

Dr. T. SAKTHIVEL

Assistant Professor (Selection Grade)
A-207, Department of Civil Engineering
Dr. Mahalingam College of Engineering and Technology
Pollachi 642 003, Tamil Nadu, INDIA
E-mail: thanga.sakthivel@gmail.com, Mobile: +91 99522 63820



EDUCATION BACKGROUND

- **Ph.D., Civil Engineering** July 2019
Indian Institute of Technology Madras, Chennai, INDIA.
Thesis: Effect of the incorporation of slag, fly ash and limestone calcined clay on the compressive strength, elastic modulus and shrinkage of concrete
- **M.E., Structural Engineering** May 2009
Annamalai University, Annamalainagar, INDIA.
Thesis: Behaviour of fly ash concrete filled steel tubular columns
- **B.E., Civil Engineering** April 2007
Anna University, Chennai, INDIA.
Projects: 1. Performance of hollow steel tubular beam in filled with concrete (an experimental study)
2. Behaviour of concrete filled steel tubular columns

WORK EXPERIENCE

- **Assistant Professor (Selection Grade)** November 2018 – Present
 - Dr. Mahalingam College of Engineering and Technology (MCET), Pollachi, Tamil Nadu
- **Guest Lecturer** January 2017 – December 2017
 - SRM University, Ramapuram, Tamil Nadu
- **Teaching / Research Assistant** July 2011 – Oct. 2018
 - Indian Institute of Technology Madras, Chennai, Tamil Nadu
- **Consulting Civil Engineer** May 2010 – June 2011
 - Zenith Consultant, Erode, Tamil Nadu
- **Lecturer** June 2009 – April 2010
 - Kumaraguru College of Technology, Coimbatore, Tamil Nadu

RESEARCH INTEREST

- Performance of mineral and chemical admixtures on concrete
- Durability and long-term performance of concrete systems
- Non-destructive testing methods for concrete structures

COURSES TAUGHT

Undergraduate level

- MEC211-Introduction to concrete and construction technology
- 16CET42-Strength of materials/Mechanics of Solids
- 16CEE10-Maintenance and Rehabilitation of Structures

Graduate level

- SEE401-Advanced concrete technology
- SEE507-Advanced design of steel structures
- 19STCN1102-Theory of elasticity and plasticity

PUBLICATIONS

Journals

1. Yuvaraj Dhandapani, **T. Sakthivel**, Manu Santhanam, Ravindra Gettu, and Radhakrishna G. Pillai (2018) "Mechanical properties and durability performance of concrete with limestone calcined clay cement (LC³)" *Cement and Concrete Research*, 107, pp.136-151
2. **T. Sakthivel**, Ravindra Gettu, and Radhakrishna G. Pillai (2019) "Compressive Strength and Elastic Modulus of Concretes with Fly Ash and Slag" *Journal of Institution of Engineers (India): Series A*. <https://doi.org/10.1007/s40030-019-00376-w>

Conferences

1. Ravindra Gettu, Manu Santhanam, Radhakrishna G. Pillai, Yuvaraj Dhandapani, **Sakthivel T.**, Sripriya Rengaraju, Sundar Rathnarajan, Fathima Suma M., Anusha S. Basavaraj and Sanoop Prakasan, "Summary of 4-years of research at IIT Madras on concrete with lime stone calcined clay cement (LC3)" International Conference on Sustainable Materials, Systems and Structures 2019, Rovinj, Croatia
2. Ravindra Gettu, Manu Santhanam, Radhakrishna G. Pillai, Yuvaraj Dhandapani, **Sakthivel T.**, Sripriya Rengaraju, Fathima Suma M., Sanoop Prakasan, Sundar Rathnarajan, and Anusha S. Basavaraj "Recent research on limestone calcined clay cement (LC3) at IIT madras" Conference in Honour of Centennial of Laboratory of Construction Materials and 60th Birthday of Prof. Karen Scrivener (Lausanne, Switzerland), At Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland, 22 Aug 2018, Volume: pp. 76-79
3. **T. Sakthivel**, Swathi Shantharaju, Ravindra Gettu and Radhakrishna G. Pillai "Assessment of shrinkage prediction models for fly ash concrete" International Conference on Advances in Construction Materials and Systems, 3rd R. N. Raikar Memorial International Conference and Gettu Kodur International Symposium, Mumbai, India, December 14-15, 2018.

