

THE LIGHT MICROSCOPE

Standard applications of light microscopy

Low power objective

High power objective

Immersion objective

Important considerations

Bright-field and dark-field illumination

Fluorescence microscopy

Confocal laser scanning microscopy

MORPHOLOGICAL INVESTIGATIONS

Microscopic 'identification' of filamentous microorganisms

'Identification' of protozoa and metazoa

EXAMINING ACTIVATED SLUDGE SAMPLES MICROSCOPICALLY

Mounting the activated sludge sample

Gram staining

Neisser staining

DAPI staining

CTC staining

FLUORESCENCE *in situ* HYBRIDIZATION

Reagents and solutions for FISH

Procedure

COMBINED STAINING TECHNIQUES

FISH-DAPI staining

FISH-PHA staining