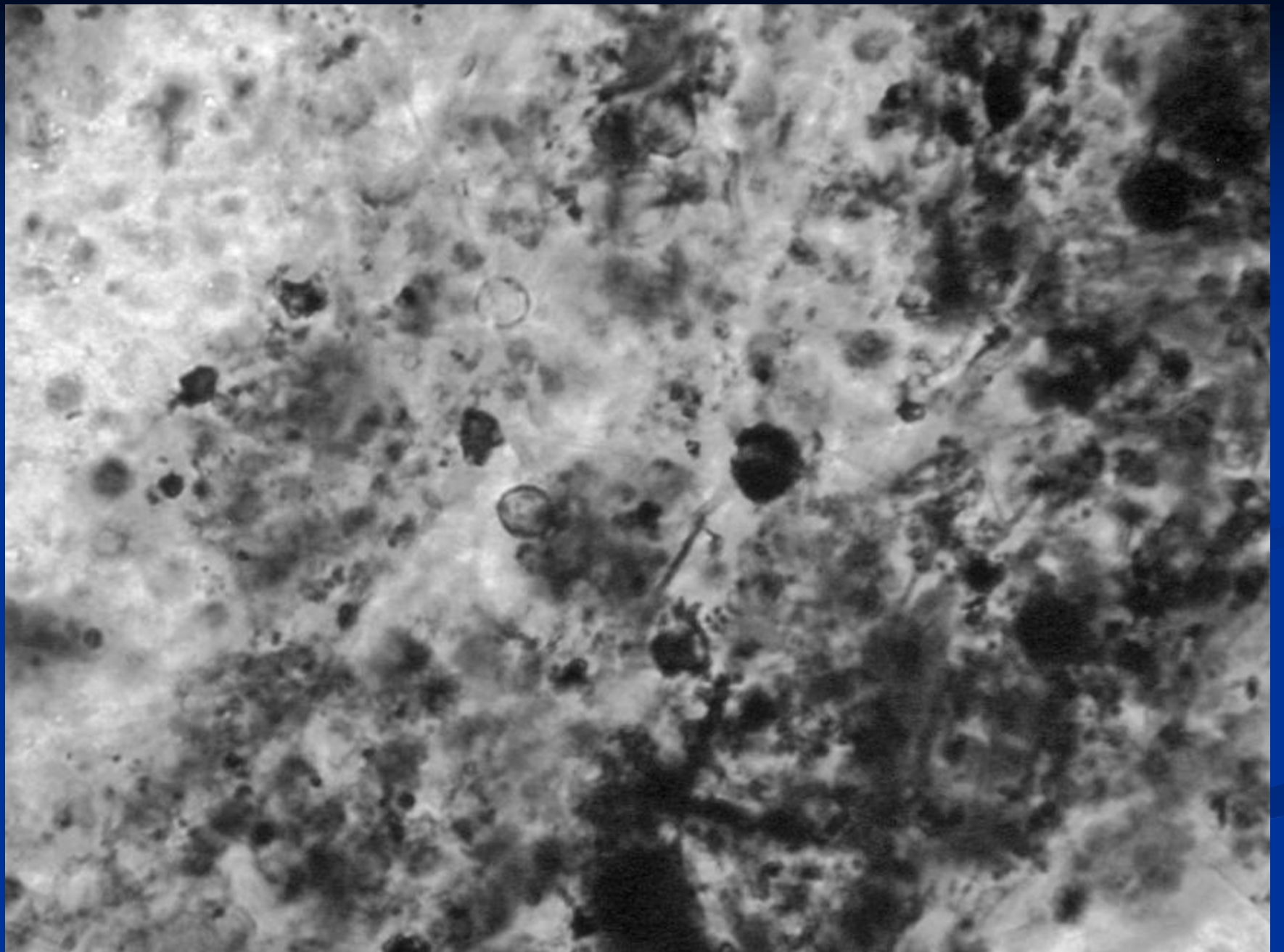


**GUNFLINT  
CYANOBACTERIA**

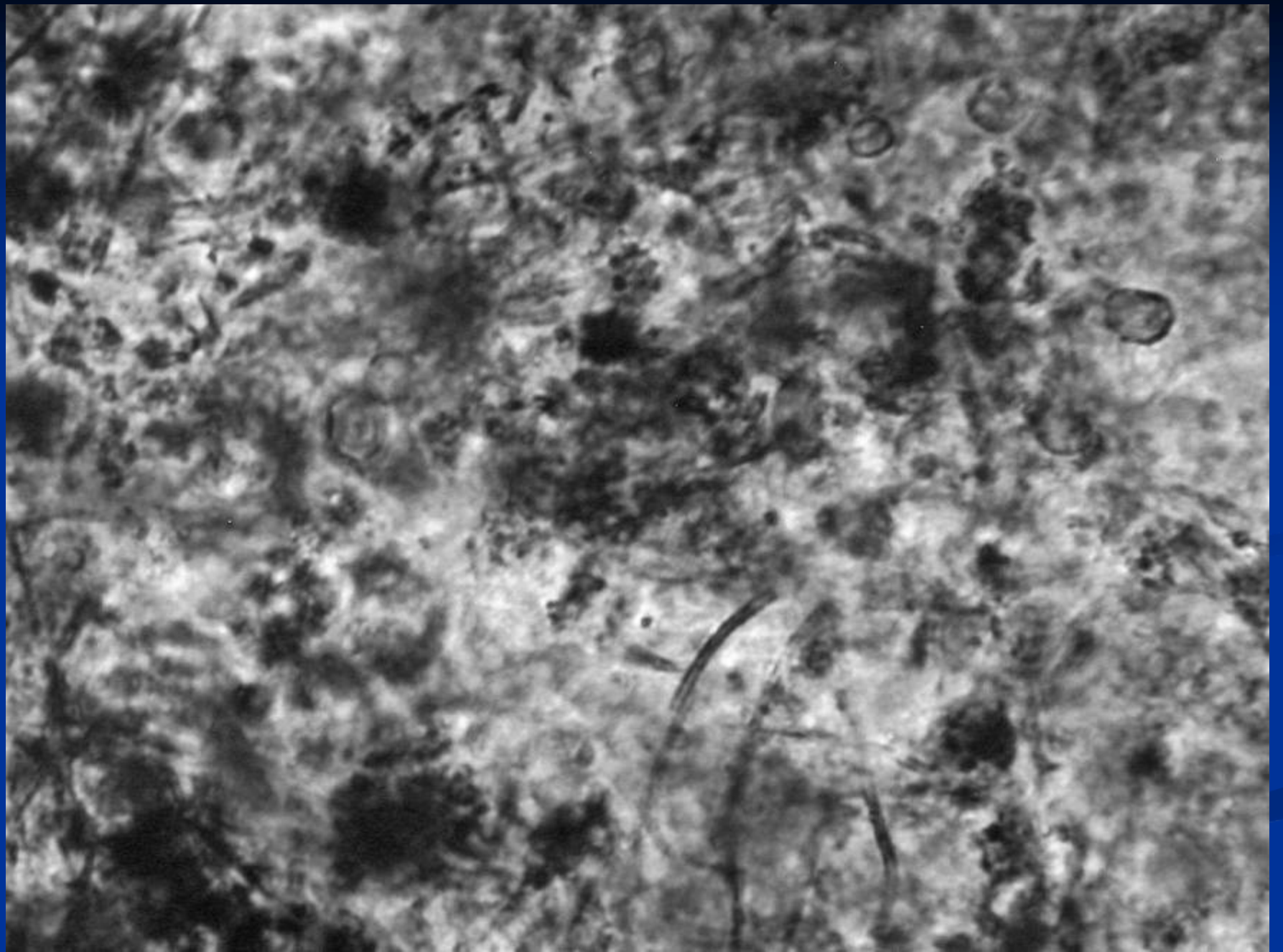


**EOSPHERA**

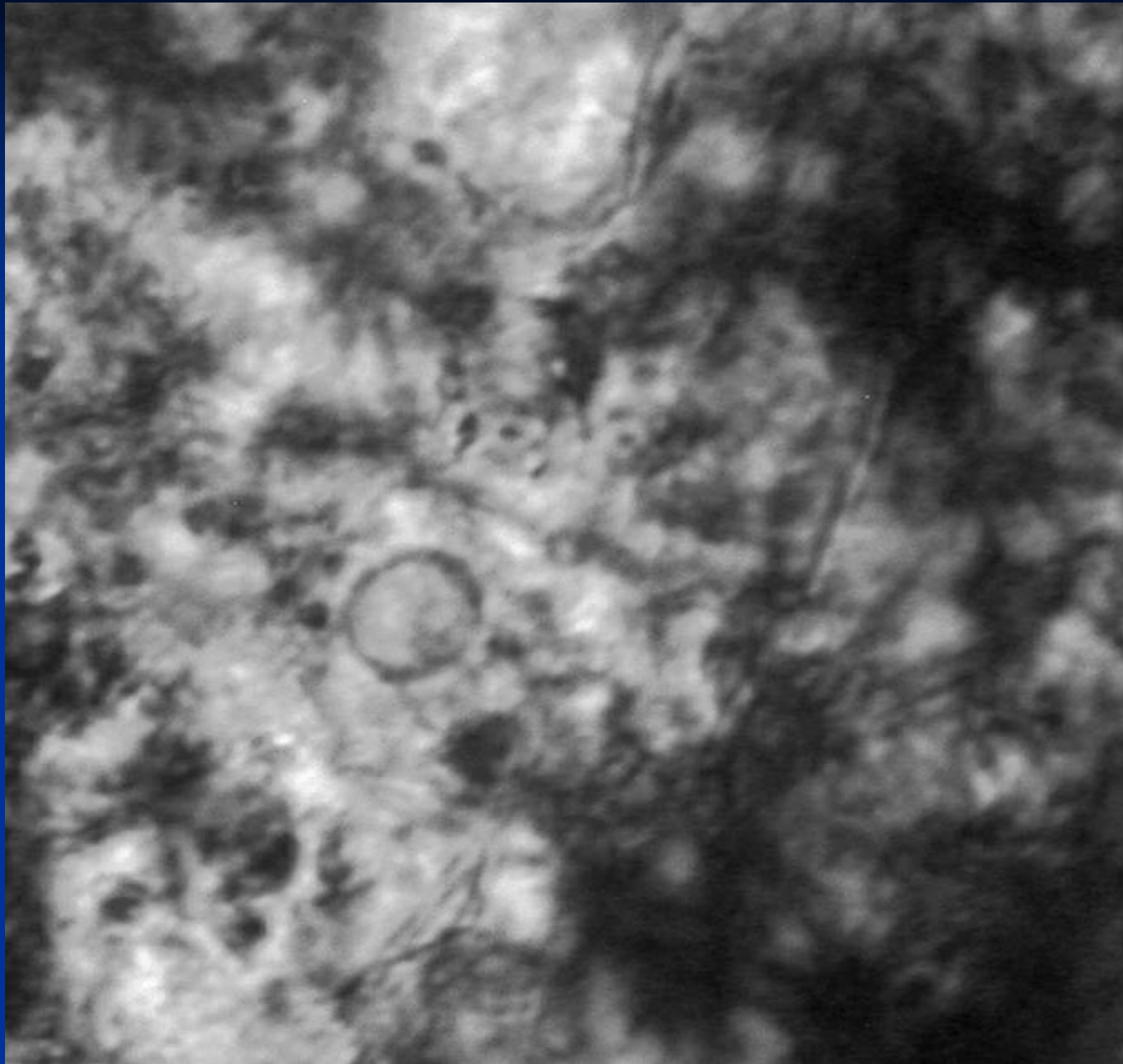


