# Prof. Ashwin Thammaiah K

**Assistant Professor, Department of Civil Engineering** 

R V College of Engineering, Bengaluru, Karnataka, India

Faculty Photo

**Prof. Ashwin Thammaiah K** is an accomplished structural engineering professional and academician currently serving as an Assistant

Professor in the Department of Civil Engineering at Rashtreeya Vidyalaya College of Engineering (RVCE), Bengaluru—an autonomous institution affiliated with Visvesvaraya Technological University, Belagavi. With over seven years of combined experience, including two years in industry and five years in teaching, he brings a balanced blend of practical exposure and academic depth to the field. He holds a Bachelor's degree in Civil Engineering and a Master's degree in Structural Engineering, in which he secured the prestigious **VTU Gold Medal** for securing the First Rank during the academic years **2012–2014**. He is presently pursuing his Ph.D., with research interests spanning structural masonry, RCC design, structural dynamics, earthquake engineering, alternative building materials, and the repair and rehabilitation of structures.

**Prof.** Ashwin Thammaiah K has made notable contributions to the research community, with publications in both national and international journals, four international conference presentations, and two book chapters published under Springer's Advances in Science, Technology & Innovation series. His work on sustainable construction and environmental engineering includes studies on self-compacting concrete using tobacco waste ash, stabilization of black cotton soil using eco-friendly materials, and greywater reuse systems. He also holds a published patent related to the environmental impact of coal fly ash during wet storage and reuse.

His international presentations at academic symposia in Japan and Italy reflect his global engagement and technical proficiency in advanced structural analysis, including finite element modeling and seismic retrofitting. Deeply committed to academic excellence and sustainability, **Prof. Ashwin Thammaiah K** continues to mentor students and engage in interdisciplinary research projects aimed at innovative, resilient, and eco-conscious infrastructure solutions.

## **Personal Information**

Name: ASHWIN THAMMAIAH KDesignation: Assistant Professor

• Department: Department of Civil Engineering

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Research Gate - https://www.researchgate.net/profile/Ashwin-Thammaiah-K

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## **Domain of Expertise**

### **Research Focus**

Primary Area: **Structural Masonry Engineering** 

Reinforced Cement Concrete (RCC) Design

Earthquake Engineering and Structural Dynamics

Alternate Building Materials

**Sustainable Infrastructure and Materials** 

Repair and Rehabilitation of Structures

- Allied Areas:
  - Waste Valorization in Civil Engineering
  - Geotechnical Engineering Applications
  - Materials Science for Construction Innovation
  - Smart and Green Infrastructure Development
  - Geotechnical Engineering and Ground Improvement
  - Construction Waste Management and Circular Economy

# **Academic Qualifications**

- Ph.D.: [Structural Masonry Engineering Visvesvaraya Technological University]
- M.Tech: Structural Engineering, Visvesvaraya Technological University, 2013 14
- B.E.: Civil Engineering, Visvesvaraya Technological University, 2011 12

## **Professional Experience**

Experience			
SI. No	Institute/College/Industry	Job Title	Duration
1.	RV College of Engineering, Bengaluru - 560059	Assistant Professor	2017 - Till Date,
2.	M/s Abhaya Associates Pvt. Ltd. Bangalore - 74	Structural Design Engineer	2015 - 2016
3.	M/s Larsen & Toubro Pvt. Ltd. Engineering Design Research Centre.	Post Graduate Engineer Trainee	2014 - 2015

## **Publications & Patents**

### **Journal Publications**

- 1. "Dynamic Tests to evaluate in-plane performance of Hollow Concrete Block Masonry Ashwin Thammaiah K, Dr. Aswath M U, Dr. Raghunath S, Published in The International Journal of Structural Engineers World Congress, February 2015.
- 2. "Self-compacting Concrete Using Tobacco Waste Ash" Ashwin Thammaiah K., Manu Prasad P., Nishchel C.N., Ballavur R.S., Rohith Y.M.Journal: Recent Advances in Civil Engineering. Lecture Notes in Civil Engineering, Volume: 233, DOI: https://doi.org/10.1007/978-981-19-0189-8\_1.

3. "Ultimate Moment Capacity of Reinforced Hollow Concrete Block Masonry" – Ashwin Thammaiah K, Pratyusha M Naik, Dr. Aswath M U, Dr. Raghunath S, Published in Bulletin of Association of Consulting Civil Engineers (India), April – June 2014.

