# **RESMI G.**

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Project Officer

Mob : 7306998063

Department of Civil Engineering

IIT Madras

Res

: 8893107325

# **ACADEMIC QUALIFICATION**

Course	Institution	Board / University	Year of passing	CGPA / Percentage
Ph.D, Structural Engineering	IIT Madras	IIT Madras	2023	10
M. Tech (Structural Engineering)	National Institute of Technology, Trichy	National Institute of Technology, Trichy	2013	9.22
B.Tech (Civil Engineering)	College of Engineering Thiruvananthapuram	Kerala University	2011	8.47
XII	Govt. Model Boys Higher Secondary School, Attingal	Kerala State Higher Secondary Board	2007	92.67
X	Sr. Elizabeth Joel, C. S. I. E. M. H. S. S, Attingal	Board of Public Examination, Kerala	2005	94.74

# **GATE 2011 DETAILS:**

GATE Score: **586** AIR: **475** Mark obtained: **44 out of 100** 

# **ACHIEVEMENTS**

- 1. Secured second place in oral presentation for the paper entitled "Damage assessment of laterally restrained steel beams using dynamic response" in a national conference held at CARE Trichy during December 2012
- 2. **Topper** of First semester **M. Tech**, Structural Engineering NIT, Trichy
- 3. Got **fifth rank** in the **B. Tech** Civil Engineering exam conducted by Kerala University during the year 2011
- 4. **Topper** of Fourth Semester B. Tech, College of Engineering Trivandrum.

# AREA OF RESEARCH

Deterioration of flexural behavior of pre-tensioned bridge girders due to chloride induced corrosion of prestressing strand – under the guidance of Prof. Amlan Kumar Sengupta and Dr. Radhakrishna G. Pillai (IIT Madras).

# SEMINARS/WORKSHOPS/CONFERENCES ATTENDED AND PAPERS PRESENTED

- Participated in RILEM-ICI Doctoral Course on "Advanced Concrete Technology", conducted by Indian Institute of Technology Madras, Chennai, November 29-December 4, 2015.
- 2. Participated in GIAN course on "Advanced Bridge Design and Construction", conducted by Indian Institute of Technology Madras, Chennai, July 11 –23, 2016.
- 3. Presented a Conference Paper in "Structural Engineering Convention 2016", hosted by CSIR- SERC, Chennai, India, 21-23 December 2016.
- 4. Participated in training Programme on "Bridge Diagnostics, Performance Evaluation and Rehabilitation", conducted by CSIR-CRRI, New Delhi, 10-14 July, 2017.
- 5. Presented a Conference Paper in "International Conference on Advances in Construction Materials and Systems (ICACMS)", Indian Institute of Technology Madras, September 3 to 8, 2017.

#### **PROJECT**

- Undergraduate: A proposal for comprehensive development of Pottakuzhy-Ulloor stretch in Thiruvananthapuram City under the guidance of Dr. R. Ashalatha, Assistant Professor, CET, Thiruvananthapuram
- Postgraduate: Damage assessment of laterally restrained steel beams using dynamic response under the guidance of Dr. K. Baskar, Associate Professor, NIT Trichy

## PAPERS PUBLISHED IN CONFERENCES

- Giriraju, R., Sengupta, A. K. and Pillai, R. G., "An Assessment of the Deterioration of Flexural Capacity of a Pre-tensioned Concrete Girder due to Strand Corrosion", Proceedings (in CD ROM) and Book of Abstracts (pp.1478-1483), 10<sup>th</sup> Structural Engineering Convention, CSIR Structural Engineering Research Centre – Chennai, Indian Institute of Technology Madras and Anna University, December 21 to 23, 2016.
- 2. G. Resmi, Sengupta, A. K. and Pillai, R. G., "A Study of Deterioration of Flexural Behaviour of Corroded Pre-tensioned Beams", *International Conference on Advances in Construction Materials and Systems*, Vol. 4, pp. 211-222, 71st RILEM Annual Week & ICACMS 2017, Chennai, India, September 3 to 8, 2017.

#### PAPERS PUBLISHED IN JOURNALS

- Giriraju, R., Sengupta, A.K. and Pillai, R.G. Tensile Behaviour of Corroded Strands in Prestressed Concrete Systems. J. Inst. Eng. India Ser. A, 103, 867-879, 2022, doi: 10.1007/s40030-022-00656-y.
- Giriraju, R., Sengupta, A. K. and Pillai, R. G., "An Assessment of the Deterioration of Flexural Capacity of a Pre-Tensioned Concrete Girder due to Strand Corrosion", *Recent Advances in Civil Engineering*, Vol. 2, by Springer Nature Singapore Pte. Ltd., 2018, pp. 515 525, doi: 10.1007/978-981-13-0365-4\_44.

#### **BOOK CHAPTERS BASED ON THESIS**

Giriraju, R., Sengupta, A.K., Pillai, R.G. An Assessment of the Deterioration of Flexural Capacity of a Pretensioned Concrete Girder Due to Strand Corrosion. *Lecture Notes in Civil Engineering book series*, Vol. 12, Edited by: Rao, A., Ramanjaneyulu, K., Springer, Singapore.

#### RESEARCH INTERESTS

- Structural concrete
- Structural health monitoring
- Prestressed concrete structures

## **WORK EXPERIENCE**

- 15 days of May 2012: Internship trainee in Central Public Works Department, Trichy Central Sub-division III
- July 2013 October 2022: Research scholar at IIT Madras

## POSITIONS OF RESPONSIBILITIES:

• Volunteered for "First Workshop on Corrosion Control in Concrete Structures", jointly organized by NIGIS-SZ and Institute of Technology Madras during August 5-6, 2016.

#### TECHNICAL SKILLS

- Proficient in ABAQUS 6.11, MATLAB 2021, SAP 2000, STAAD Pro., AUTOCAD, Midas Civil
- Knowledge in C, C++

## PERSONAL DETAILS

Parents : Mr. G. Giriraju, Mrs. C. V. Jayadevi

Age : 33

Date of Birth : 18<sup>th</sup> June, 1989

Gender : Female

Current Address : No. 7/1C, Second cross street, Dandeeshwaram Nagar, Velachery,

Chennai, 600042

Permanent Address: Rajdale, Thachoorkunnu, Avanavanchery, P. O., Attingal, TVM,

Kerala, 695103

I hereby declare that all the data and information provided above are correct to the best of my knowledge.

Date: 26/04/2023 RESMI G.

Place: Chennai