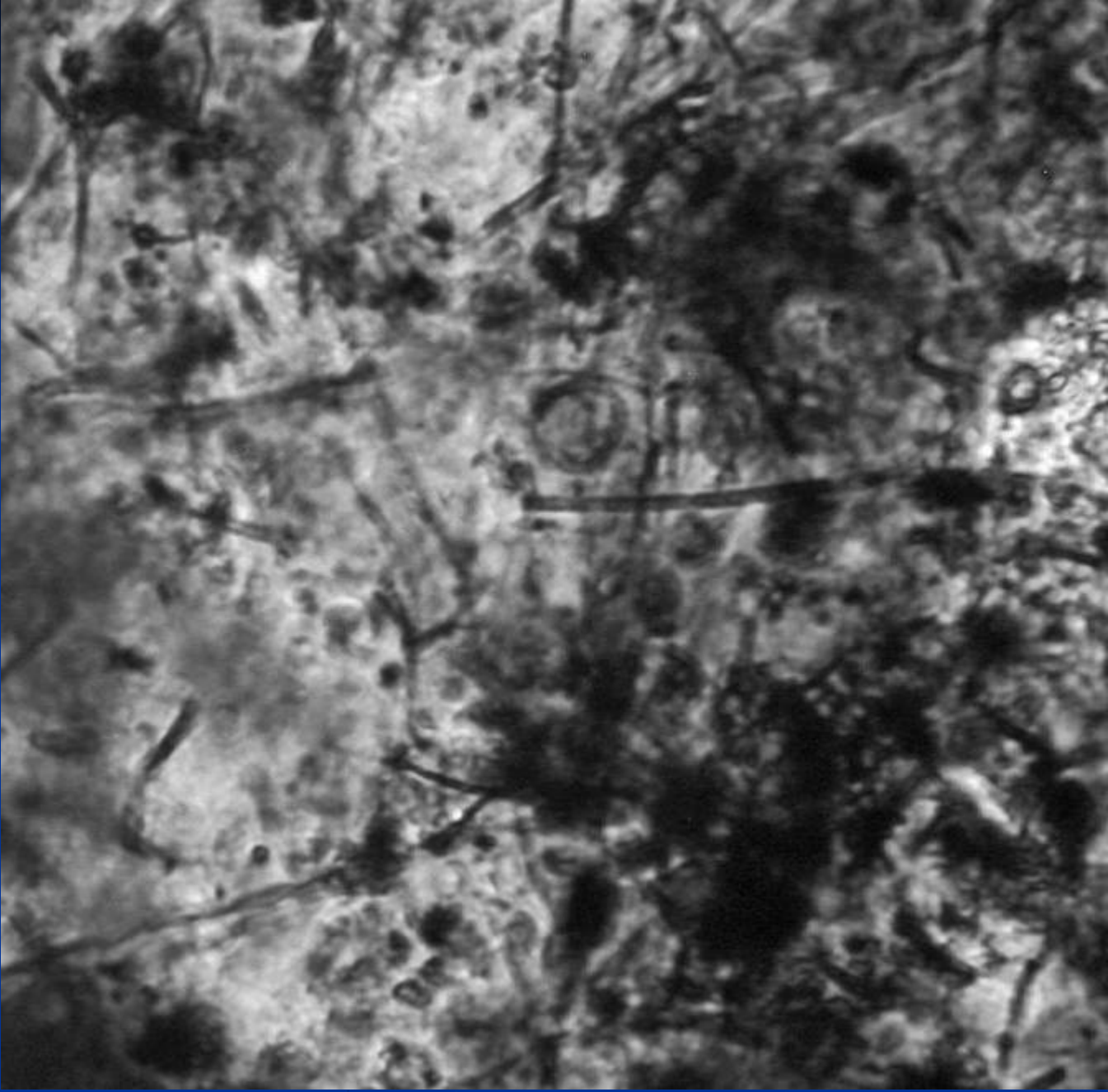


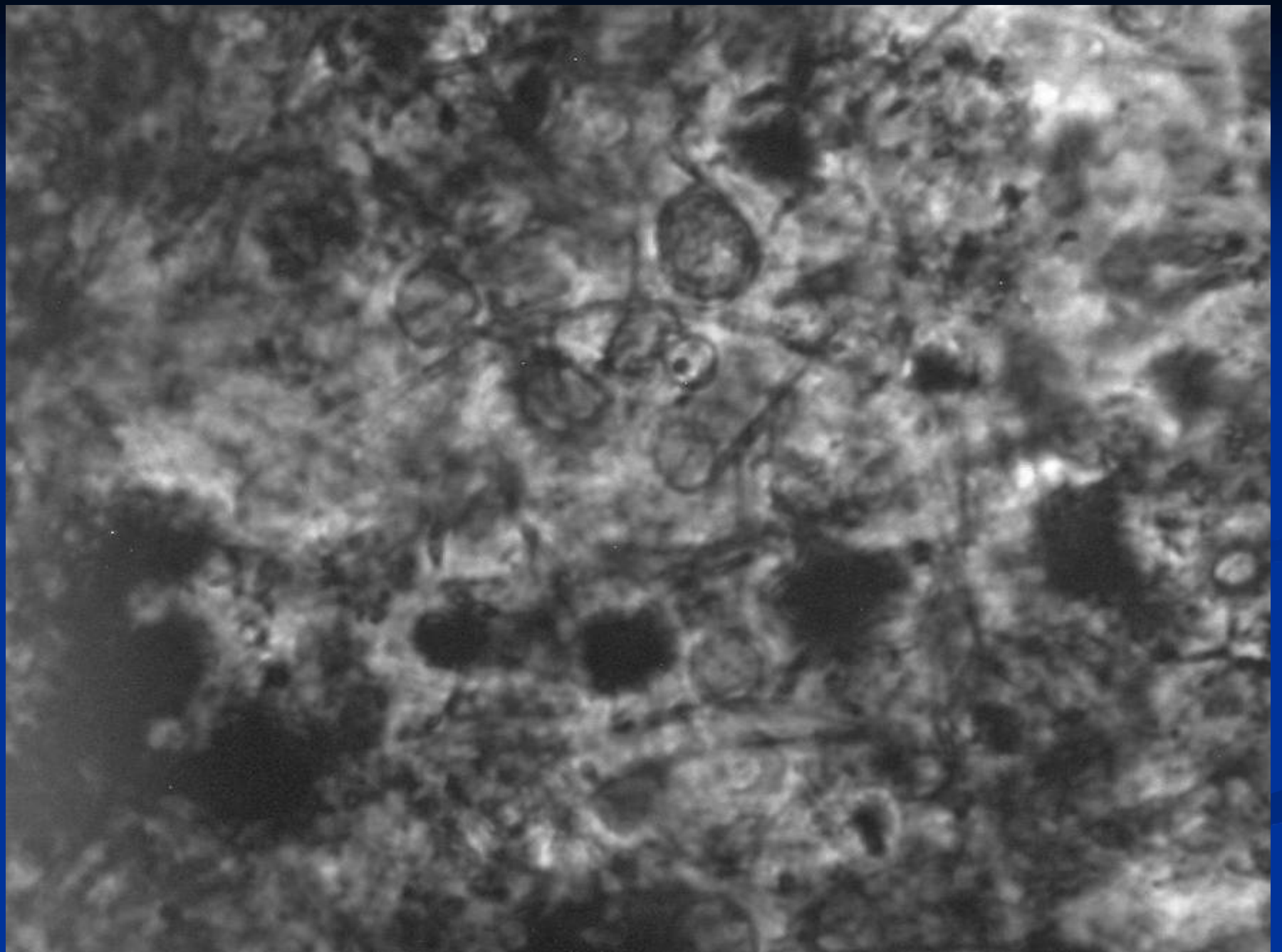


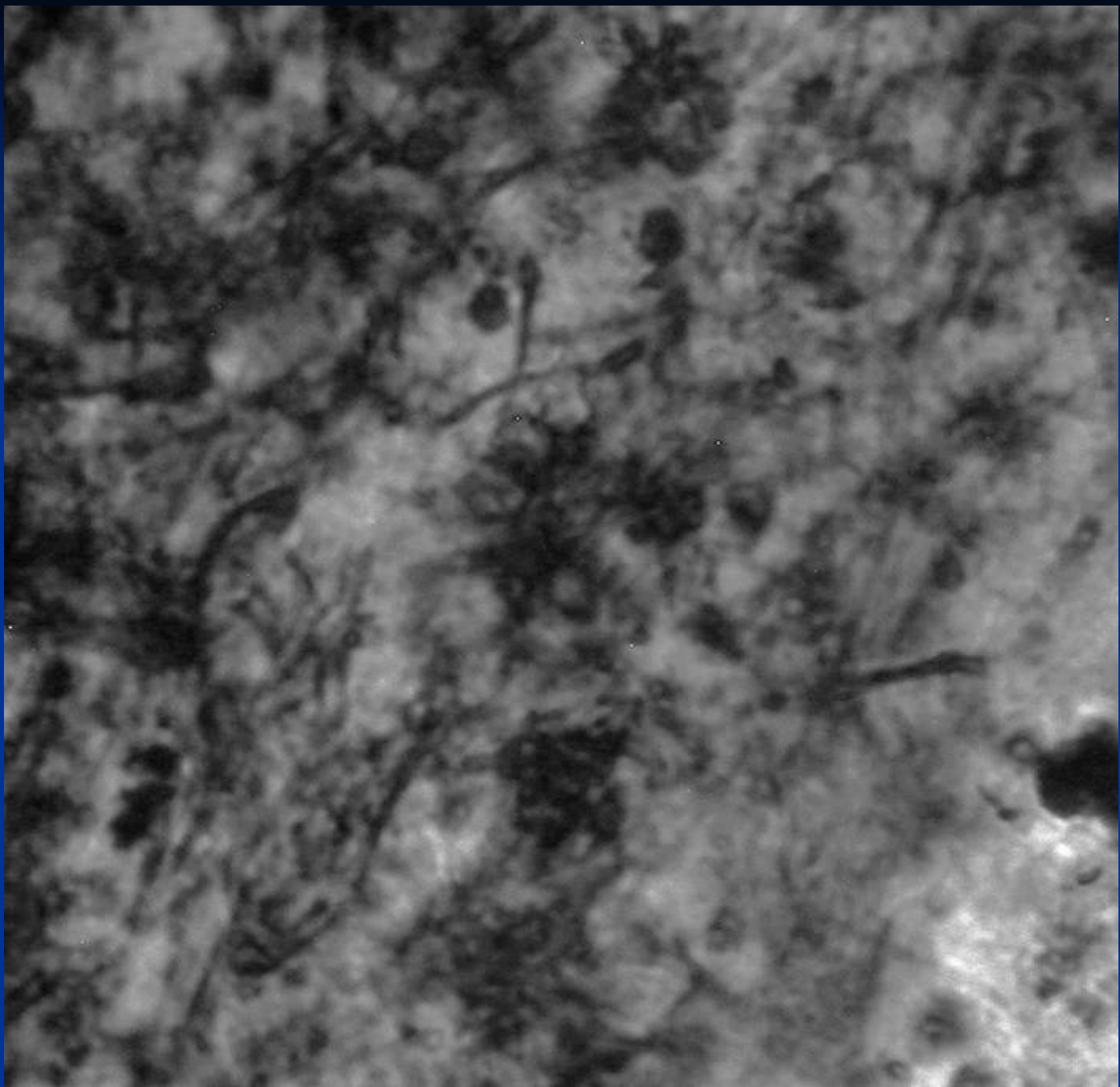




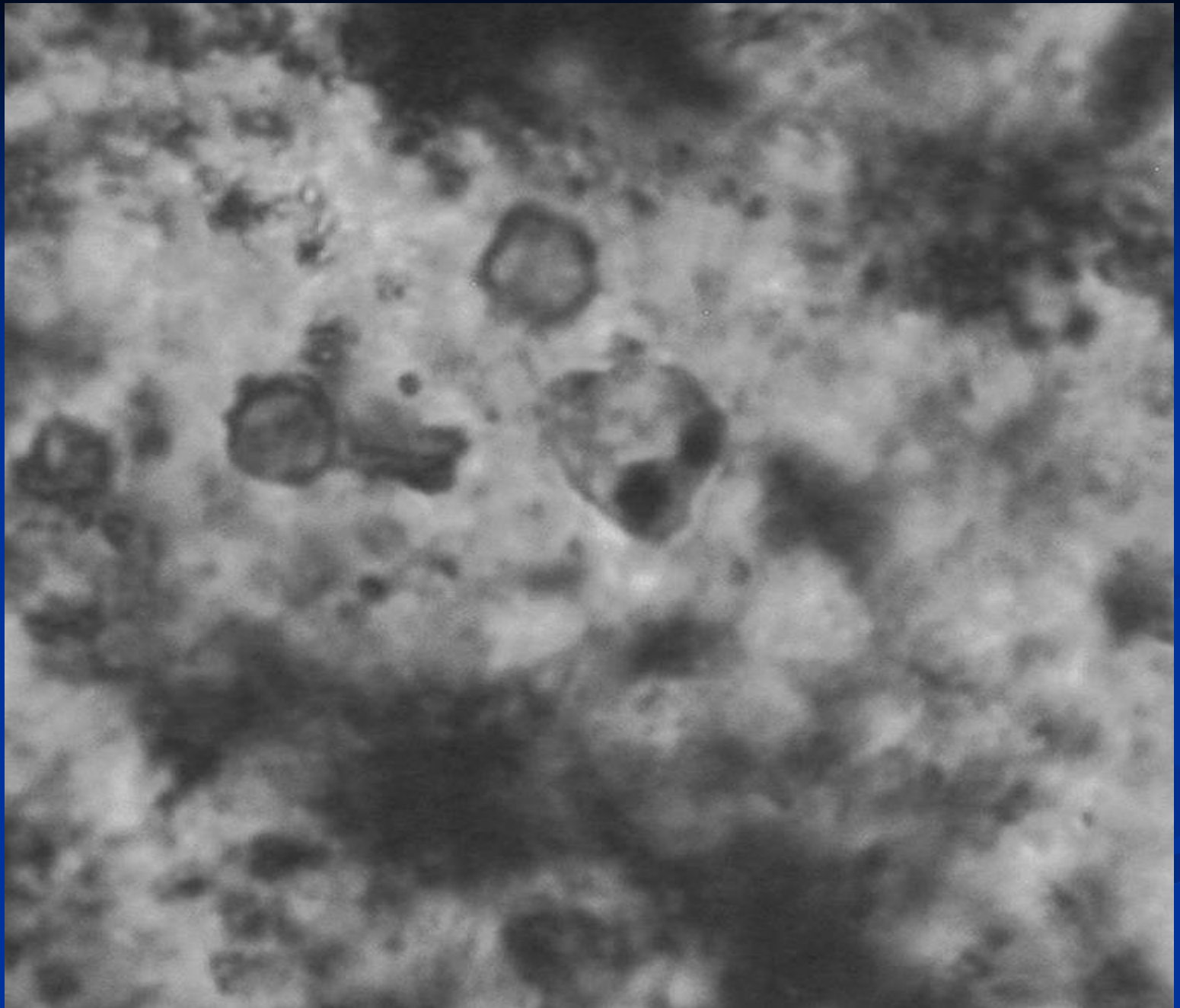


