

Highly Homogeneous Nitrogen Doped Titania Nanomaterials: Synthesis and Characterization

Nurul Diyana Zainal¹, Hadi Nur², Siew Ling Lee^{2*}

¹ Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

² Centre for Sustainable Nanomaterials, Ibnu Sina Institute for Scientific and Industrial Research, Universiti Teknologi Malaysia, 81310 Johor Bahru, Johor, Malaysia

Corresponding author: diyana_zainal91@yahoo.com.my

Abstract

A series of nitrogen doped titania nanomaterials were synthesized via sol-gel method by using tetraethyl ammonium hydroxide as N source. N doping into TiO₂ was confirmed via XRD and FTIR analyses. Change in surface morphology after N doping was detected by FESEM. Results of EDX mapping analysis indicated homogeneous distribution of N dopants.