

SPECTROSCOPIC STUDY OF ALUMINUM PHTHALOCYANINE CHLORIDE (AlPcCl) IN HOMOGENEOUS AND MICRO-HETEROGENEOUS MEDIA CONSISTING OF P-123 AND F-127 POLYMERIC MICELLES

Bruno H. Vilsinski^{a,*}, Adriana P. Gerola^b, Évelin O. Lemos^a, Patrícia M. Barbosa^a, Katieli S. S. Campanholi^a, Gabriel B. César, André L. Tessaro^c, Noboru Hioka^a and Wilker Caetano^a

^aDepartamento de Química, Universidade Estadual de Maringá, Av. Colombo 5.790, 87020-900 Maringá – PR, Brasil

^bUniversidade de Coimbra, R. da Ilha, 3000-214 Coimbra, Portugal

^cUniversidade Tecnológica Federal do Paraná, Rua Marçílio Dias, 635, 86812-460 Apucarana – PR, Brasil

The absorption spectra of AlPcCl in different concentrations provide informations about the aggregational state of PS while fluorescence emission spectra complement the informations showing only monomeric species. The Figure 1S shown the maintenance of absorption spectra profiles and its conservation under dilution which suggest the presence of monomeric species (Figure 1S-b shown the linearity following Lambert Beer law).¹⁵ However the data of maxima emission *versus* AlPcCl's concentration presents a loss of linearity and a presence of self-aggregates species in higher concentrations.²⁵

REFERÊNCIAS

- 1S. Ruifrok, A. C.; Johnston, D. A.; *Anal. Quant. Cytol. Histol.* **2001**, 23, 299
- 2S. Lakowicz, J. R.; *Principles of Fluorescence Spectroscopy*, 3^a ed., Springer: New York, 2006.

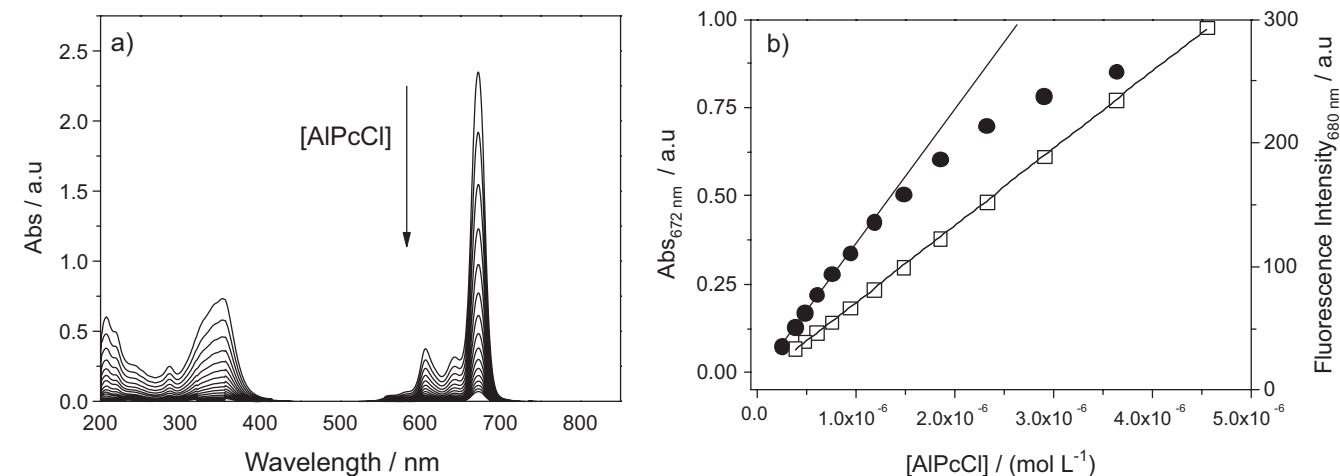


Figure 1S. a) Electronic absorption spectra of AlPcCl in ethanol at various concentrations (from 4.0×10^{-6} to 4.0×10^{-7} mol L⁻¹; the narrow indicates the decrease of absorption with the dilution), b) absorption (□) and emission intensity (●) at 672 and 680 nm versus [AlPcCl]