



# MICROSCOPE BASICS

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WV Environmental Training Center

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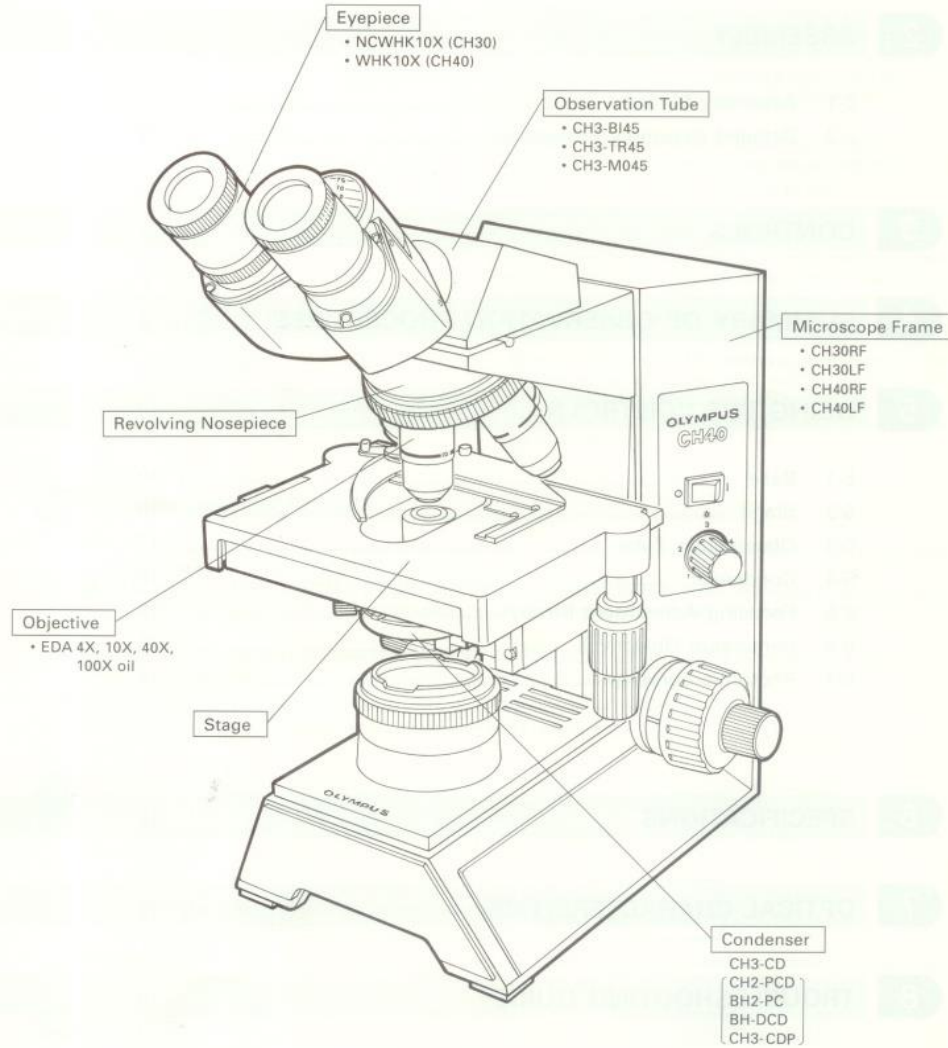
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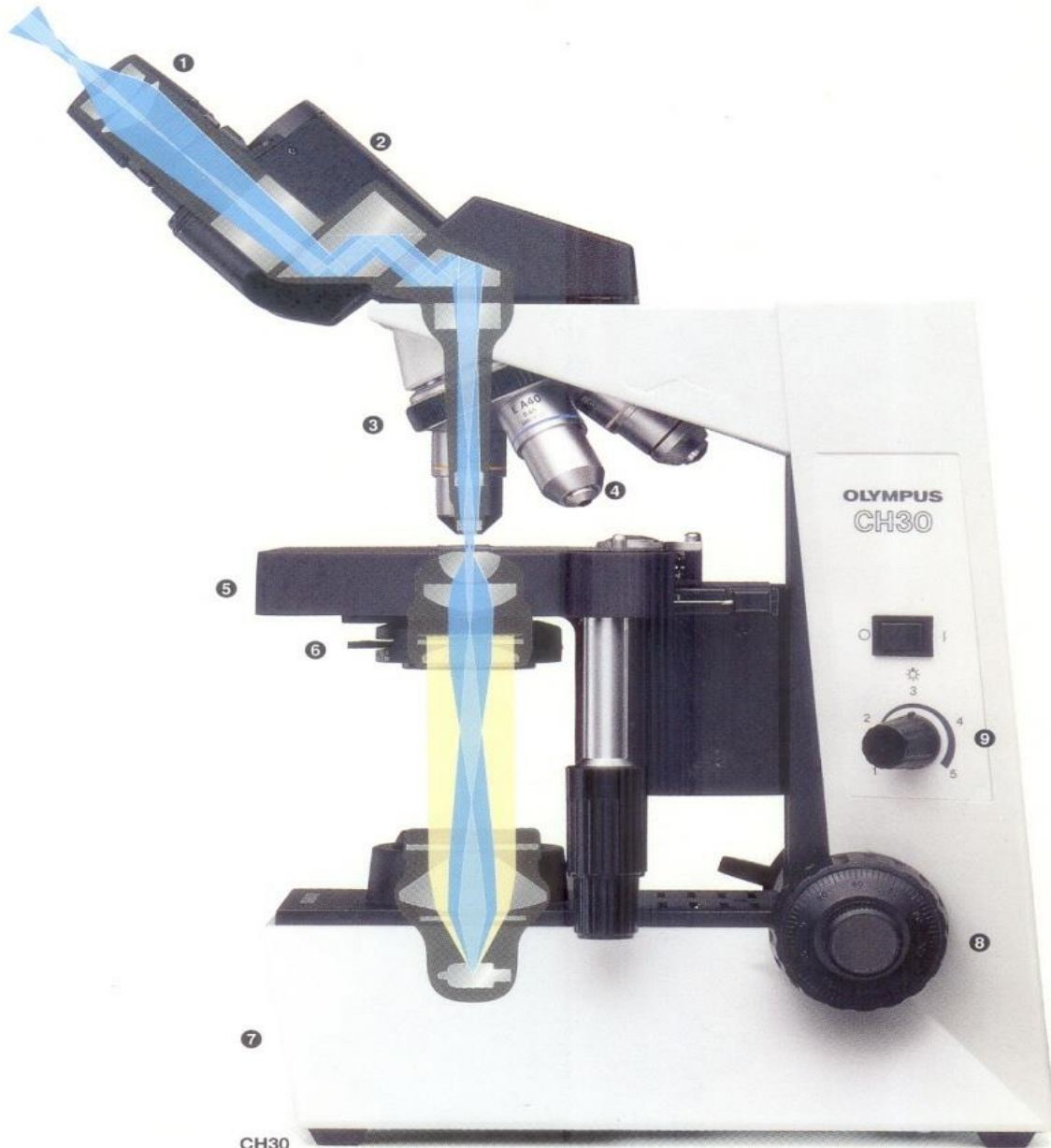


