

2016 SATU Joint Research Scheme Program Host Application Form

Date: 25 / 04 / 16 (year/month/day)

1. Host University

University of Malaya

2. Host Unit

Nanotechnology & Catalysis Research Centre (NANOCAT)

3. Joint Research Project Title

Photocatalysis degradation of Azo Dye by Hydrogenated Titanium Dioxide

4. Principal Investigator

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5. Co-PI from the same unit – If any

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6. Project Details

Project Description	Hydrogenated TiO ₂ (H-TiO ₂) has drawn much research attention in the photocatalysis society since it is significantly improved solar absorption and enhanced photocatalytic activity. Nevertheless, the key factor that leads to the enhanced photocatalytic performance of H-TiO ₂ is still debatable. In order to clarify this issue, the structural properties of H-TiO ₂ and their effects on photo-generated charges
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SATU Presidents' Forum

of Southeast and South Asia and Taiwan Universities
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are investigated in this study. H-TiO₂ nanoparticles with different hydrogenation degree are synthesized through the flowing of purified H₂ gas at several elevated temperatures and their photocatalytic activities are evaluated by Reactive Black 5 (RB5) photodegradation. The hydrogenated TiO₂ nanoparticles treated at lower temperature with light gray colour have better photocatalytic activity compared to the dark gray H-TiO₂ with higher thermal hydrogenation degree, where it display much worse photocatalytic performance..

7. Acknowledgement (Signed by the President or SATU representative to show recognition)

Name
title

PROFESSOR DR. NOORSAADAH ABD. RAHMAN
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Date:

25 / 04 / 2016



(signature)

(yyyy/mm/dd)

Please email satu@email.ncku.edu.tw before 2016.4. 29(Fri.) for application with the subject line: < 2016 SATU JRS host application –School Name>. Thank you.