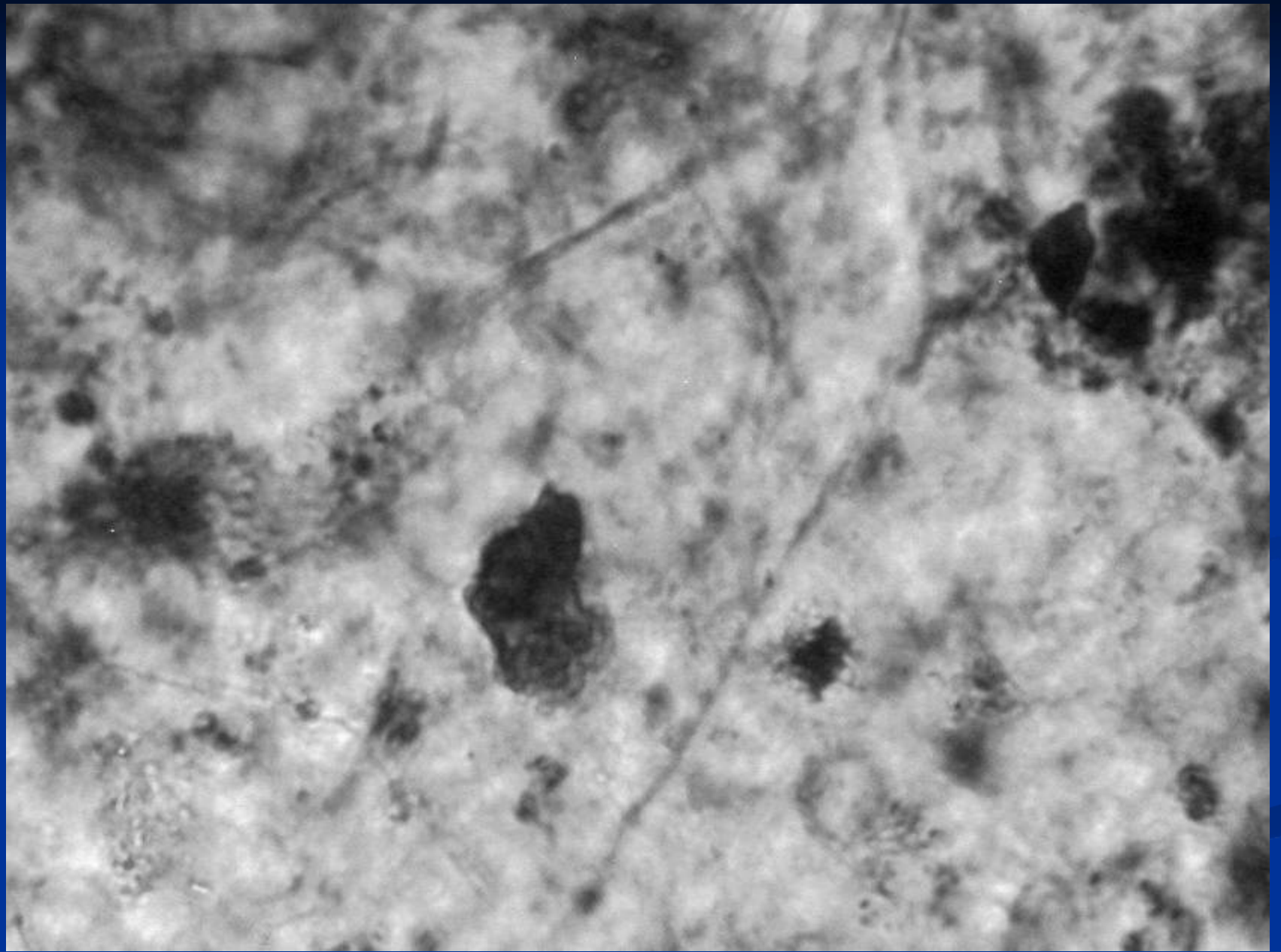













**Allentown Fm Cambro-  
Ordovician (~500 Ma)  
Stromatolite Reef and  
associated ooids, Sussex  
County, NJ**