# 1 NOMENCLATURE

1

NOMENCLATURE

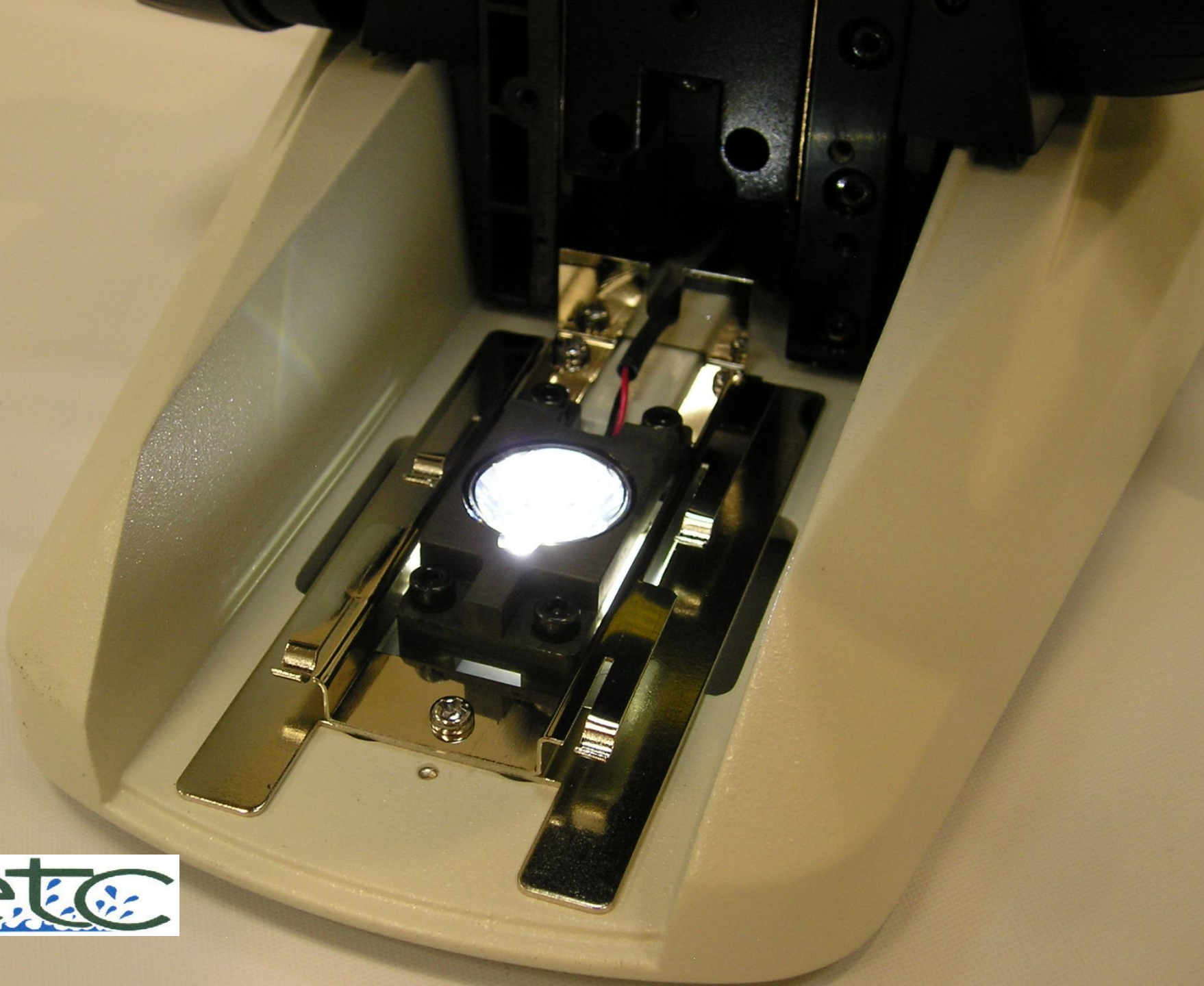




CH30

① LB Series eyepieces



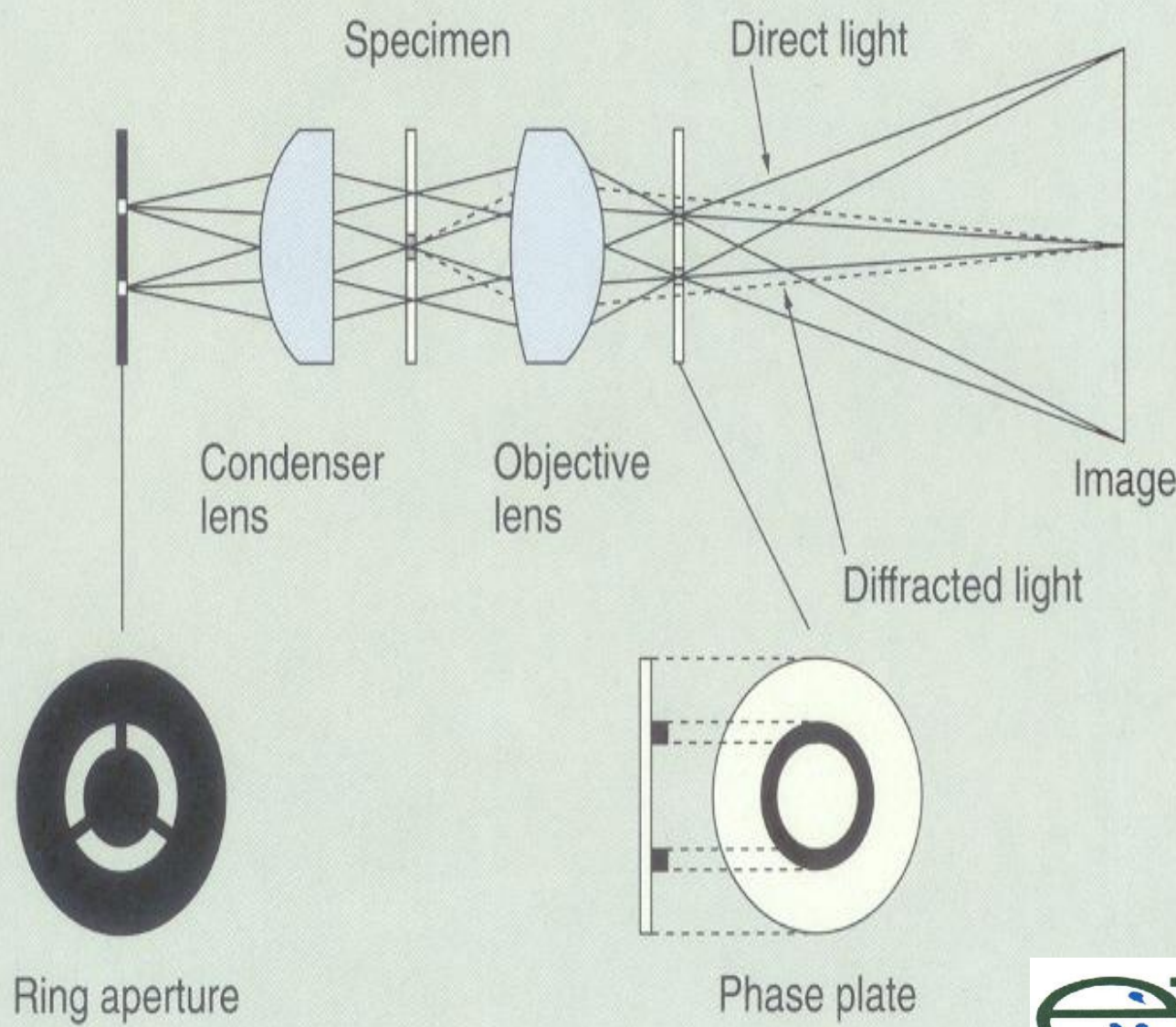


# Types of Illumination

- Bright Field (Staining)
- Phase Contrast (Live Organisms)
- Dark Field
- Diffraction Interference Contrast (DIC)
- Fluorescence (FISH)

