

## 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.

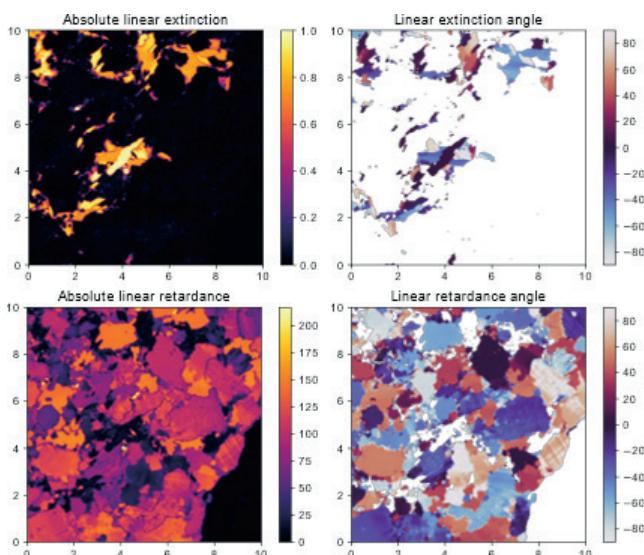


Figure 2: Linear extinction and linear retardance petrographic thin section

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

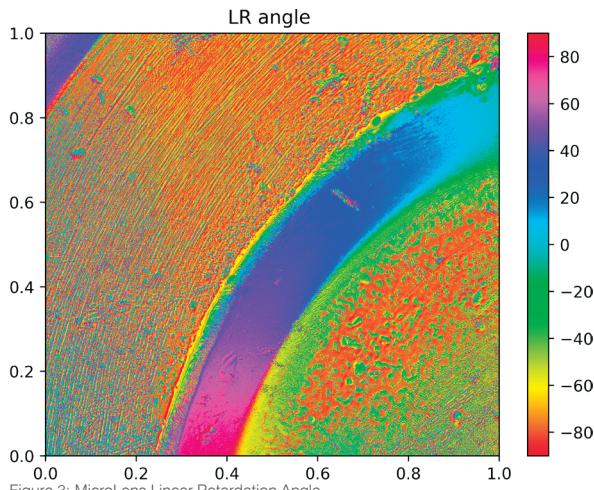


Figure 3: MicroLens Linear Retardation Angle

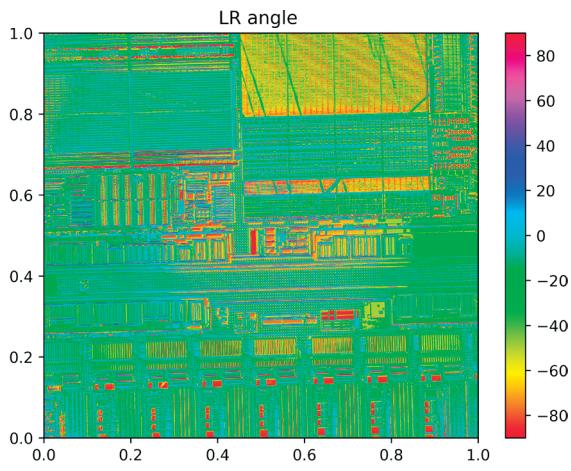


Figure 4: Chip Linear Retardation Angle

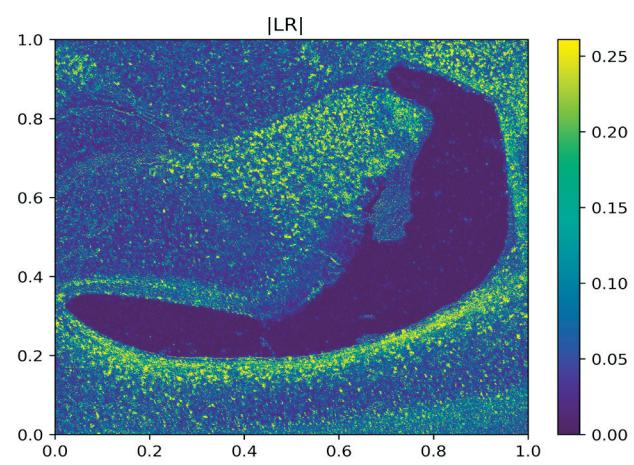


Figure 6: Brain Linear Dichroism Abs

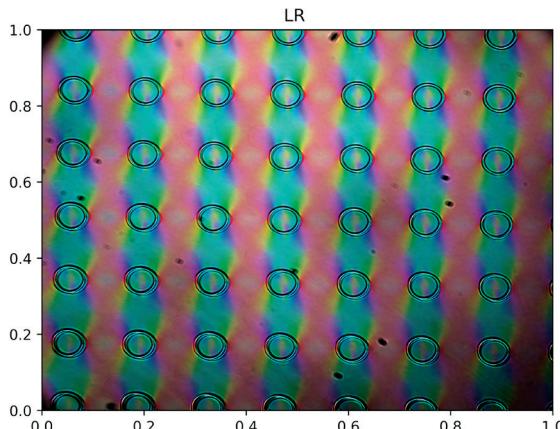


Figure 5: VortexPlate Linear Retardation

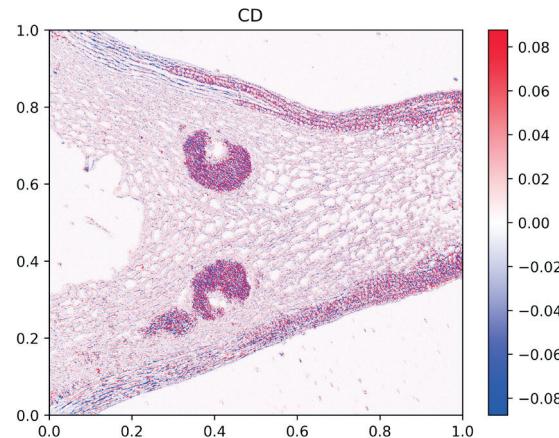


Figure 7: Hemp Sample Circular Dichroism

## 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                                         |