### **Conference Papers**

- 4. "Sustainable use of Grey water for Lower Floor Toilet Flushing" Ashwin Thammaiah K, et, al., Third international conference on Nano-technology and materials science, Rome, Italy 2019.
- 5. Dairy Wastewater treatability studies by soil aquifer treatment system in conjunction with different adsorbents" Ashwin Thammaiah K, et., al., Third international conference on Nano-technology and materials science, Rome, Italy 2019.
- 6. "Influence of Geometric Parameters on the in-plane response of Masonry walls Analytical Studies" Ashwin Thammaiah K, Dr. Raghunath S and Dr. Aswath M U Published at 4th International Engineering Symposium. Kumamoto University, Japan, March 2015.
- 7. "Parametric Comparison of Retrofitting Methods in Masonry using Finite Element Analysis" Ashwin Thammaiah K, et., al., Journal: IOP Conference Series: Earth and Environmental Science, International Conference on Contemporary and Sustainable Infrastructure (ICCSI-2021) Volume: 822 DOI:10.1088/1755-1315/822/1/012017.

### **Books/Book Chapters**

- 8. Ashwin Thammaiah K, et., al., (2022). Drought Risk Assessment Using NDVI—A Case Study. In: Heggy, E., Bermudez, V., Vermeersch, M. (eds) Sustainable Energy-Water-Environment Nexus in Deserts. Advances in Science, Technology & Innovation. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-76081-6\_29">https://doi.org/10.1007/978-3-030-76081-6\_29</a>.
- 9. Ashwin Thammaiah K, et., al., (2022). Enviro- Safe Stabilization of Black Cotton Soil—Experimental Study with Optimal Proportion of Stabilizer. In: Heggy, E., Bermudez, V., Vermeersch, M. (eds) Sustainable Energy-Water-Environment Nexus in Deserts. Advances in Science, Technology & Innovation. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-76081-6\_90">https://doi.org/10.1007/978-3-030-76081-6\_90</a>.

#### **Patents**

1. "Changes In Metal Leaching from Coal Fly Ash During Wet Storage & Reuse" Application No: 202241002935, Publication Date: 04/02/2022

## R & Grants & Consultancy Projects

## **Ongoing & Completed Research Projects**

# **Ongoing & Completed Consultancy Projects**

## **Professional Memberships**

INTERNATIONAL ASSOCIATION OF ENGINEERS (Member ID – 227828)

## **Awards & Recognitions**

• VTU – Gold Medalist (Secured 1st Rank) \_ M.Tech (Structural Engineering) - Academic Year

(2012 - 2014)

• "Self-Compacting Concrete using Tobacco Waste Ash", Project Grant – Karnataka State Council for Science and Technology under Student Project Proposal (SPP) – 44th series for the year 2021 & presented at 44th Series of State Level Seminar and Exhibition of SPP projects at Indian Institute of Science Campus, Bengaluru – 560 012.

## **Student Supervision**

• M.Tech: 02 Students

• Undergraduate Research Mentees: 56 Students

### **Professional Roles**

- Editorial Board:
  - o International Conference on Recent Advances in Science and Engineering (RAiSE-2023)
- Chair/Committee Member:
- Industry Advisor:
  - o Jal Jeevan Mission Gol
  - o Karnataka Urban Water Supply & Drainage Board GoK
  - o Rural Drinking Water and Sanitation Department GoK

## **Teaching**

#### **Core Courses:**

- CV235AI Mechanics of Materials
- CV345AT Structural Analysis
- MST323B5 Tall Structures
- MST313IA Structural Dynamics
- CV255TBD Bridge Engineering
- CV234AI Concrete Technology
- CV244AI Building Planning & Drawing

#### Advanced/Lab Courses:

- Structural Engineering Laboratory,
- Advanced Concrete Technology,
- Earthquake Engineering,
- Finite Element Method (FEM) for Structural Analysis,
- Repair and Rehabilitation of Structures,
- Environmental Engineering Lab (Allied),
- Design & Drawing of Bridge Structures etc.,

## **Professional Roles**

## Responsibilities

- Academic: NPTEL Mentor, UG Counsellor, CIE Coordinator, Quiklrn Coordinator, Magazine Coordinator, Alumni Committee Coordinator, Concrete Fair Coordinator.
- Administrative: AICTE, NBA, NAAC, VTU LIC, NIRF, TTO Member, Sports Committee Member.

### **External Connect**

- Member of BoS/ BoE
  - M S Ramaiah Institute of Technology,
  - New Horizon College of Engineering,
  - Bangalore Institute of Technology,
  - o PES College of Engineering,
  - o Dr. Ambedkar Institute of Technology,
  - o Nitte Meenakshi Institute of Technology,
  - Dayanand Sagar College of Engineering,
  - VNR Vignana Jyothi Institute of Engineering and Technology.