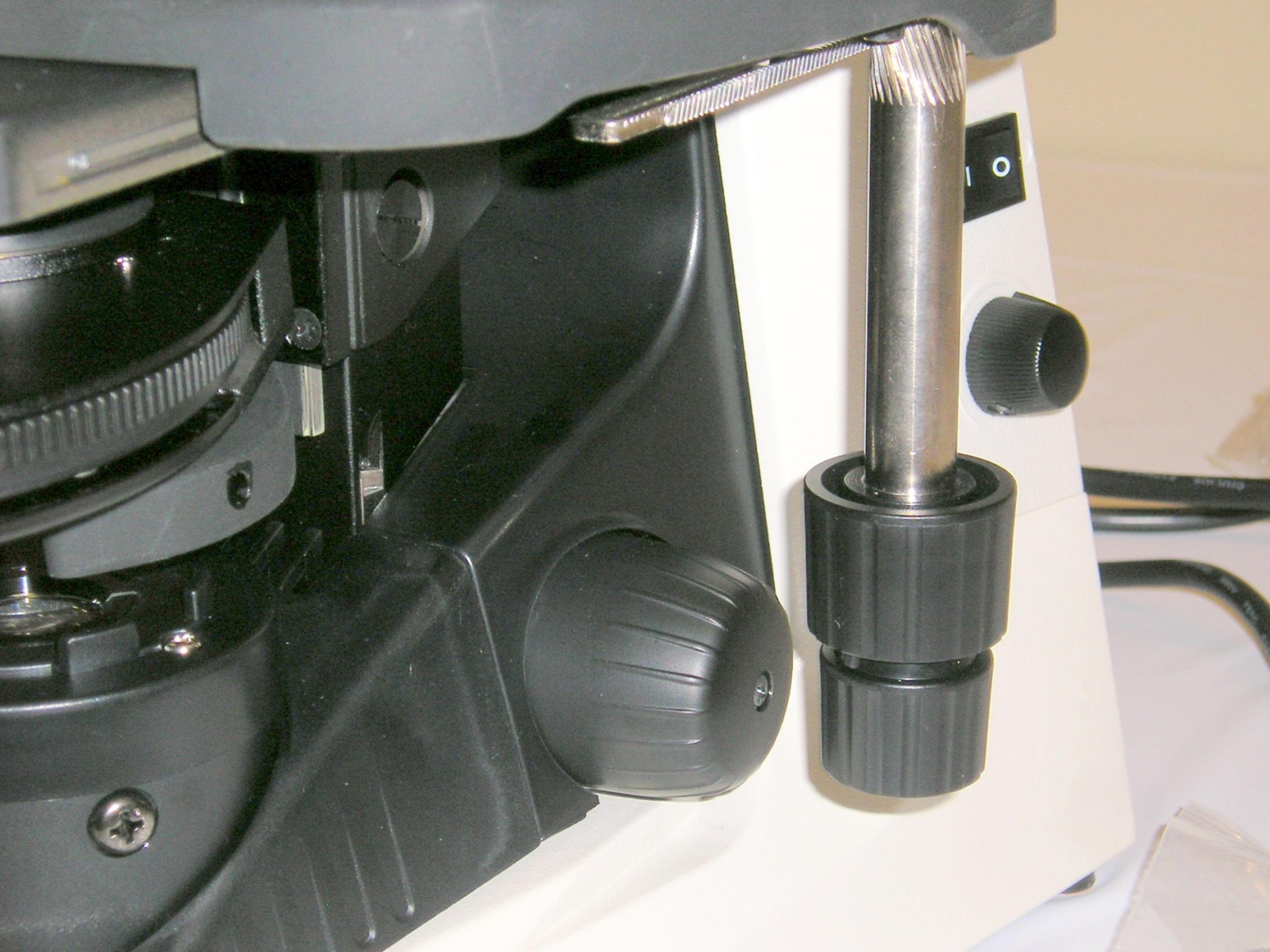


**Fig. 1. Phase Contrast Microscopy**







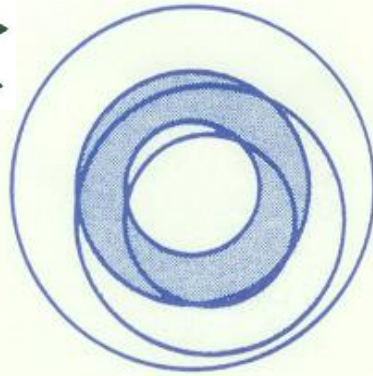




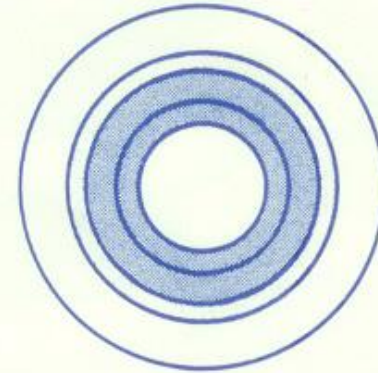
**Nikon**  
**PHASE CONTRAST**  
**0.90 DRY**  
**JAPAN**  
MADE IN JAPAN

**Ph1**





PRIOR TO ALIGNMENT



AFTER ALIGNMENT

## PHASE CONTRAST ALIGNMENT PROCEDURE FOR MODELS BHTU AND CHS

To make the phase contrast “optical conversion” function properly, the image of the light annulus must be positioned to coincide with the phase plate of the objective. Checking the correct alignment (superimposition) is accomplished with the phase centering telescope, included with your microscope. Remove the OWR® Reticle Eyepiece from the right eyepiece tube, and insert the phase centering telescope. Rotate the nosepiece to place the 10X objective into the viewing position; then rotate the condenser turret to the matching 10X position.