The background of the slide is a solid blue color. In the bottom right corner, there are several thick, dark blue, wavy lines that curve and flow across the space, creating a decorative graphic element.





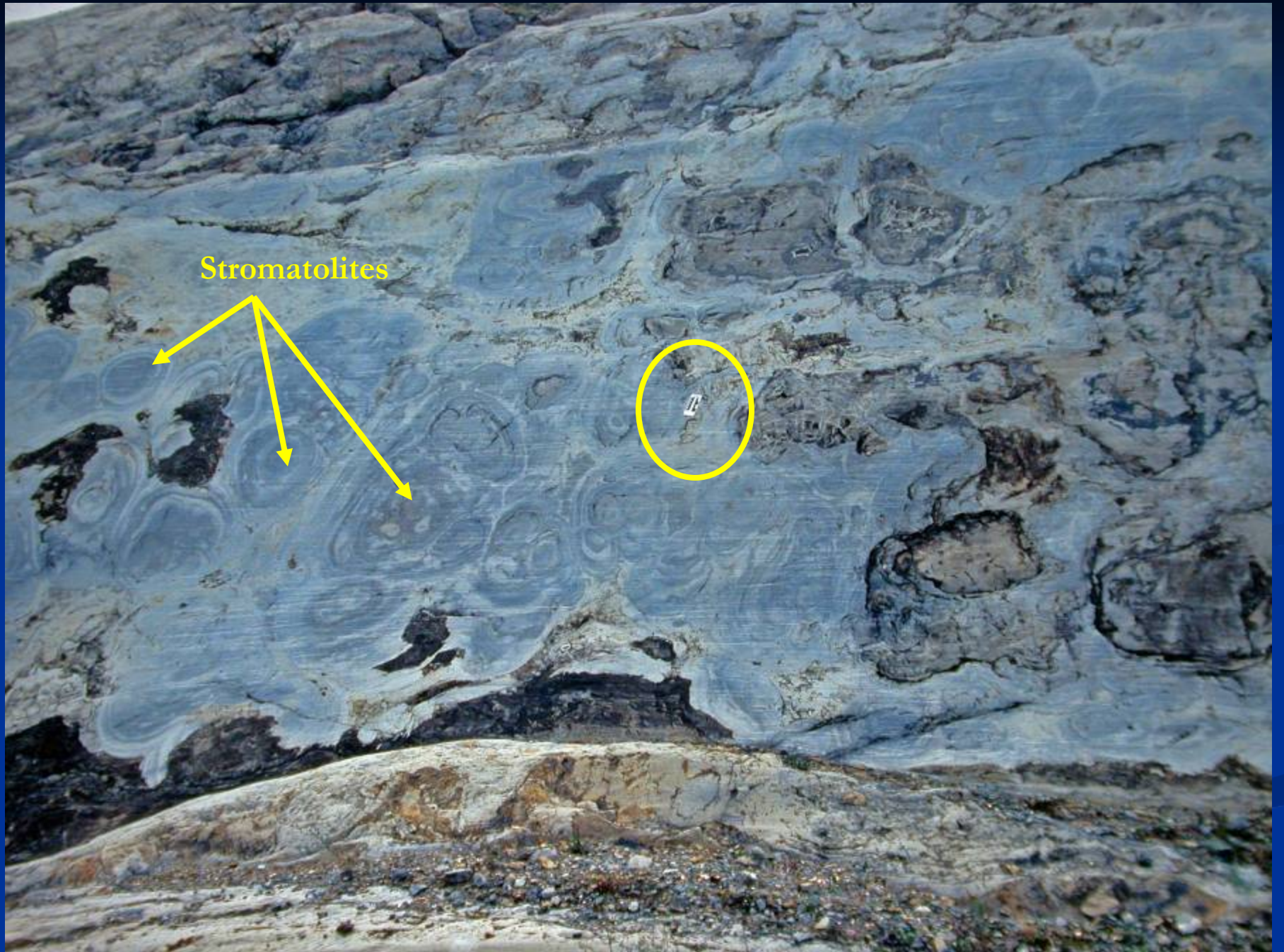




**EACH WHISPY, THIN, STROMATOLITIC ,  
CONCENTRIC LAMELLAE IS A DIURNAL DEPOSIT**

2 cm ( acetate peel )





