# Decaazapentacenes Appended with Electron-Rich Triphenylamine and Phenanthrene Units - Their Redox-Coupled Photophysical and Self-Assembling Properties

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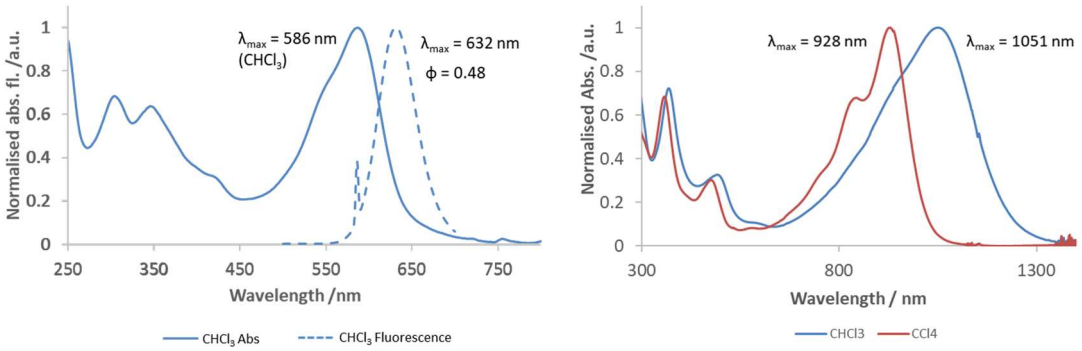
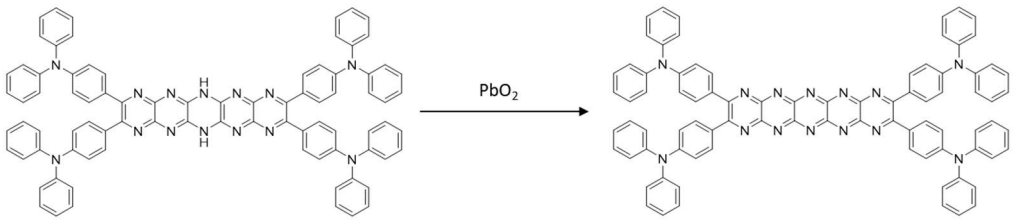
Pyrazinacenes[1] are analogues of classic acenes with apical CH groups replaced with nitrogen atoms. These stable compounds are currently being investigated for a variety of applications based on their photophysical and electronic propeties.[2,3] Here we describe decaazapentacenes appended with electron rich triphenylamine (TPA) or phenanthrene units. For TPA appended molecules a large shift in absorption from 586 nm in the reduced form to 1050 nm when oxidized is observed in chloroform solution. In this presentation, we will discuss the photophysical properties of these compounds including absorption and fluorescence properties of both oxidized and reduces species as well as their self-assembling behaviours.

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