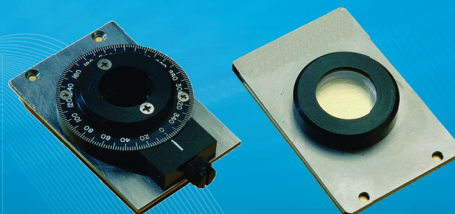


AGILENT POLARIZER AND DEPOLARIZER

FOR THE CARY 60/100/300/4000/5000/6000i UV-VIS-NIR SPECTROPHOTOMETERS

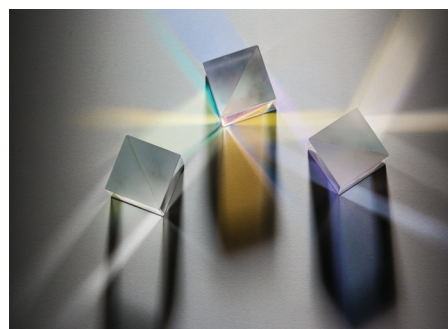
The Measure of Confidence



Easily control light beam polarization

Polarizers are used to control the plane polarization of the incident beam of light. Conversely, a depolarizer can be used to convert any plane polarization of the transmitted beam to a mixture of polarizations. The light passing through the depolarizer changes from parallel, through circular, to perpendicular polarization many times over. The light hitting the detector is thus a non-uniform mixture of polarizations. The depolarizer can also be used before the sample to ensure that the incident beam has no polarization bias.

The Cary polarizer is a Glan-Taylor polarizing prism, mounted in a stainless steel slide with vernier and dial. The Cary depolarizer comprises two crystalline quartz wedges, one twice the thickness of the other, placed together so that the crystal axes are at 45° . The depolarizer is not wavelength sensitive nor does it demonstrate a fast axis nor deflect light.



For more information:
www.agilent.com/chem/uv



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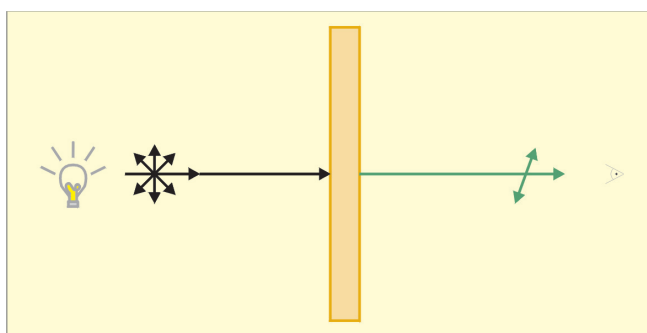
Applications

In many instances, it is important to control the plane polarization of the light beam in a spectrophotometer. Polarizers and depolarizers are useful in a number of situations.

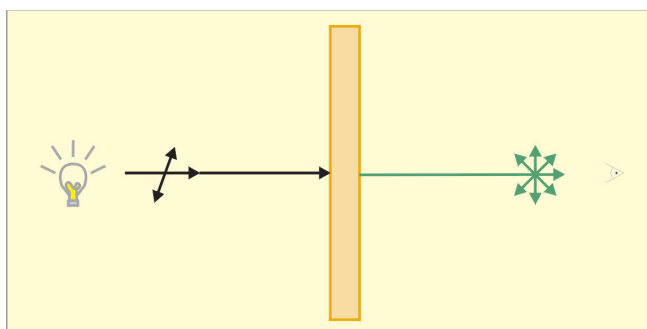
Sample	Example measurement
Liquid crystal	Sample sensitivity to plane polarized light
Polarizing of sample	Depolarizer used to reduce polarizing effects
Optically active compounds	Polarimetry measurements to determine concentration
Mirrors	Reflectance measurements at angles greater than 10°
Thin film	Transmission at various angles

Specifications

Instrument	Cary 60/100/300/4000/5000/6000i
Glan-Taylor Polarizer	
Wavelength range	350–2300 nm made from UV selected calcite
Extinction ratio	$<5 \times 10^{-5}$
Material/substrate	Calcite
Clear aperture	12 mm
Slide plate mounted	5 x 7.5 cm
Depolarizer	High transmittance Fabricated from crystalline quartz
Clear aperture	22 mm
Slide plate mounted	5 x 7.5 cm



Polarizer



Depolarizer

Additional Accessories

Required	Solid sample holder
Optional	Solid sample holder (with side mounted slides), VASRA, all DRAs

For more information:
www.agilent.com/chem

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