

Bright Field Illumination

In Bright Field illumination, light is transmitted (i.e., illuminated from below and observed from above) and contrast in the image is caused by absorbance of some of the transmitted light in dense areas of the specimen. The name "Bright field" is derived from the fact that the specimen is dark (or colourful) and contrasted by the surrounding bright viewing field. Bright Field illumination can be equipped with crossed polarizing filters (Polarizer/Analyzer). This illumination technique can reveal details not visible using white light in some cases.

Bright field microscopy is well suited for following applications:

- Unstained or stained biological samples, such as water-borne single-celled organisms.
- Precision semitransparent plastic parts.
- Fibers, hairs, yeast and protozoa.
- Minerals and crystals, thin polymers and some ceramics.
- Forensics.
- Examining external details, such as outlines, edges, grain boundaries and surface defects.

