



Monday, February 17

3:30 PM – 5:00 PM

Room 33A

Applied Photophysics

Discover When Change is Significant: Latest Developments in Circular Dichroism and Stopped-Flow Kinetics

Applied Photophysics has remained at the forefront of the technologies of circular dichroism and stopped-flow kinetics since its creation in 1971 by the Royal Institution of Great Britain under the leadership of Nobel Prize-winning Lord Port.

In the first part of the presentation, the latest developments regarding the Chirascan CD spectrometers will be introduced. Case studies will be discussed to illustrate that CD spectroscopy with Chirascan is far more powerful than the traditional use of revealing the protein secondary structures such as α -helix and β -sheet. With Chirascan CD spectrometers, information regarding secondary structures, as well as tertiary structures, thermal and chemical stability can be clearly demonstrated. Moreover, the introduction of automatic CD spectrometers provides unparalleled sensitivity, reproducibility and productivity. It provides a novel approach for objective, quantifiable higher order structure (HOS) comparisons. The introduction of the Circularly Polarized Luminescence (CPL) accessory makes the Chirascan more economical and versatile.

In the second part of the presentation, the latest developments in the SX Stopped-Flow systems will be discussed. Stopped-Flow systems from Applied Photophysics are known for its high performance, ease-of-use and durability and we have made them better. We introduce LED light sources and various accessories, such as dual fluorescence detection, fluorescence polarization/anisotropy, and photodiode array detector. Applications in enzymology and protein structures will be discussed.

Speakers

Marc Neglia, Sales Director, Applied Photophysics Americas

Frank Yuan, Applications Scientist, Applied Photophysics

Darek Silwa, Sales Manager, Applied Photophysics