

# Electrochemiluminescence microscopy of cells

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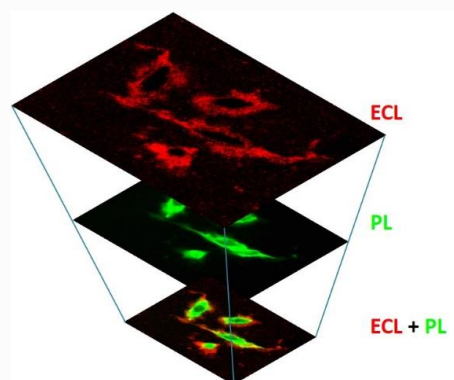
Room Delta 1B - Scientific Campus

and at <https://zoom.us/j/88917608297> Passcode: seminar1

## Abstract

Electrochemiluminescence (ECL) is the light emission triggered by an electrochemical reaction at the electrode surface.<sup>1-2</sup> Since ECL is based on an “electro-excitation” process, it does not require any light source to generate the light as in fluorescence and phosphorescence. Thus, ECL combines intimately electrochemistry and photophysics. Due to the orthogonal modalities of electrochemical stimulation and optical readout, ECL attracts growing interests in diverse scientific fields, from fundamental research on Marcus inverted region and design of highly efficient ECL fluorophores to original biosensing and imaging strategies.

In the last decade, ECL has evolved from a pure (bio)analytical technique to an imaging method. In this talk, the development of coreactant-based ECL as a surface-confined microscopy to image single cells will be discussed.<sup>3-4</sup> We will present several ECL-based approaches to image membrane proteins, single mitochondria and the intracellular wireless analysis of single cells by bipolar ECL confined in a nanopipette.<sup>5-7</sup>



## REFERENCES

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