etc



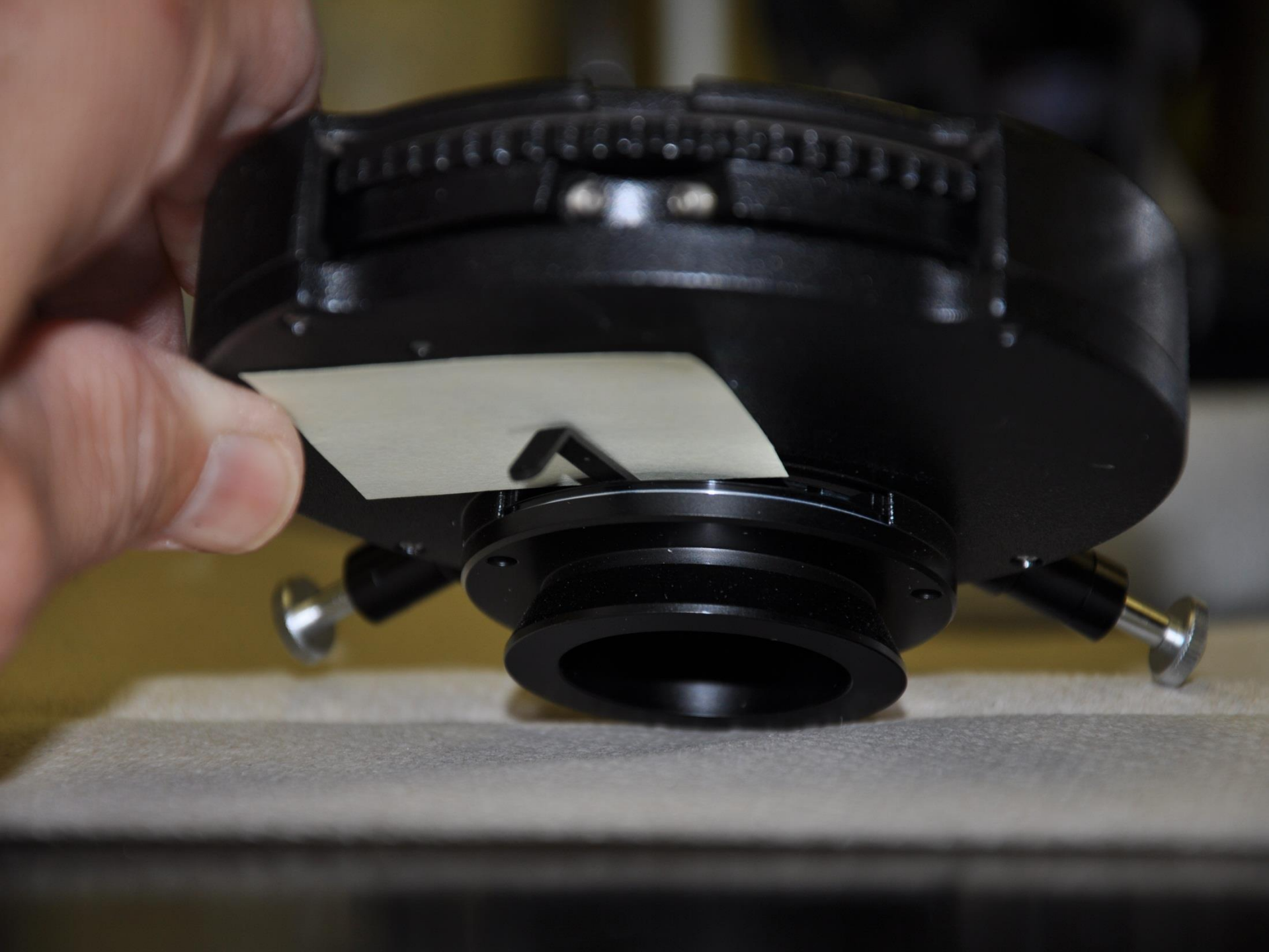




PHASE CONTRAST

OLYMPUS  
JAPAN

40







MBL73100  
115602





PHASE CONTRAST  
0.90 DRY  
JAPAN  
MADE IN JAPAN

Ph1



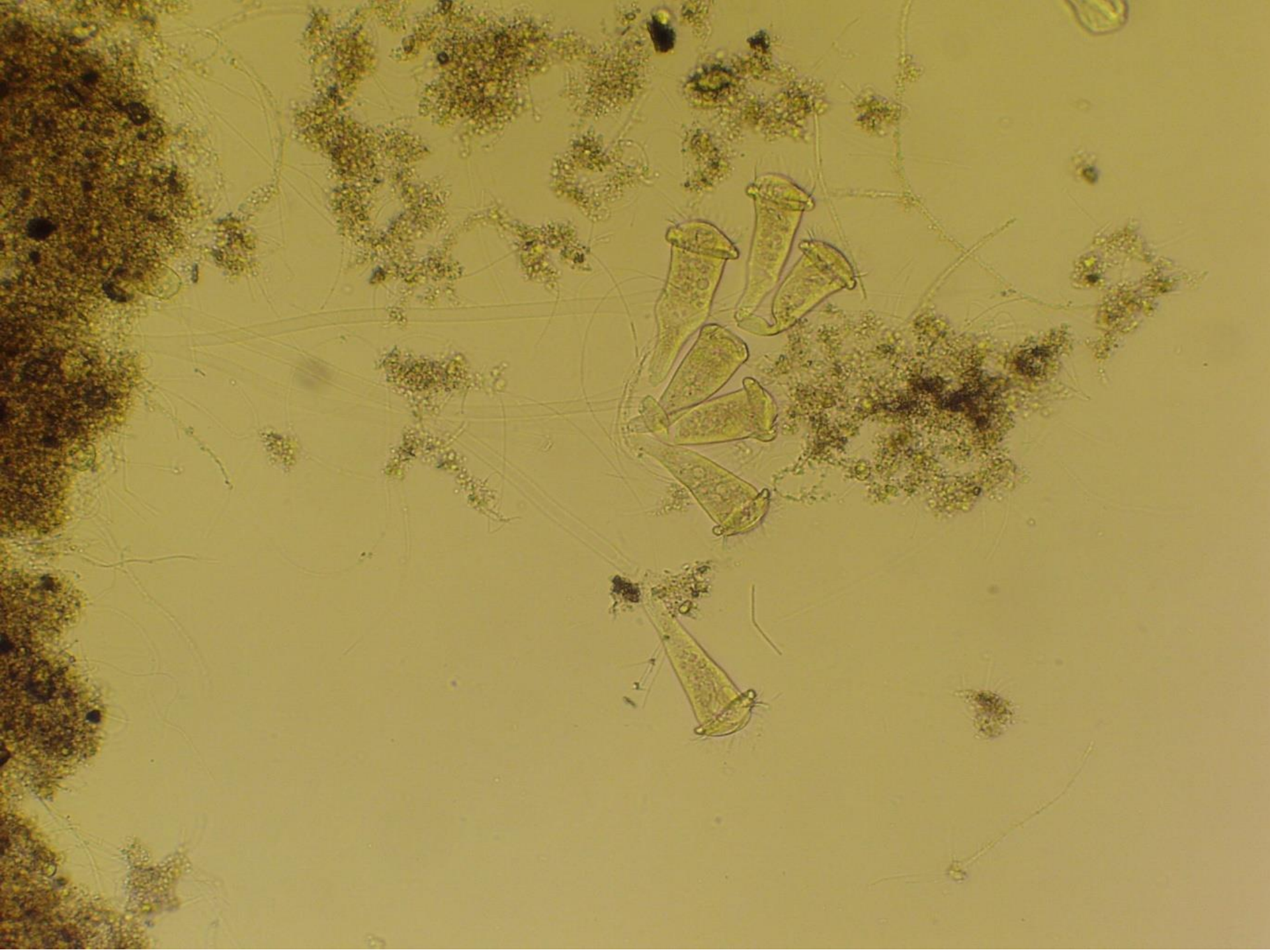
**Nikon**  
ECLIPSE  
E200

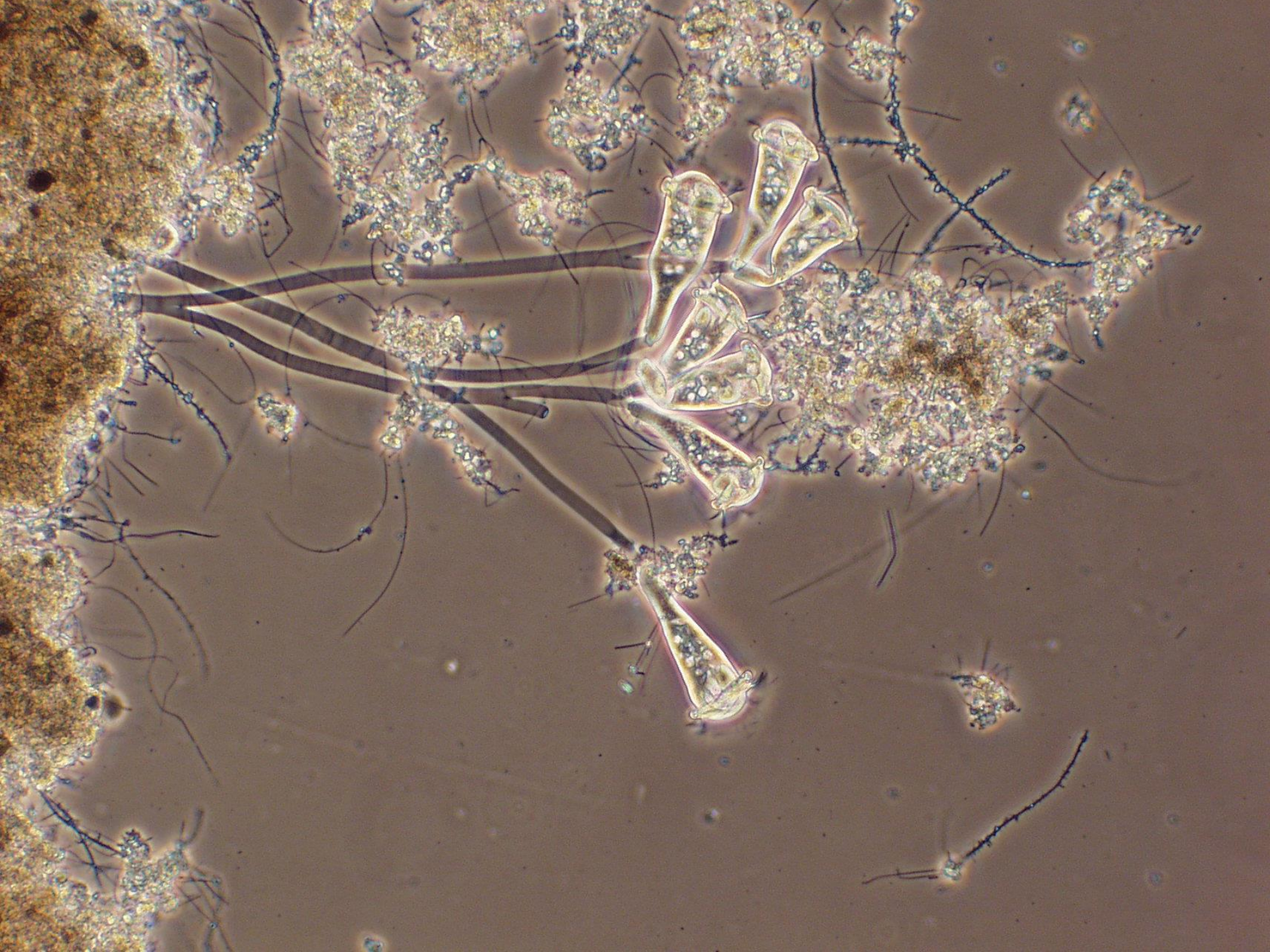
*Nikon*  
**PHASE CONTRAST**  
**0.90 DRY**  
**JAPAN**