Stromatolites



























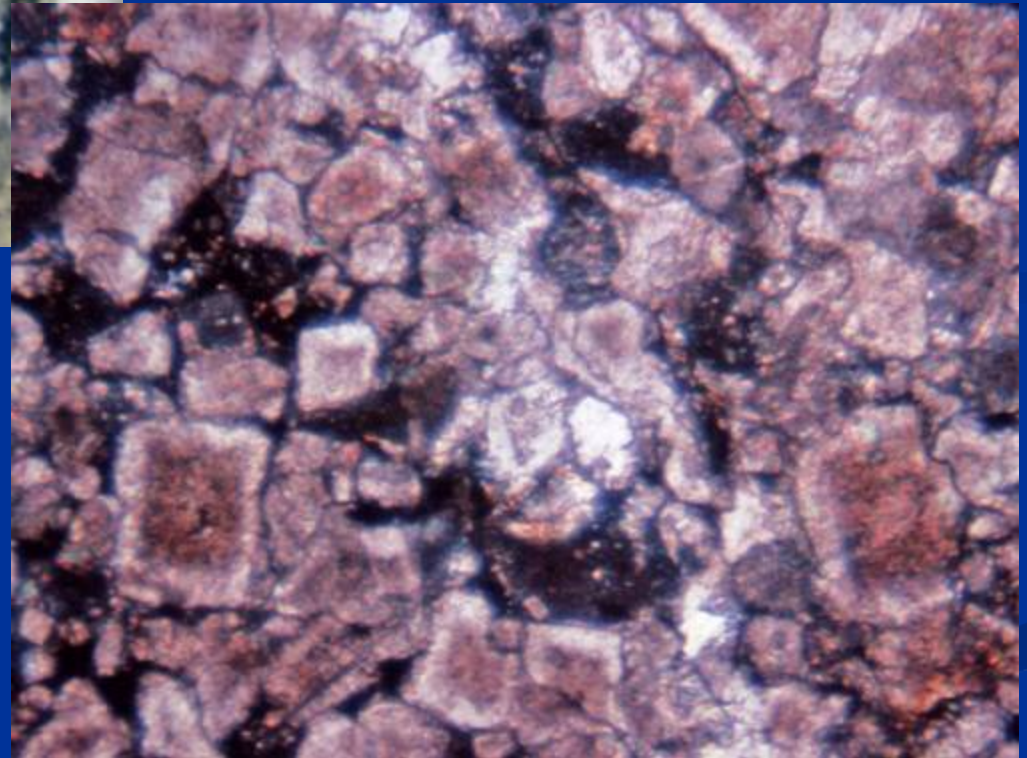
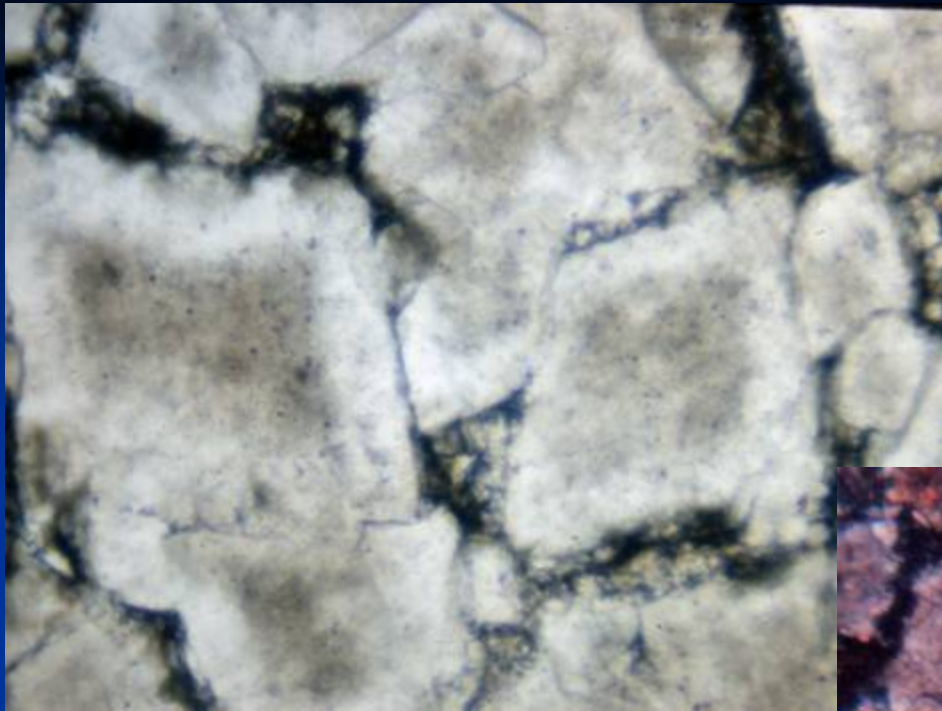