4. **T. Sakthivel**, Ravindra Gettu, and Radhakrishna G. Pillai “Influence of incorporation of fly ash and slag on the shrinkage response of common concretes” International conference on advances in construction materials and systems, 71st RILEM Week and ICACMS, Chennai, India, September 3-8, 2017.
5. **T. Sakthivel**, E. K. Mohanraj, and S. Thiruganasambanam (2011) “Axial Capacity of concrete Filled Steel Tubular Slender Columns”, *Proc., International Conference on Emerging Trends in Engineering*, INDIA. 762 - 767.
6. S. Thiruganasambandam, **T. Sakthivel**, and M. Pravin (2009) “Flyash as Fine Aggregate in Polyester Resin Based Polymer Concrete - A Repair Material” *Proc., National Seminar on Disaster Mitigation and Rehabilitation of Structures*, INDIA. 303 - 309

PROJECTS WORKED

1. Study of durability and long-term performance of concrete under different environmental conditions, funded by Lafarge Centre De Recherche, France, (2010 - 2015)
2. Performance of limestone calcined clay clinker cement (LC³), funded by Swiss Agency for Development and Cooperation (SDC), Switzerland. Jointly working with EPFL Switzerland, IIT-D, IIT-B, and TARA (2014-2018)
3. Study of creep and shrinkage of self-compacting concrete funded by L&T constructions, India, (2016-2018)

REPORTS PREPARED

1. “Mechanical properties of concrete with LC³”-Chapter-5, Limestone calcined clay cement technical report submitted to SDC, Switzerland, May 2017
2. “Creep and shrinkage tests of M65 and M50 grade concretes supplied by L&T construction” submitted to L&T constructions India, February 2018

INVITED TALKS

- Delivered a talk on Importance of long-term performance of concrete system in a two-day seminar on advanced concrete mix design at KCG College of Technology, Chennai on 31st January 2018.

OTHER ADMINISTRATIVE RESPONSIBILITIES

- Program co-ordinator and Project co-ordinator for M.E., Structural Engineering program at MCET from December 2018 to till date.
- Laboratory in charge for Structural Engineering and Structural Mechanics laboratories at MCET from December 2018 to till date.
- Active member in Curriculum and syllabus formulation for Structural Engineering course at MCET.
- Scholar in-charge for durability, creep and shrinkage laboratory at IIT Madras from April 2012- October 2018.

- Active committee member for safety monitoring in civil engineering laboratories at IIT Madras.
- Organising committee member for various conferences, workshops, and short-term courses at IIT Madras
- Department councillor for research scholars during the year 2013-2014
- Coordinator for research scholar meetings (BT&CM Div.) from June 2013 to December 2014
- Active volunteer for society for the promotion of Indian classical music and culture amongst youth (SPIC MACAY)

REFERRALS

Prof. Ravindra Gettu

Prof. V. S. Raju Institute Chair Professor
Department of Civil Engineering
Indian Institute of Technology Madras
Chennai, TN 600 036, INDIA
Email: gettu@iitm.ac.in
Phone: +91 44 2257 4266 (off.)

Dr. Radhakrishna G. Pillai

Associate Professor
Department of Civil Engineering
Indian Institute of Technology Madras
Chennai, TN 600 036, INDIA
Email: pillai@iitm.ac.in
Phone: +91 44 2257 4303 (off.); 90032 28158 (mob.)