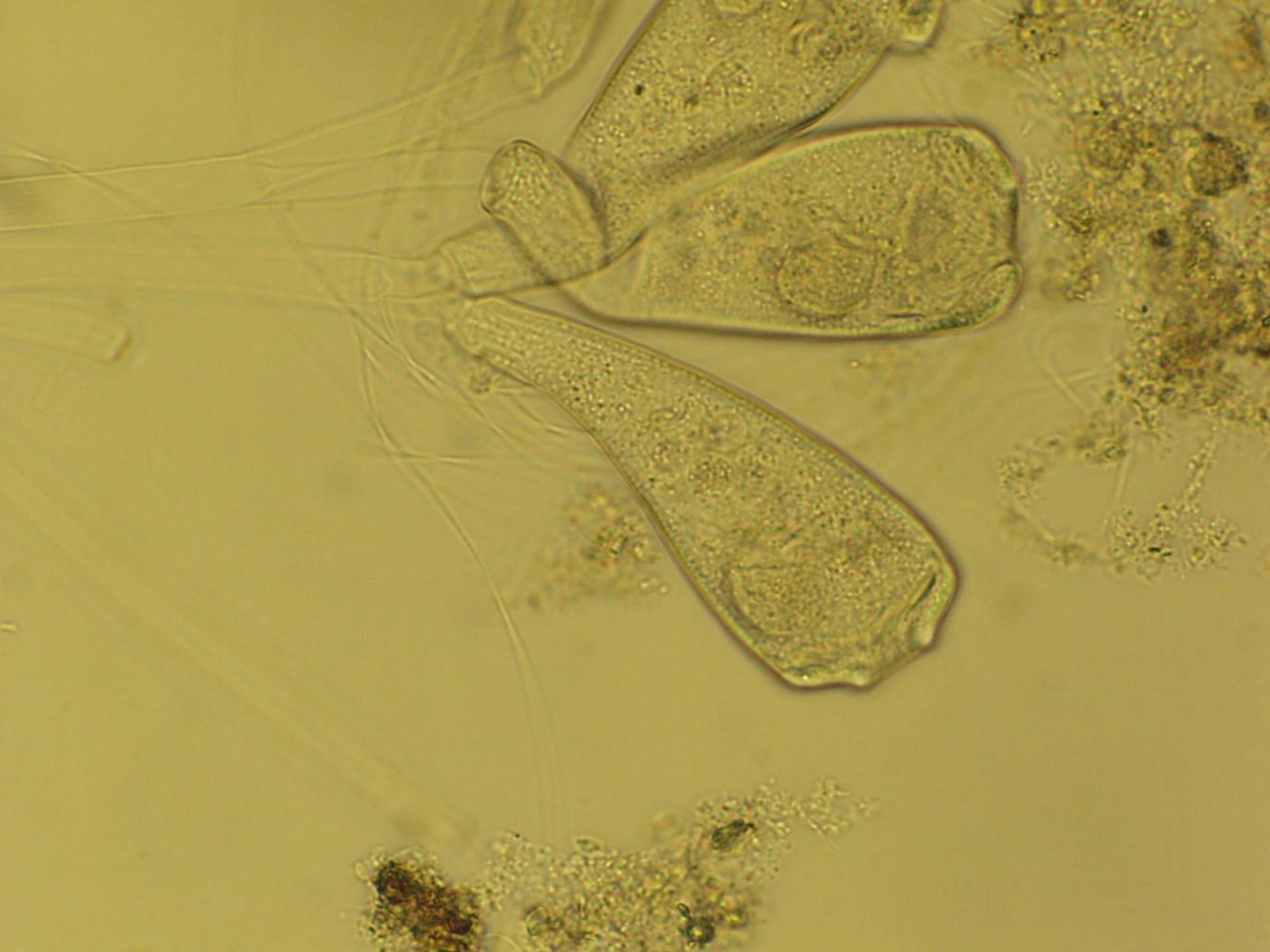
MADE IN JAPAN

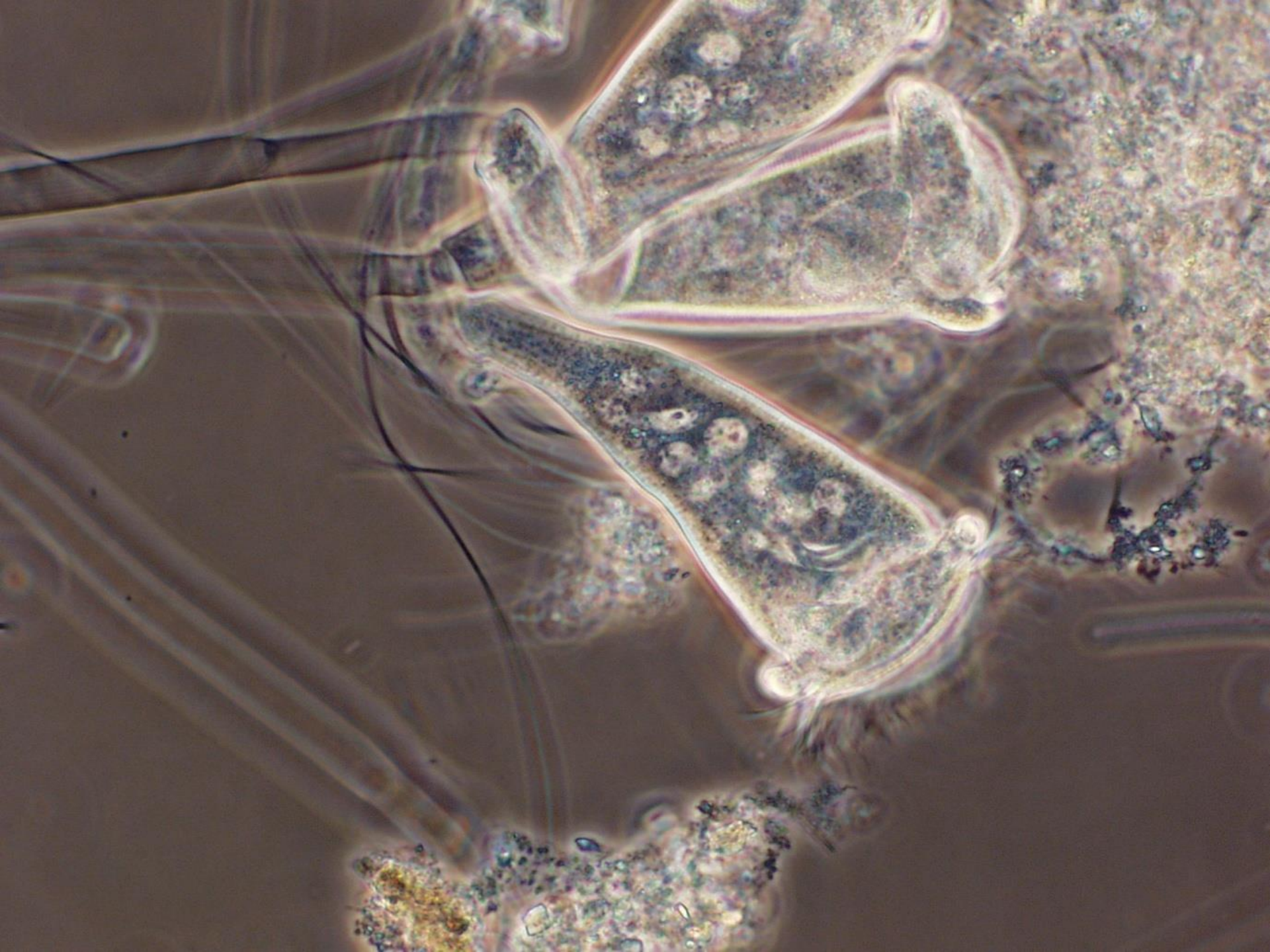
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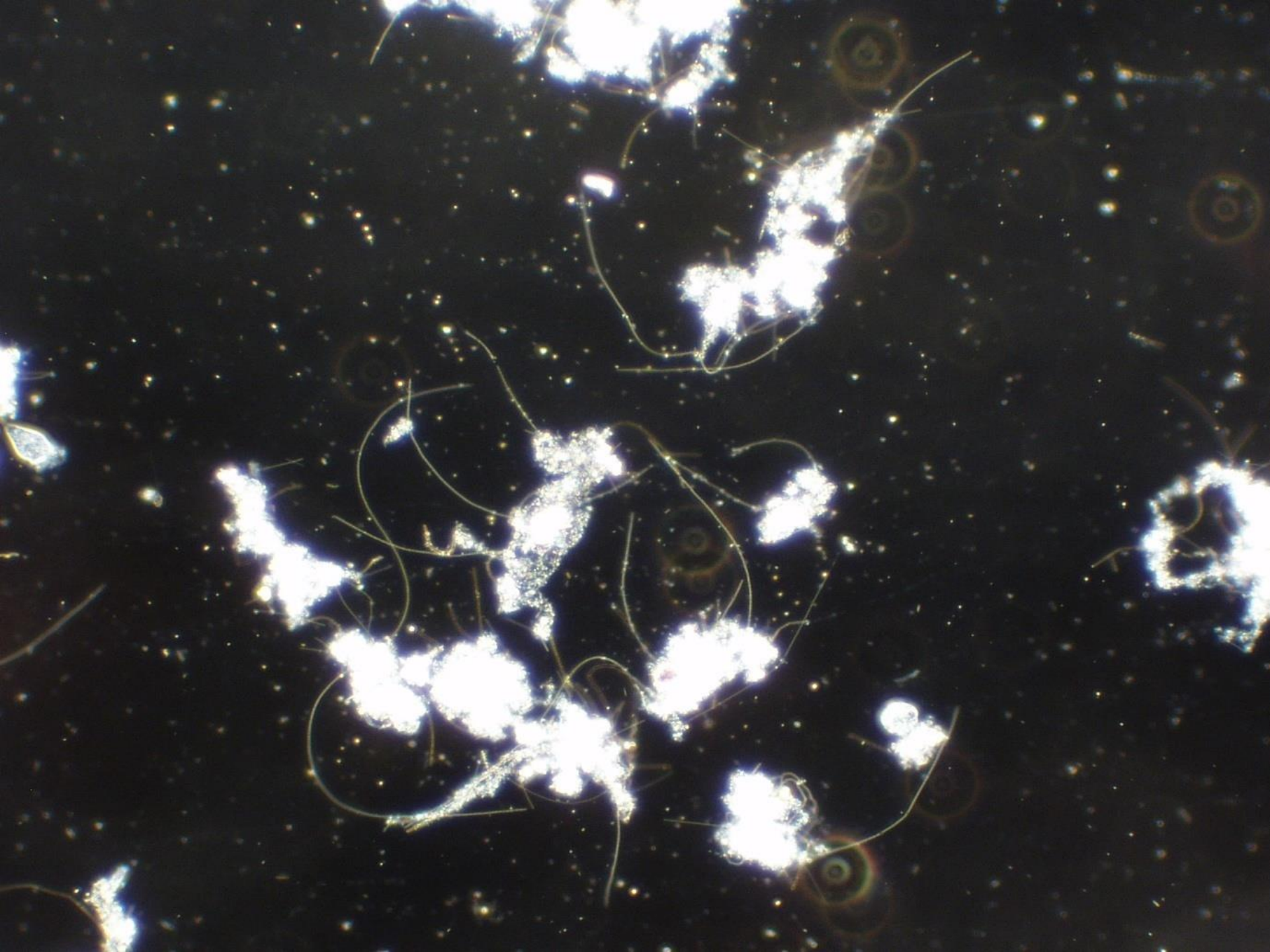


