ACUCAL SERVICES

High Tech Quality Instruments

Polarizer Analyzer for Stereo Zoom Microscope

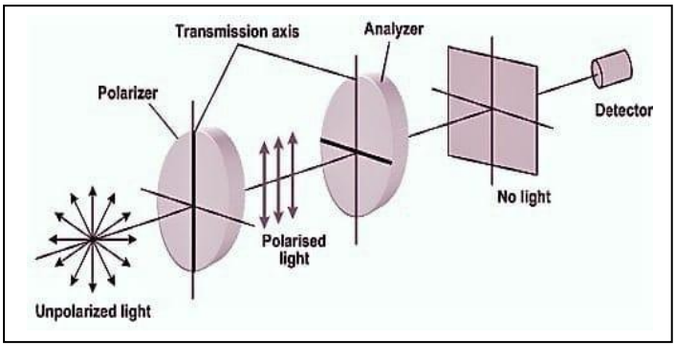
Type: ACUSZM-POL

INTRODUCTION

Polarizers and Analyzers are used in polarized light microscopy. Although both polarizers and analyzers are used as light filters, there are differences in their applications. Polarizer is a device which can filter light waves in order to produces plane polarized light . Analyzer is a device which is used to examine, whether light is plane polarized or not. The analyzer acts as a subsequent polarizer.

POLARIZER

ANALYZER



DIFFERENCES

A polarizer and an analyzer are two necessary mechanisms for a polarized light microscope. The main dissimilarity between polarizer and analyzer is that polarizer produces plane polarized light whereas analyzer is used to check whether the light has been polarized or not.

- Polarizer : Polarizer is placed under the sample. Polarizer can be rotated 360˚.
- Analyzer: Analyzer is located above the sample. It can be moved in or out of the path of light.

USES

Polarising Light microscopy is a contrast-enhancing technique to allow you to evaluate the composition and 3-dimensional structure of anisotropic specimens. Anisotropic substances are “direction-dependent” – that is, they do not behave the same way in all directions.

Polarising Light microscopy improve image quality while examining birefringent (doubly-refracting), anisotropic materials.

You can use this technique to highlight the features of various substances such as crystals, fibers, and minerals, which can aid in their identification.