
Phthalocyanine-based ambipolar heterojunctions for ammonia sensing

Seydou Ouedraogo^{*†1} and Marcel Bouvet^{‡2}

¹Université Ouaga I Joseph Ki-Zerbo – Burkina Faso

²Université Bourgogne Franche-Comté – Institut de Chimie Moléculaire de Bourgogne (ICMUB),
UMR-CNRS 6302 – France

Abstract

Whereas ambipolar materials are the object of numerous studies in organic electronics, they were introduced only very recently in conductometric transducers. In this work, we report on the interest of ambipolar materials for gas sensing. The key point is to master the trigger that allows changing from p-type to n-type behavior and vice versa.

Keywords: molecular materials, conductometric transducer, heterojunction, ammonia, relative humidity

^{*}Speaker

[†]Corresponding author: seydoued2001@yahoo.fr

[‡]Corresponding author: marcel.bouvet@u-bourgogne.fr