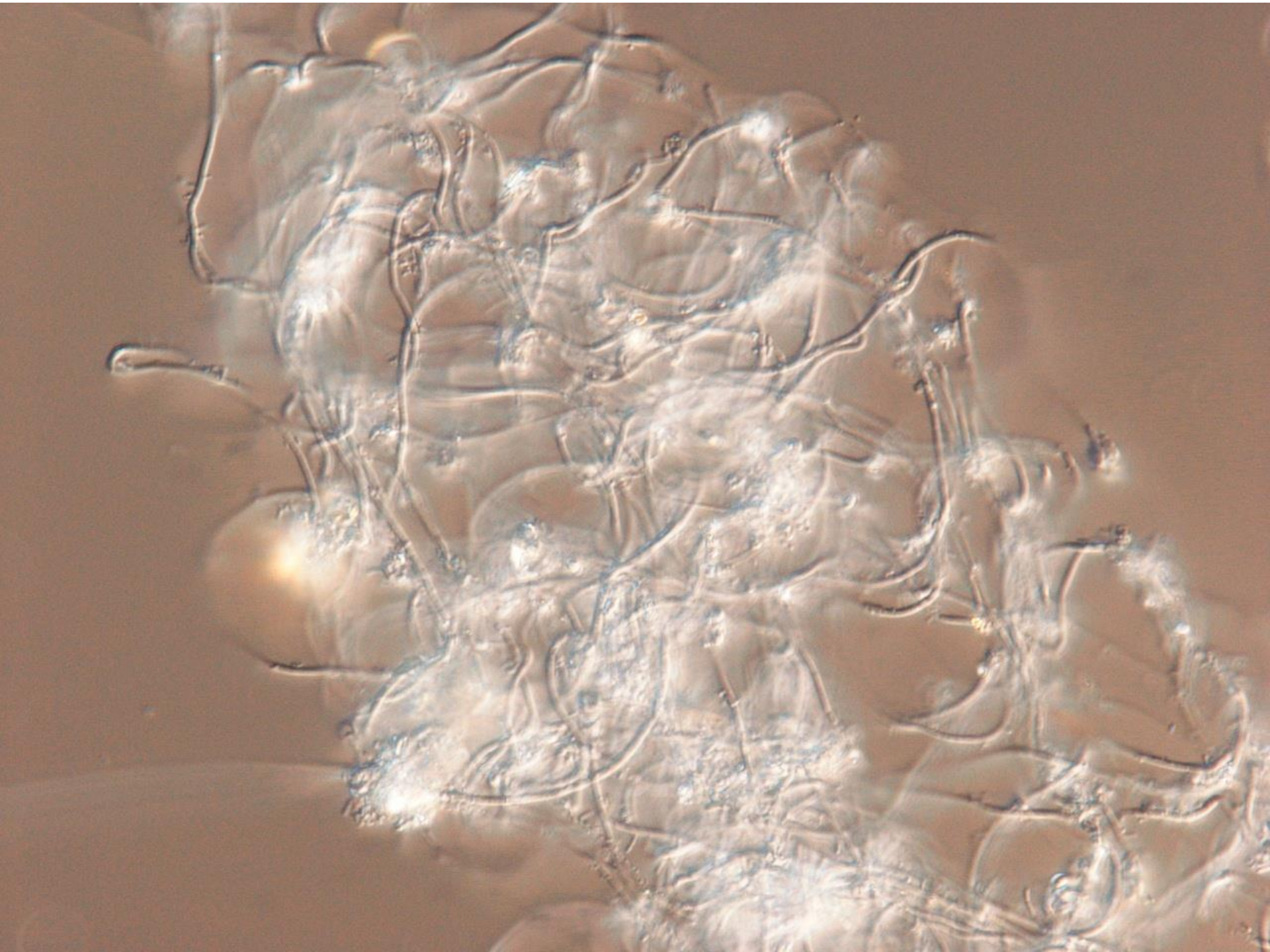










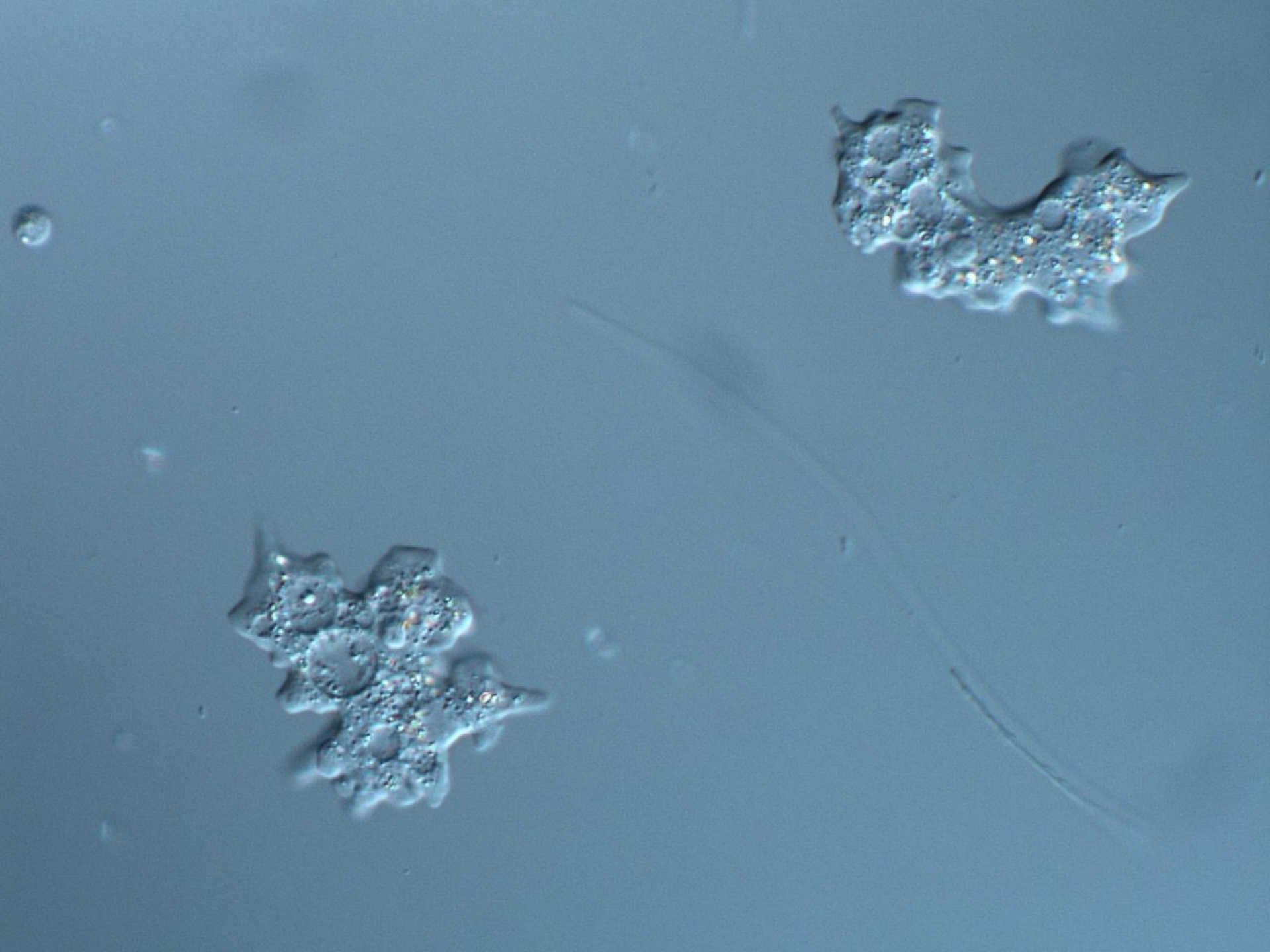






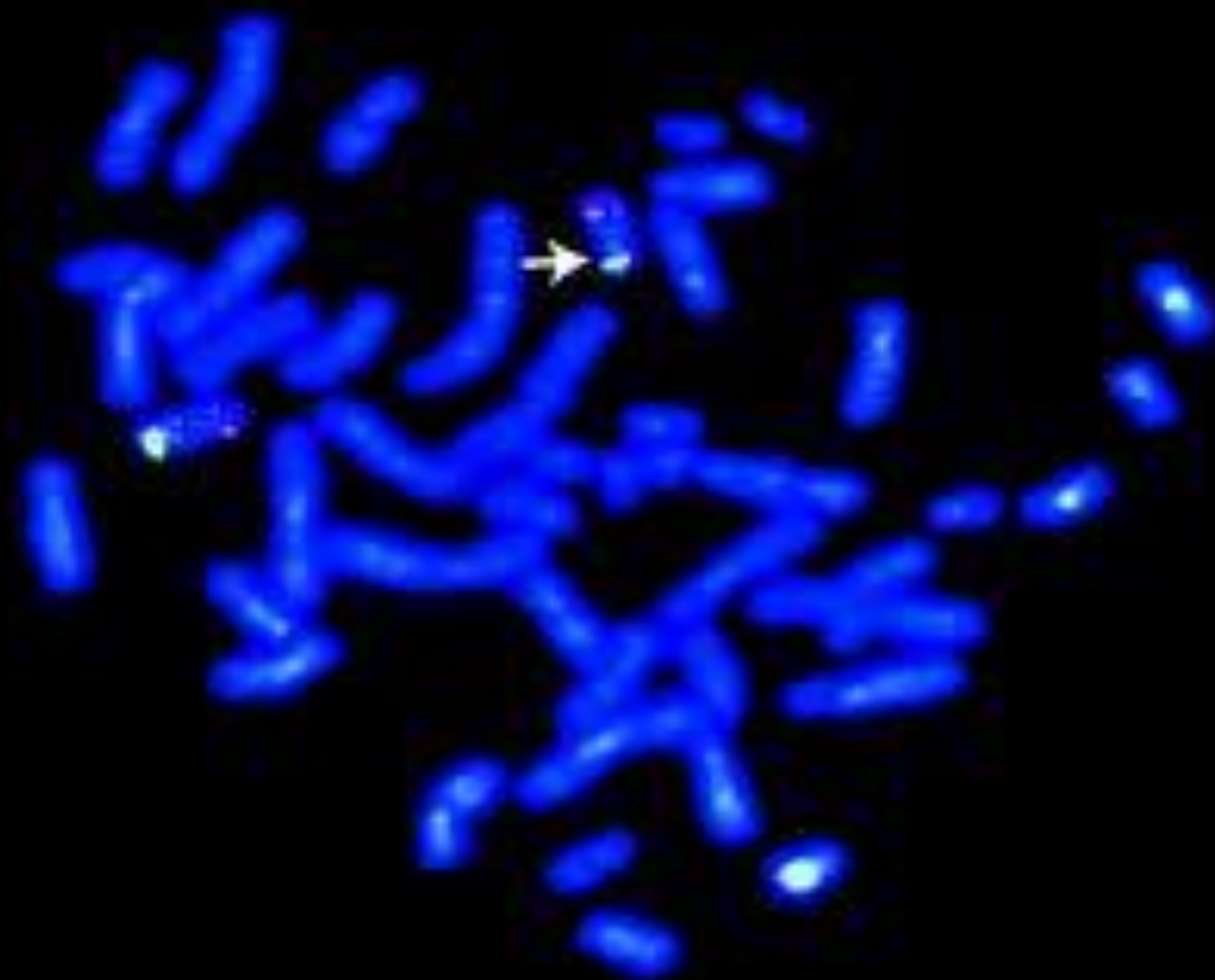


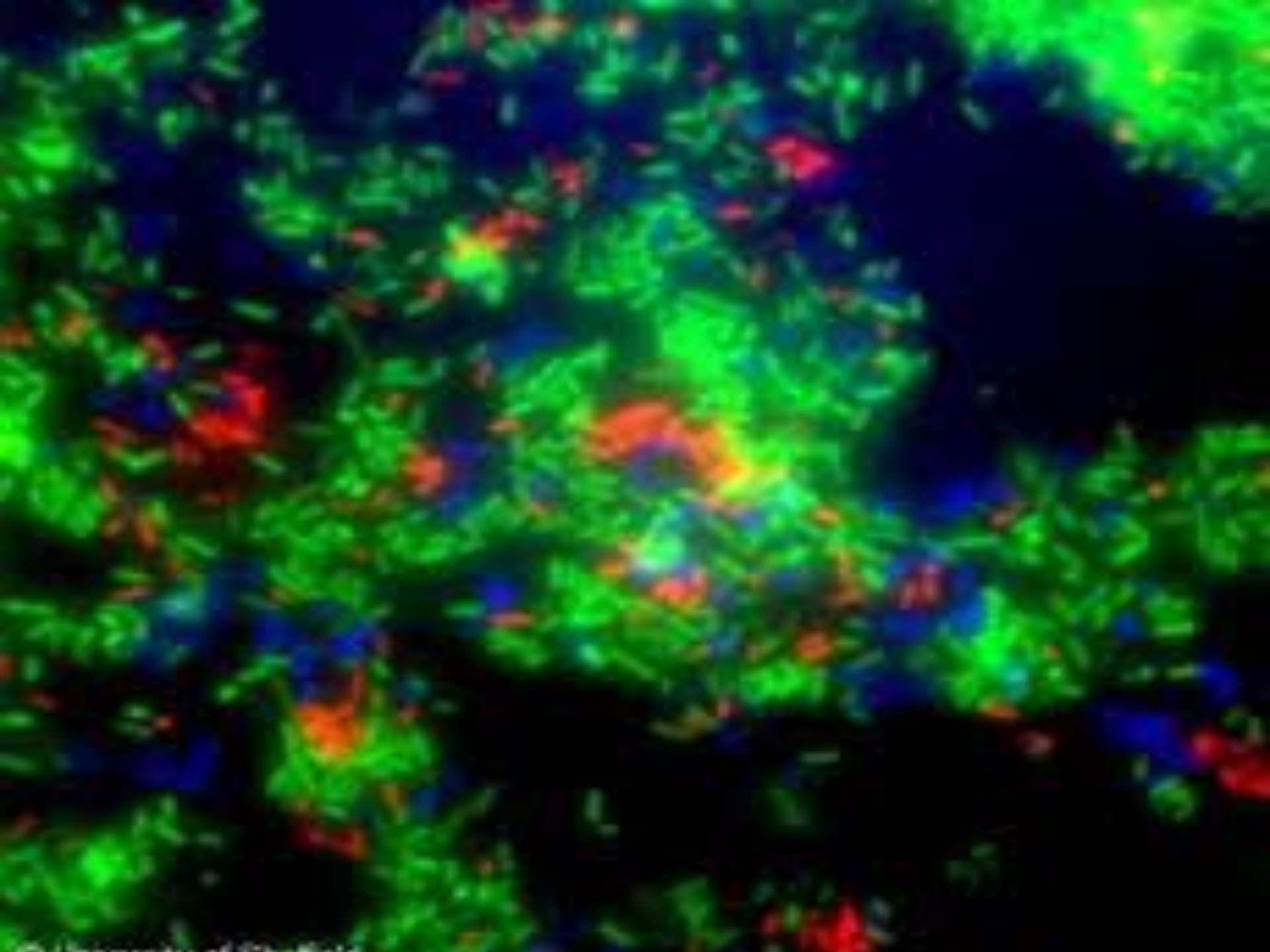




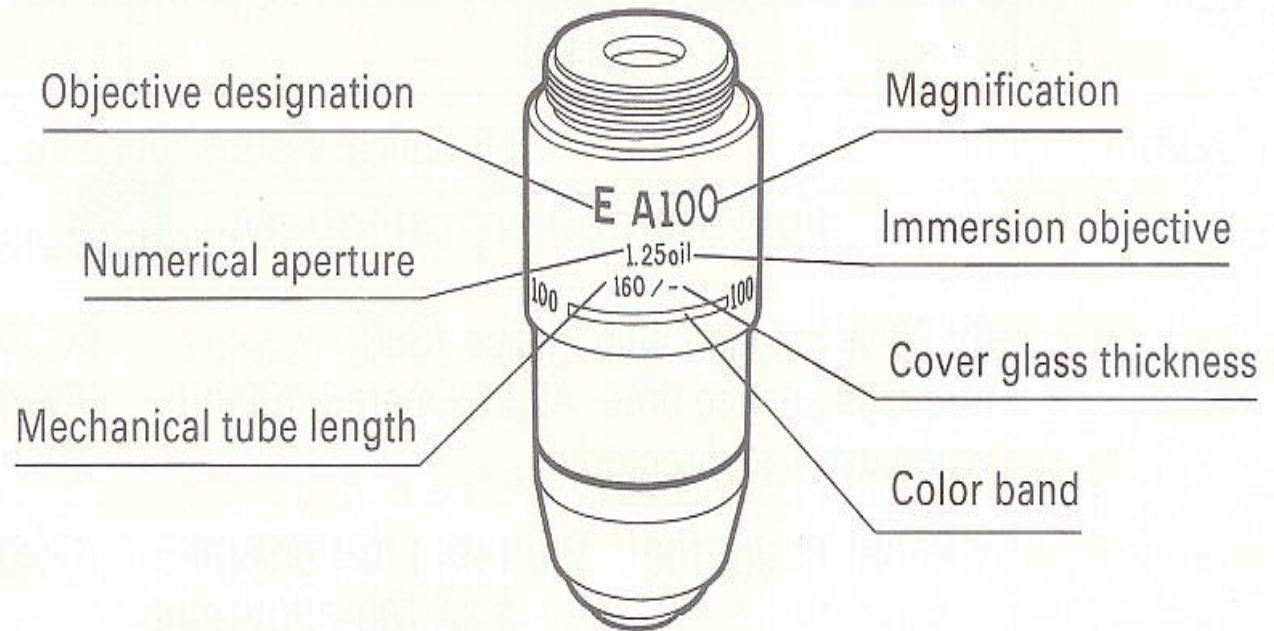


