



**The Department of Mechanical  
Engineering and Mechanics**

is pleased to announce a

Dissertation Defense

by

**Mohammed Alzahrany**

November 6, 2014, 3:10 p.m.

STEPS 551

**Pulmonary Gas Transport and Drug Delivery in a  
Patient Specific Lung Model during Invasive High  
Frequency Oscillatory Ventilation**

Presented in Candidacy for the  
Degree of Doctor of Philosophy  
in Mechanical Engineering

Ph.D. Committee Chairman: Prof. Arindam Banerjee