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TUNING THE PHOTOPHYSICAL PROPERTIES OF PUSH-PULL AZAHETEROCYCLIC CHROMOPHORES BY PROTONATION: TOWARDS WHITE LIGHT EMISSION

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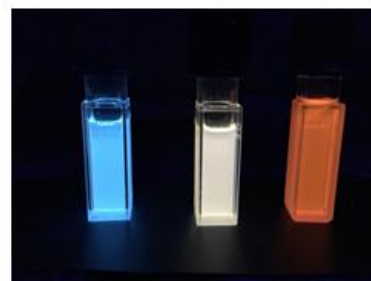
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Abstract. Conjugated push-pull molecules that incorporate nitrogen heterocycles as electron-withdrawing units are interesting materials because of their luminescence properties. These chromophores can be easily and reversibly protonated at the nitrogen atom of the heterocyclic ring and this can cause dramatic color changes. White and multi-color photoluminescence both in solution and in the solid state can be obtained by an accurate control of the amount of acid [1-6]. Thus, with a suitable design these compounds have potential applications in the development of colorimetric pH sensors and the fabrication of OLEDs based on only one material. We provide here a brief overview of our collaborative efforts made in this area with pyrimidine, pyridine and (iso)quinoline derivatives.

**References**

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