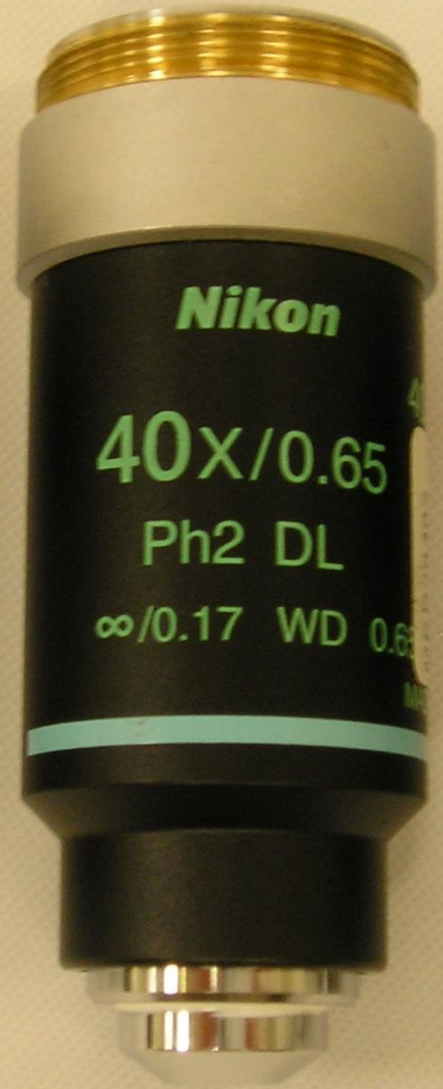
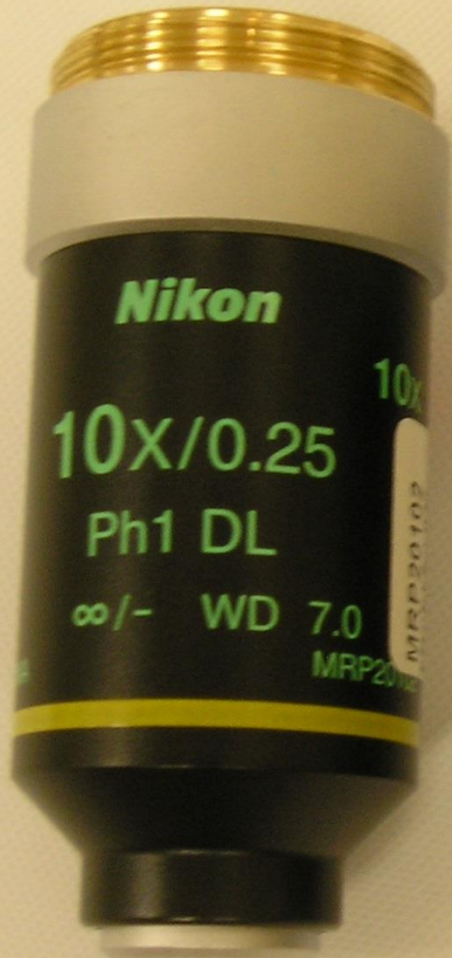






# OPTICAL CHARACTERISTICS







50 SHEETS - 4 x 6 INCHES

MADE IN U.S.A.

## LENS PAPER

2867-3719

Recommended for cleaning microscope  
eyepieces and objectives and the lenses  
of other optical instruments.



Graham - Field, New Hyde Park, N. Y. 11040





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