Multi-colour electrochemistry: SpectroECL

SpectroElectrochemiluminescence instrument for Screen-Printed Electrodes

Basics:

Metrohm DropSens offers a compact and versatile solution to perform SpectroElectrochemiluminescence studies, combining in one equipment a biopotentiostat/galvanostat and a microspectrometer integrated in an innovative cell for Screen-Printed Electrodes. This miniaturized and portable alternative is perfect for performing Electrogenerated ChemiLuminescence (ECL) measurements.

The microspectrometer allows discriminate detection of different luminophores according to their maximum wavelength emission.

In addition, the instrument is compatible with the already available Metrohm DropSens Si-photodiode cell.

More information at **www.metrohm-dropsens.com**

Multianalyte ElectroChemiLuminescence detection with SPEs

- Quantification of different analytes using different luminescent species.
- Full spectra acquisition in the visible range (340-850 nm).

Characterization of new luminophores

- Potential resolved SpectroElectrochemiluminescence.
- Easy discrimination between species according to their emission wavelength.

SpectroElectrochemiluminescence RET

- Processes triggered by the electrochemiluminescence reaction and due to resonance energy transfer can be easily followed.

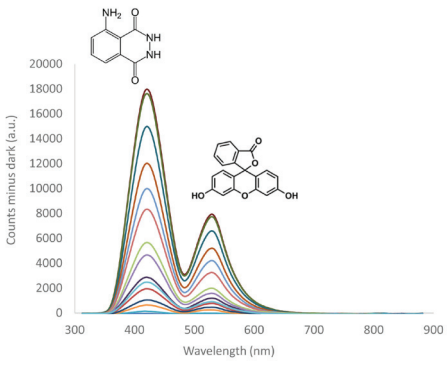
(Bi)Potentiostat / Galvanostat	
DC-potential range	± 4 V
Maximum measurable current	± 40 mA

Spectrometer	
Detector	High sensitivity CMOS image sensor
Wavelength range	340 - 850 nm

Software:

DropView SPELEC is a powerful spectroelectrochemical software that controls the SpectroECL equipment, combining **real time luminescent spectrum and relating wavelength emission potential and ECL intensity**.

- Generated spectra are collected through all the electrochemical measurement, getting individual information for each spectrum and electrochemical curve.
- 3D perspective: luminescent spectra (wavelength and intensity) related to the sweep potential.
- Advanced data handling for an easy results interpretation.



Spectra recorded during ECL RET reaction between luminol and fluorescein.

Metrohm DropSens