**Allentown Fm: dolomite rhombs**

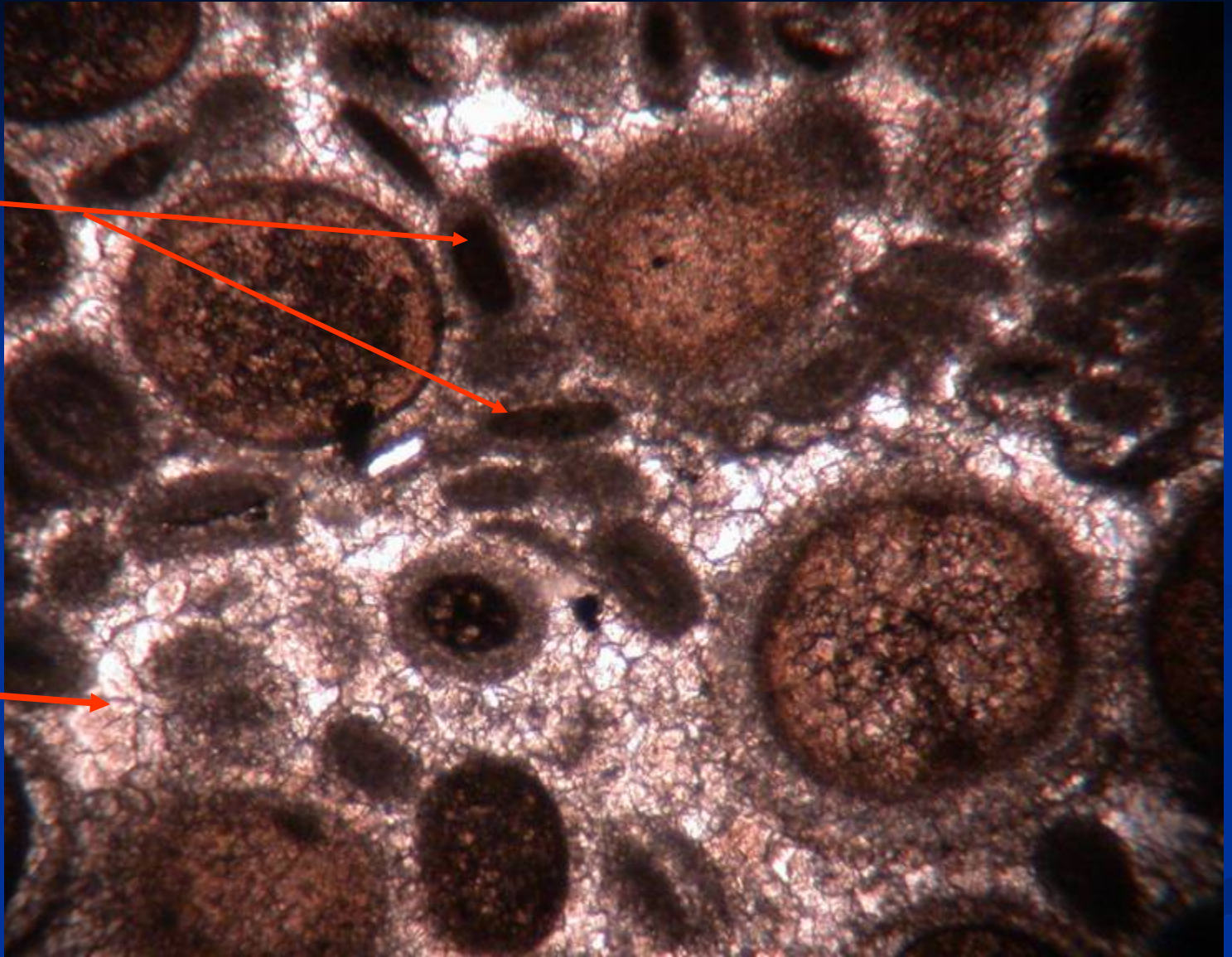






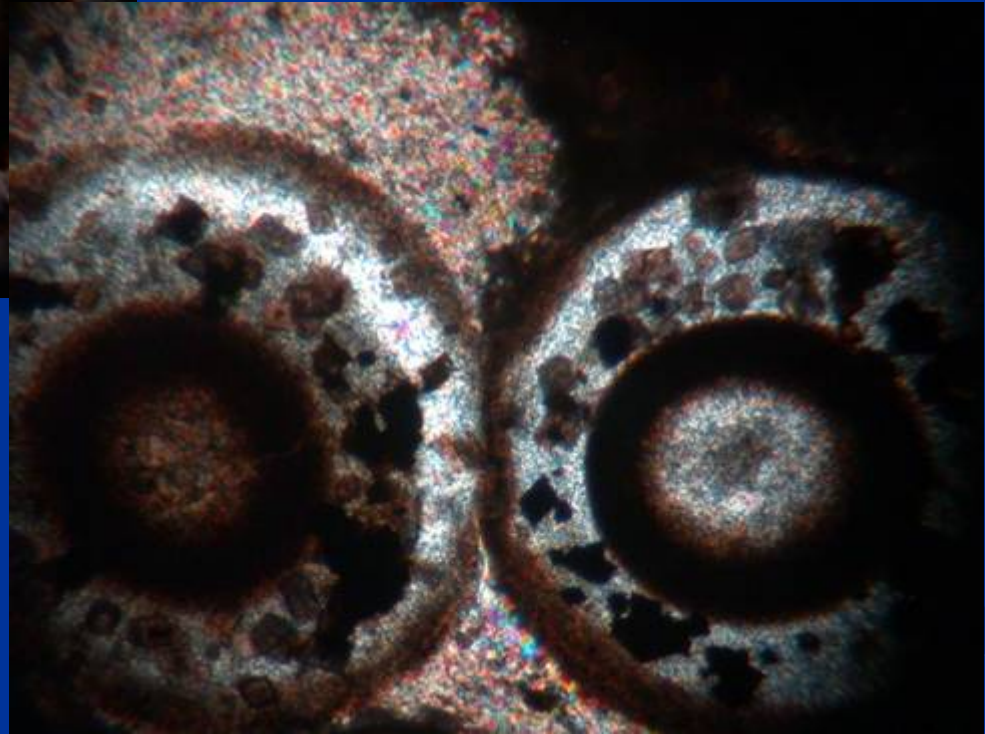
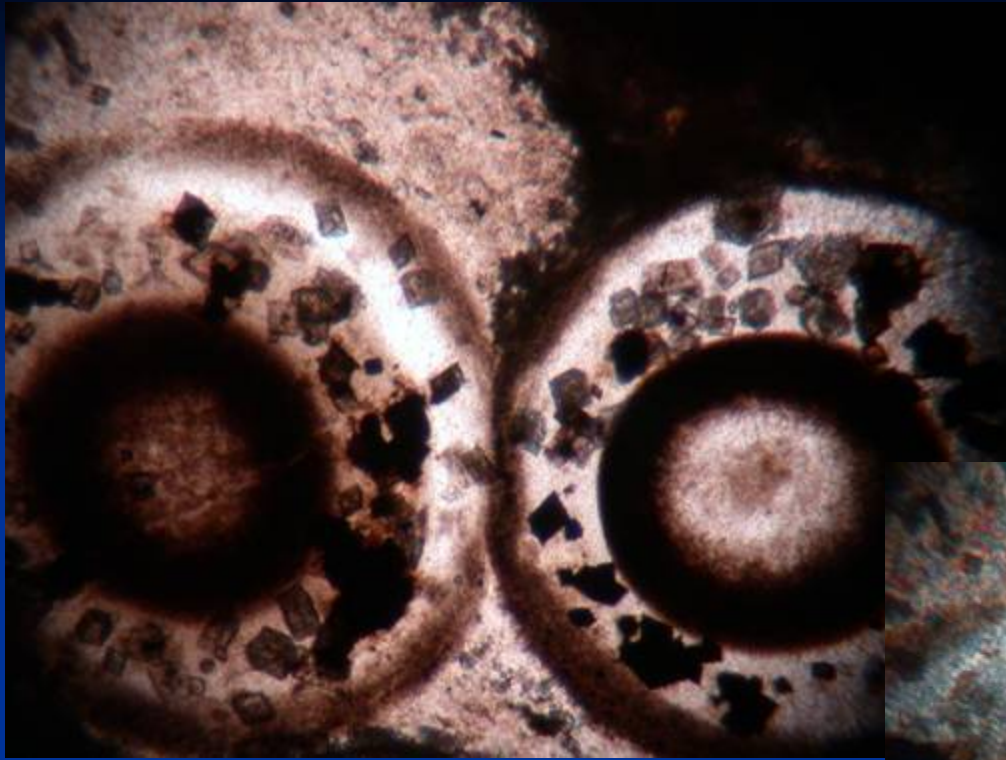
Oolites and  
fecal pellets  
or pelloids  
in Allentown  
Fm

