

**ACTIVE VIBRATION CONTROL OF FLEXIBLE
ROTORS WITH ELECTROMAGNETIC ACTUATOR**

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IIT Kharagpur

Anindya Sundar Das

**ACTIVE VIBRATION CONTROL OF FLEXIBLE
ROTORS WITH ELECTROMAGNETIC ACTUATOR**

*Thesis submitted to
Indian Institute of Technology, Kharagpur
for the award of the degree*

of
Doctor of Philosophy

by
Anindya Sundar Das

under the guidance of
**Prof. Jayanta Kumar Dutt
and
Prof. Kumar Ray**



**DEPARTMENT OF MECHANICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY, KHARAGPUR**

MARCH 2009

CERTIFICATE OF APPROVAL

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Certified that the thesis entitled ACTIVE VIBRATION CONTROL OF FLEXIBLE ROTORS WITH ELECTROMAGNETIC ACTUATOR submitted by ANINDYA SUNDAR DAS to Indian Institute of Technology, Kharagpur, for the award of the degree of Doctor of Philosophy has been accepted by the external examiners and that the student has successfully defended the thesis in the viva-voce examination held today.

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DECLARATION

I certify that

- a. the work contained in this thesis is original and has been done by me under the guidance of my supervisors;
- b. the work has not been submitted to any other Institute for any degree or diploma;
- c. I have followed the guidelines provided by the Institute in preparing the thesis;
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This is to certify that the thesis entitled “**Active Vibration Control of Flexible Rotors with Electromagnetic Actuator**”, submitted by **Sri Anindya Sundar Das** to Indian Institute of Technology, Kharagpur, is a record of bona fide research work under our supervision and is worthy of consideration for the award of the degree of Doctor of Philosophy of the Institute.

Prof. Jayanta Kumar Dutt,
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Anindya Sundar Das