



Contribution ID: 15

Type: Poster

8-Amidoquinoline Containing Glycinyl Group as Turn-on Fluorescent Sensors for Zn(II).

Fluorescent chemosensors for Zn(II) are attractive for microscopy and imaging for studying the role of Zn(II) biological in biological system. In this work, we discovered that 8-aminoquinoline containing amino group at alpha-position of the amino acid (**1**) pendant was effective for Zn(II) fluorescence imaging in plant tissue. In the presence of Zn(II) in aqueous media, ligand **1** exhibits selective fluorescence enhancement at 504 nm with a remarkable 24-fold increase of the fluorescence quantum yield. To tune the emission color and test for the generality of the core ligand, 5-arylethynyl-8-aminoquinoline derivatives were synthesized to study the effect of the electronic effects on the fluorescence responses of the ligands upon the complexation with Zn(II).

Primary author: Prof. SUKWATTANASINITT, Mongkol (a. Department of Chemistry, Faculty of Science, d. Nanotec-CU Center of Excellence on Food and Agriculture, Department of Chemistry, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand.)

Presenter: Prof. SUKWATTANASINITT, Mongkol (a. Department of Chemistry, Faculty of Science, d. Nanotec-CU Center of Excellence on Food and Agriculture, Department of Chemistry, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand.)

Track Classification: Nanomaterials & nanostructures