Calcite  
matrix or  
cement

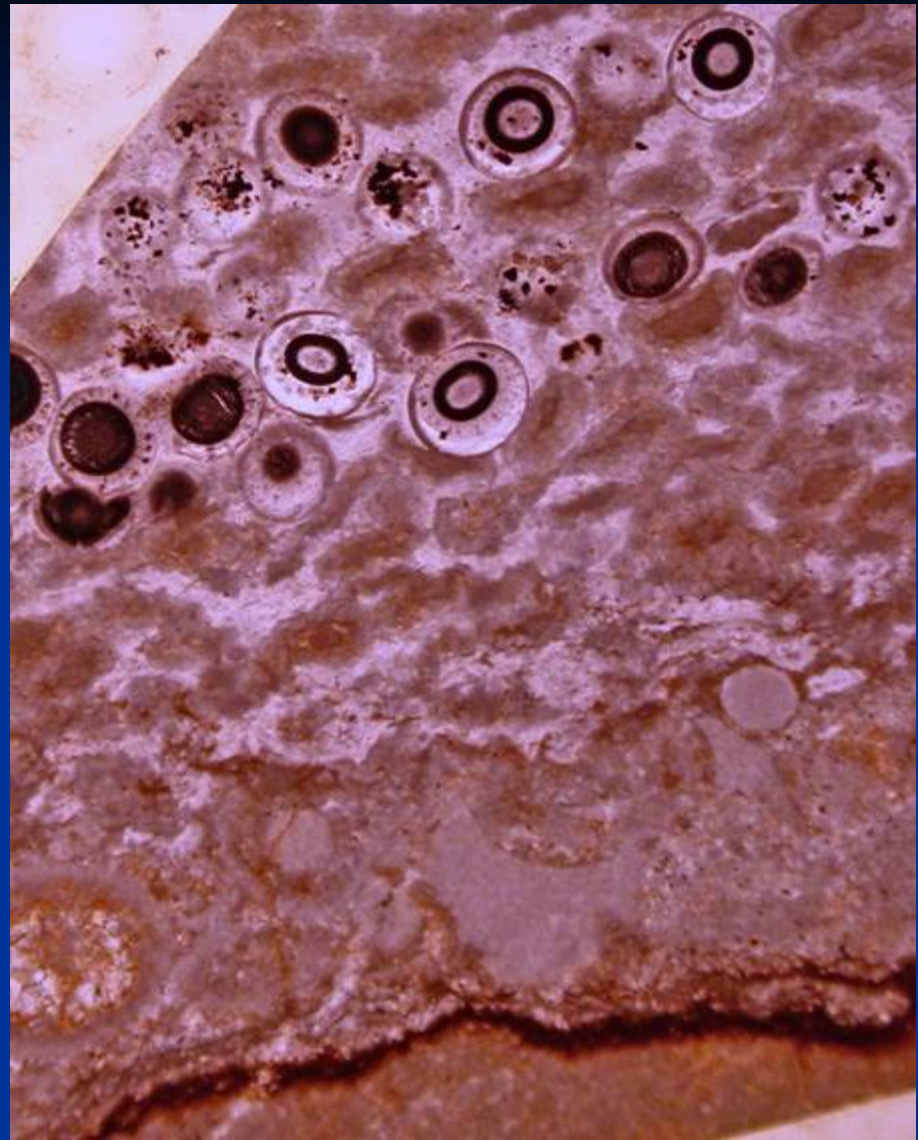
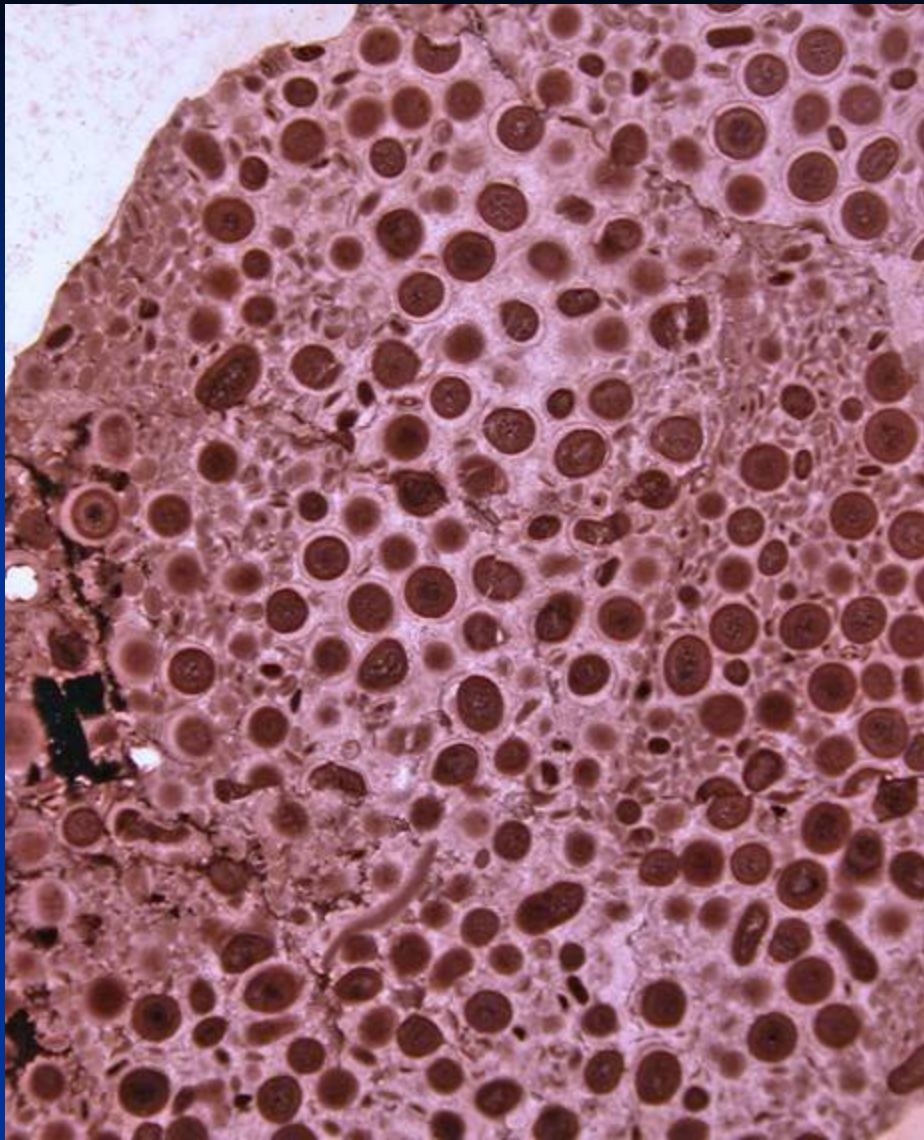


## Oolites in Allentown Fm

Note dolomite rhombs in oolite







**Oolites in Allentown Fm**



Secondary dolomite  
rhombs replaced with  
Pyrite



Pelloids-  
microtized  
fecal debris



Oolites in Allentown Fm



