



# The University of Manchester

By virtue of the powers granted to it by the Charter and Statutes and the authority of the Senate the University has this day awarded the Degree of

## DOCTOR OF PHILOSOPHY

in the Faculty of Engineering and Physical Sciences

to  
**Khalfan Al-Masruri**

who has satisfied the Examiners for the Degree:



EMBASSY OF THE KINGDOM OF SAUDI ARABIA	مملكة البحرين
CULTURAL ATTACHÉ	المجلس الثقافي البريطاني
LONDON	لندن
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Albert McMenemy  
Registrar and Secretary

*[Signature]*

Registrar and Secretary

November 25<sup>th</sup>, 2005.