

Dr.V.Ponmalar
Associate Professor



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Academic Background

- Obtained Doctorate from the Indian Institute of Technology, IIT Madras in the year of 2010.
- Attained Masters of Structural Engineering Degree from Thiagarajar College of Engineering (Madurai Kamarajar University) in the year of 2002.
- Obtained Bachelor of Civil Engineering Degree from Thiagarajar College of Engineering (Madurai Kamarajar University) in the year of 1999.

Professional Background

- Having ten years experience in teaching at the College of Engineering, Guindy, Anna University, Chennai.
- Worked as a HTRA at IIT Madras from January 2003 to December 2004 (two years).
- Completed the M.E. Project work from Structural Engineering Research Centre (SERC) Taramani, Chennai from June 2002 to Dec 2002.

Professional Excellence Summary

- Written a book titled "Construction Materials" in Tamil for B. E. Civil Engineering (Tamil Medium) in the year 2010.
- Prepared the "Construction Engineering Laboratory Manual" for B.E. Civil Engineering Programme (Tamil Medium) in the year 2010. It includes all the materials testing like testing on cement, brick, fine aggregate, coarse aggregate and concretes.
- Prepared an "Advanced Construction Engineering Laboratory Manual" for M.E. Construction Engineering and Management Programme in the year 2009.
- Arranged and organized the Engineering Laboratory Manual" for B.E. Civil Engineering

Programme (English Medium) in the year 2010.

Details of Publications

National Journal

- Ponmalar.V., Ganesh Babu.K., and Gettu, R. (2014), "Theoretical Modelling of the Confinement Effect on Concrete with Fiber Reinforced Polymer", Journal of Structural Engineering, Vol.40, No.6, 521-529.

International Journal

- Ponmalar.V., (2012), "Strength comparison of Fiber Reinforced Polymer (FRP) Wrapped Concrete Exposed to High Temperature", International Journal of Applied Sciences and Engineering Research, Vol.1, No.2, 146-151.
- Ponmalar, V and Ramesh B, "Energy Efficient Building Design and Estimation of Energy Savings from Daylighting in Chennai", International Journal of Energy Engineering: Association of Energy Engineers, Vol.114.,No.5., 165-181.
- Ponmalar, V and Albert Abraham, "Effective Utilization of RHA in Concrete", Korean Journal of Civil Engineering, (Published online).

Details of International and National Conferences

- Ponmalar,V. Ganesh Babu, K. and Gettu, R. (2008), "Confinement effect of FRP: Experimental and Model Calculations, Comparison of Existing Design Guidelines", International Conference on Advances in Concrete and Construction- (ICACC-2008), Vasavi Engineering College, Hyderabad, India, Feb 7-9, pp.891-898.
- Ponmalar,V. Ganesh Babu, K. and Gettu, R. (2008), "Strengthening of Structural Elements with Fiber Reinforced Polymer Laminates", International Conference on Innovative World of Concrete- (ICI-IWC-2008), Indian Concrete Institute, Noida, New Delhi, India, Dec 12-14.
- Ponmalar, V. Ganesh Babu, K. and Gettu, R. (2008), "Experimental and Analytical Study on Confinement Effect of GFRP", The Sixth Structural Engineering Convention- (SEC-2008), SERC, Chennai, India, Dec 18-20, pp.1245-1252.
- Ponmalar,V. Ganesh Babu, K. and Gettu, R. (2009), "Strengthening of Structural Elements with Fiber Reinforced Polymer Laminates", International Conference on Advances in Concrete, Structural and Geotechnical Engineering-(ACSGE-2000),BITS, Pilani, India, Oct 25-27.
- Ponmalar,V. and Abarna, S (2010), "Improvement of Concrete Properties Using Palm Tress

Fronds Presented at “Poster Session” in “Asian Conference on Concrete ACECON 2010” on 5-9 December 2010, Indian Institute of Technology, Chennai. (2009), “Strengthening of Structural Elements with Fiber Reinforced Polymer Laminates”, International Conference on Advances in Concrete, Structural and Geotechnical Engineering-(ACSGE-2000),BITS, Pilani, India, Oct 25-27.

- Nirubha, E and Ponmalar, V., (2014), “Effect of Rice Husk Ash in Concrete” Proceedings of National Conference on Civil Engineering Systems and Sustainable Innovations, New Delhi.

20 national conference proceedings in the areas of construction materials, substitution materials for concrete self compacting concrete and structural and construction management.

