

**Effect of Calcination Parameters on Structural Properties and Activity of Carbon
Nanofiber-Supported Cu/ZrO₂ Catalyst in CO₂ Hydrogenation to Methanol**

By

MUHAMMAD AKRAM SAFIQ BIN MOHD NOOR AZMI

Dissertation submitted in partial fulfilment of

The requirements for the

BACHELOR OF CHEMICAL ENGINEERING (Hons)

May 2013

UNIVERSITI TEKNOLOGI PETRONAS
BANDAR SERI ISKANDAR
31750 TRONOH
PERAK DARUL RIDZUAN

CERTIFICATION OF APPROVAL

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Approved by,

(Dr. Maizatul Shima Shahrarun)

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CERTIFICATION OF ORIGINALITY

This is to certify that I am responsible for the work submitted in this project, that the original work is my own except as specified in the references and acknowledgements, and that the original work contained herein have not been undertaken or done by unspecified sources or persons.

(MUHAMMAD AKRAM SAFIQ BIN MOHD NOOR AZMI)