

Olis Polarization Toolbox

A modern marvel of simplicity, functionality, and value, the Olis Polarization Toolbox supports collection of anisotropy, circularly polarized luminescence, and fluorescence detected circular dichroism.

Toolboxes can be used on filter-based or scanning fluorescence instruments. The key to the Toolbox is an electro-optical means of varying the polarization state of the light based on US Patent 6,970,241B (2005). High speed photoelastic modulators are chosen when speed and utility below 320 nm are required. Fully controllable liquid crystal variable retardance devices modulate the light slowly, above 320 nm and far into the NIR.

Spectrophotometers with the Olis Polarization Toolbox support circularly polarized luminescence. CPL is an underutilized technique which is a useful and sensitive complement to circular dichroism. Olis introduced the world's first commercial CPL in September, 2007.

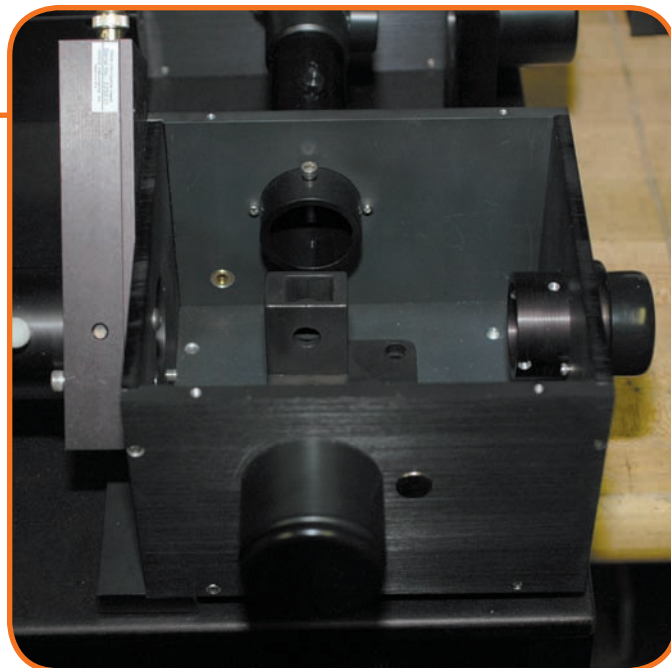
Even commonly used anisotropy is better with the Olis Polarization Toolbox: all acquisition is done without required gain correction ("G-factor") a single detector, and no moving polarizers.

Applications (standard configuration):

Single point & kinetic fluorescence intensity
Single point & kinetic fluorescence anisotropy
Single point & kinetic fluorescence polarization
Single point & kinetic circularly polarized luminescence
Single point & kinetic fluorescence detected circular dichroism

Accessory Choices include:

Stopped-flow (with PEM versions)
Peltier temperature control
Automated sample turret
Solid sample holder
CD and ORD (with detector addition)
Cryostats
Automated titrator
Flash photolysis (with PEM versions)
1.4 T magnet for MCD and MCPL
US Patent 7,092,085 B1 (2006)



Technical Specifications:

- Compatible for use with a full range of light sources, including LED, tungsten, deuterium, xenon arc, laser, etc.
- Excitation wavelength range is dependent on chosen light source
- Emission wavelength ranges available are:
 - (a) 340-630 nm with low-noise gated photon counter
 - (b) 200-850 nm with high speed photomultiplier tube
 - (c) 500-1700 nm with high sensitivity InGaAs detector
- Scanning is supported when monochromators are available (single or doubles can be used)
- Maximum collection rate to 100 msec/ point (all measurements except fluorescence intensity)
- Maximum collection rate to 0.5 usec/ point for fluorescence intensity
- Filter or monochromator based wavelength selection
- **Can be added to all Olis absorbance, fluorescence, and circular dichroism systems**

**** Models available with LED excitation, filter emission, for under \$25K!**

Competition:

None