Details of funded projects

- Co-Investigator for the project titled “PERFORMANCE OF CONCRETE WITH RICE HUSK ASH AS BINDING MATERIAL”, with the Building Technology Centre, Anna University, Chennai for a period one and Project approved from Building Materials Technology and Promotion Council, Delhi, obtained a project of Rs.5,00,000 in the year 2013.
- Mentor for UGC funded student fellowship, guided the students in the title of “IMPROVEMENT OF CONCRETE PROPERTIES USING PALM TREE FRONDS” in 2010.

Consultancy and testing

- Actually doing consultancy work and attached to Structural Engineering Laboratory in the Division and doing mix design and testing of materials work for the past 5 years and completed work Rs. 12 lakhs.

Subjects handled

- Interestingly handling undergraduate subjects like Engineering mechanics, Strength of materials, Construction materials, Repair, maintenance and rehabilitation of structures, Computer aided building, drawing, Computer aided design and drafting, Strength of materials laboratory, Construction materials laboratory.
- Actively handling post graduate courses like Repair, maintenance and rehabilitation of structures, Modern construction materials, Resource planning and control in constructions, Construction planning, scheduling and control and Advance construction engineering laboratory

Short-term/training programs and Faculty development program conducted

Sl.No	Name of the programme	Organizer / Organizers	Period / Year	Trained Organization	Total number of day/ days
1.	Conducted a Workshop on "Construction of Bamboo Houses"	Structural Engineering Division and Building Technology Centre, Anna University, Chennai.	19 th and 20 th March 2012	Consultants, architects, practicing engineers and students	2 days
2.	Conducted the training programme on "Building Materials"	Structural Engineering Division and Building Technology Centre, Anna University, Chennai	21 st to 23 rd March 2011	Engineers from Tamil Nadu Slum Clearance board	3 days
3.	Conducted the Faculty Development Training Programme on "Design of RC Elements"	Centre for Faculty Development, Anna University, Chennai.	20 th to 26 th June 2011	Faculties from Government and Govt. Aided colleges	7 days
4.	Conducted the training programme on "Building Materials"	Structural Engineering Division and Building Technology Centre, Anna University, Chennai	2 nd to 4 th March 2011	Engineers from Tamil Nadu Slum Clearance board	3 days
5.	Conducted a day seminar on "Modern Trends in High Performance Concrete"	Structural Engineering Division Anna University, Chennai	30 th April 2008	Engineers, faculties from engineering colleges and students	1 day

Short-term/training programs and Faculty development program attended

- Attended shorter course, training programme and faculty development programme of 62 days from 2005 to till date.

Students related activities

- Scrutinized the under graduate and post graduate question papers of Affiliated Colleges in Controller of Examination, Chennai for the past three years.
- Deputed for certificated verification, representing Civil Engineering of B.E. Civil Engineering in the year 2013.
- Judged the events for Civilization, Techfest, Kurushetra and Dice (Events conducted by CEG students) from 2005 to till date.
- Evaluated the practical training report and presentation of B.E. Civil Engineering students for the past two years.
- Evaluated Inplant training report and presentation of M.E. Construction Engineering and Management in every alternate year from 2005 to till date.
- Member of a Timetable committee and prepared B.E. Civil Engineering (Tamil and English) medium for four years from 2005.
- Arranged and accompanied a one day industrial visit to under graduate and post graduate courses from 2005 to till date.
- Purchased the materials for the construction materials laboratory under “DST-Purse Program” during 2010 to 2012.
- Purchased cube molds for materials laboratory under CPDE Equipment Head in the year 2010 to 2011.
- Actively delivering the lectures in the training programmes on “Design and construction of Bridges” organized by BTC (Building Technology Centre, CEG, Chennai) from 2009 to 2010.

Other Activities

- Class advisor for B.E. Civil Engineering (Tamil Medium) in the current semester.
- Treasurer for Society of Civil engineers in the year 2009-2010 for B.E. Civil Engineering programme. Successfully organized and completed the Civilization 2010.
- Class advisor for Agricultural and Irrigation Engineering and B.E. Civil Engineering in the every alternate semesters from 2006 to 2010.
- Member of the timetable committee from 2005-2008 representing the civil engineering department and prepared the time table for B.E. Civil Engineering program.

Membership of the Professional Bodies

- Member of ICI (Indian concrete Institute)
- Member of Indian Geotechnical Society (Chennai region)
- Member of Society of Civil Engineers (Anna University)

