



Lifetime Measurements of Green Fluorescent Protein (GFP) Using Light Emitting Diodes (LEDs)

CHAMPAIGN, ILLINOIS—October 31, 2000—ISS, Inc., introduces a new instrument for lifetime determinations using Light Emitting Diodes (LEDs) as light source.

The new compact instrument is built around the KOALA automated sample compartment. It is configured for T-format or L-format geometry and it allows the determination of decay times, the rotational correlation times of molecules, emission spectra, polarization and anisotropy measurements. KOALA can be equipped with all of the fluorescence accessories available for the K2TM and the PC1TM; specifically, it can be equipped with fiber optics for in-situ fluorescence measurements. In lifetime mode, the frequency response is up to 200 MHz, depending upon the type of LED utilized, thus allowing measurements in the sub-nanosecond scale. Wavelengths available with current LEDs are 370nm, 460nm and 520nm.

The new inexpensive and compact instrument is particularly useful for researchers using Green Fluorescent Proteins (GFP) and fluorescein derivatives as probes. The LEDs thus complement the laser diodes introduced two years ago. The LED package is also available for use in the K2TM and PC1TM spectrofluorometers, where it can be utilized in conjunction with the xenon arc lamp or other lasers.