

MUELLER IMAGING

PRODUCT BULLETIN

INTRODUCING HINDS' MUELLER IMAGING SYSTEM

Hinds' new Mueller Imaging system is ideal for novel applications requiring a low noise floor and high signal to noise.

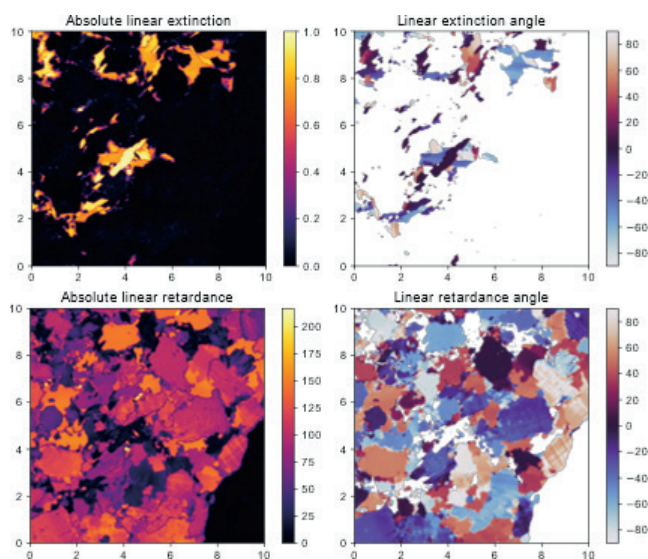


Figure 2: Linear extinction and linear retardance petrographic thin section

Full field polarization images have been shown to have a wide range of applications from remote sensing, target identification, in situ medical diagnosis, materials analysis and more.

APPLICATIONS:

Biological:

- ♦ depolarization and extinction mapping for histological analysis
- ♦ mapping collagen and fibrosis

Industrial:

- ♦ stress and strain mapping with linear retardance
- ♦ defect detection
- ♦ thin film inspection
- ♦ liquid crystal orientation and mapping
- ♦ material anisotropy mapping, i.e. TRISO



Figure 1: Imaging System

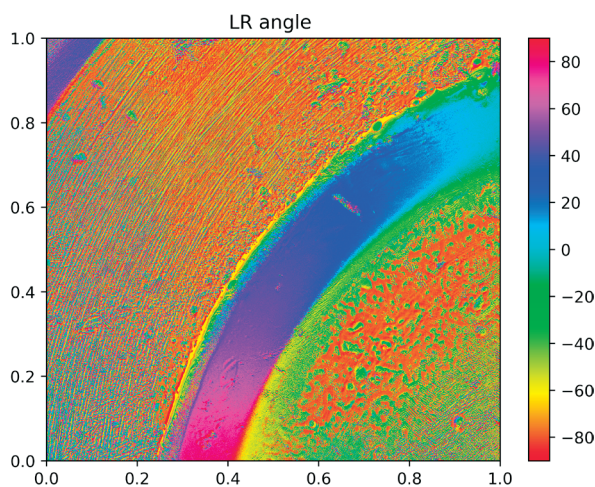


Figure 3: MicroLens Linear Retardance Angle

EXICOR®

BIREFRINGENCE MEASUREMENT SYSTEM

MUELLER IMAGING

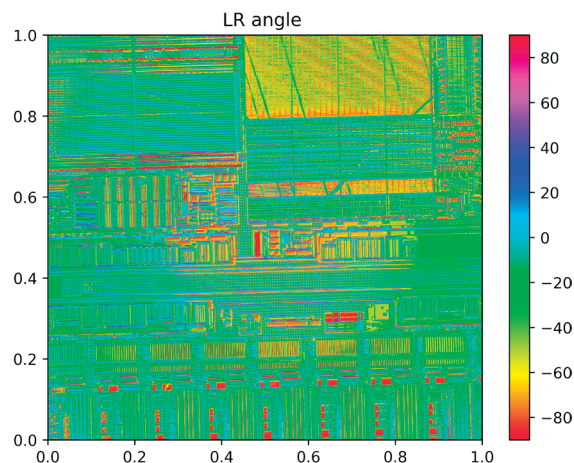
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Figure 4: Chip Linear Retardation Angle

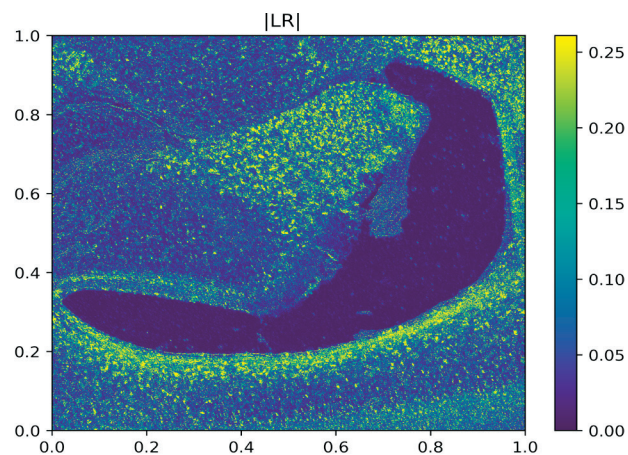


Figure 6: Brain Linear Dichroism Abs

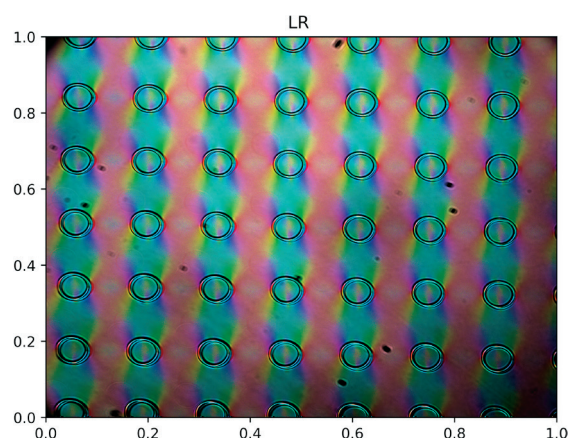


Figure 5: VortexPlate Linear Retardation

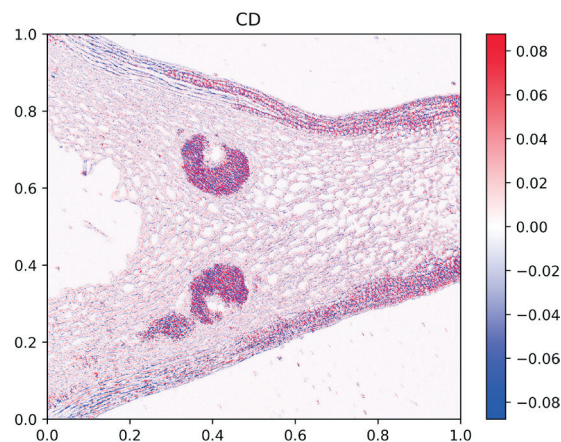


Figure 7: Hemp Sample Circular Dichroism

MEASUREMENT OF ALL 16 MUELLER MATRIX ELEMENTS

4 Discrete Wavelengths	375nm to 800nm
Mueller Matrix Precision	+/- 0.001
Measurement of Linear Dichroism	+/- 0.001
Linear Dichroism Angle	+/- 0.05°
Circular Dichroism	+/- 0.001
Linear Retardance	+/- 0.1nm at 633nm
Angle of the Fast Axis	+/- 0.05°
Optical Rotation	+/- 0.05°
Angle of Resolution	Specified Near Maximal Linear Extinction or Linear Retardance
Objectives	2X, 5X, 10X, 20X, 50X