

Date: 16.12.2011

CERTIFICATE

This is to certify that all corrections and suggestions pointed out by the Indian and foreign Examiners are incorporated in the thesis titled **“Performance of Retrofitted Reinforced Concrete Columns Subjected to Cyclic Loading.”** submitted by **Ms. JESSY MATHAI (2004119703)**

Place: Chennai
Date: 16.12.2011.


16/12/2011
SUPERVISOR
Dr. K.P. JAYA
Associate Professor,
Division of Structural Engineering
Department of Civil Engineering,
Anna University, Chennai - 600 025.

**PRCEEDINGS OF THE Ph.D VIVA-VOCE EXAMINATION OF
Ms. JESSY MATHAI HELD AT 11.00 AM ON 16th DECEMBER 2011
IN THE KARIKALAN ARANGAM, STRUCTURAL ENGINEERING
DIVISION, COLLEGE OF ENGINEERING, ANNA UNIVERSITY,
CHENNAI – 600 025.**

The Ph.D Viva-Voce Examination of Ms.JESSY MATHAI (Reg. No. 2004119703) on her Ph.D.Thesis entitled, “Performance of Retrofitted Reinforced Concrete Columns subjected to Cyclic Loading” was conducted on 16th December 2011 at 11.00 a.m. in the KARIKALAN ARANGAM, Division of Structural Engineering, College of Engineering, Anna University, Chennai.


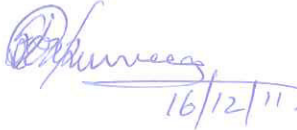
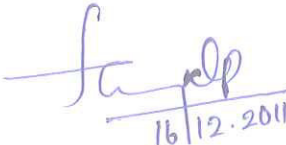
The following members of the Oral Examination Board were present:

1. **Dr. Ravi Sinha** - Indian Examiner
Professor
Department of Civil Engineering
IIT Bombay, Powai
Mumbai
2. **Dr. P. Sivakumar** - Expert Member
Senior Principal Scientist
CSIR – SERC, Chennai
3. **Dr.K.P.Jaya** - Supervisor & Convener
Associate Professor
Division of Structural Engineering
Anna University, Chennai

The research scholar, Ms.JESSY MATHAI presented the salient features of her Ph.D. work. This was followed by questions from the board members. The questions raised by the Foreign and Indian Examiners were also put to the scholar. The scholar answered the questions to the full satisfaction of the board members.

The corrections suggested by the Indian / Foreign Examiners have been carried out and incorporated in the thesis before the Oral examination.

Based on the scholar’s research work, her presentation and also the clarifications and answers by the scholar to the questions, the board recommends that Ms.JESSY MATHAI be awarded the Ph.D. Degree in the Faculty of Civil Engineering.

1. **Dr. Ravi Sinha** : 
Indian Examiner
2. **Dr. P. Sivakumar** : 
Expert Member
3. **Dr.K.P.Jaya** : 
Supervisor & Convener

ANNA UNIVERSITY


CHENNAI – 600 025

BONAFIDE CERTIFICATE

Certified that this Thesis titled “**PERFORMANCE OF RETROFITTED REINFORCED CONCRETE COLUMNS SUBJECTED TO CYCLIC LOADING**” is a bonafide work of Mrs. **JESSY MATHAI**, who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other scholar.

Place : Chennai 600 025

Date : 10. 11. 2011



Dr.K.P.JAYA

SUPERVISOR

Associate Professor

Civil Engineering

Structural Engineering Division

Anna University

Chennai - 600 025.