

## Meso-trifluoromethyl groups as a tool for expanding the range of corrole *meso*-substituents

Julliard P.-G.<sup>a</sup>, Pascal S.<sup>b</sup>, Siri O.<sup>a</sup>, Cortés-Arriagada D.<sup>c</sup>, Sanhueza L.<sup>d</sup> and Canard G.<sup>a</sup>

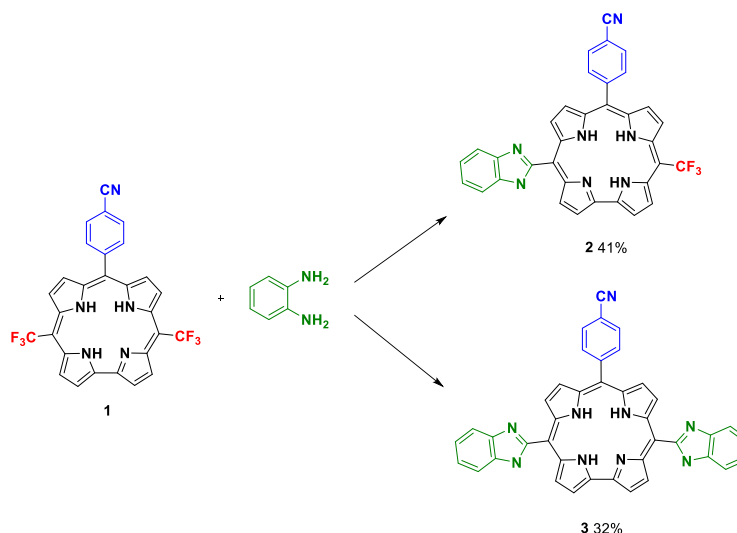
<sup>a</sup> Aix Marseille Univ, CNRS, CINaM, UMR 7325 Campus de Luminy, 13288 Marseille Cedex 09, France.

<sup>b</sup> Nantes Univ, CNRS, CEISAM, UMR 6230, 2 rue de la Houssinière, 44322 Nantes Cedex 03, France.

<sup>c</sup> Universidad Tecnológica Metropolitana, Ignacio Valdivieso 2409, San Joaquín, Santiago, Chile.

<sup>d</sup> BioMA, Universidad Católica de Temuco, Av. Rudecindo Ortega 02950, Temuco, Chile.

Our team has recently proposed novel synthetic routes for A<sub>2</sub>B<sub>2</sub>-porphyrins and A<sub>2</sub>B corroles bearing two *meso*-perfluoroalkyl substituents. [1] These substituents possess remarkable properties such as a strong electron-withdrawing character, [2] but they can also be used to introduce additional diversity on *meso* positions through multiple fluorine-substitutions. [3] This presentation will focus on using a variety of amines in combination with the trifluoromethyl groups of corrole **1** to selectively obtain unprecedented *meso*-substituents on one or two *meso*-positions. For example, corroles **2** and **3** were prepared when *o*-phenylenediamine is used. We will also highlight the physico-chemical characterization of these corroles, including their unique photo-physical properties, which are significantly influenced by the type and number of functional substituents.



**Figure:** Corrole **1** fluorine- substitution by *o*-phenylenediamine yielding corroles **2** and **3**

### REFERENCES

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