



Showcasing research from Professor Fabien Miomandre's laboratory, PPSM, Ecole Normale Supérieure Paris-Saclay, Cachan, France.

Combined scanning electrochemical and fluorescence microscopies using a tetrazine as a single redox and luminescent (electrofluorochromic) probe

The possibility of using a single electroactive and luminescent molecule both as a redox mediator and as a fluorophore in an experiment combining *in situ* Scanning Electrochemical Microscopy (SECM) and epifluorescence microscopy was validated. The tip potential, tip–substrate distance and, in the case of a conducting substrate, the substrate potential are the parameters that are likely to control the fluorescence. It is shown that the tip can be used to switch on and off the luminescence and that the modulation amplitude maximum is sensitive to the nature of the substrate.

As featured in:



See F. Miomandre *et al.*,  
*Chem. Sci.*, 2018, 9, 5897.



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