

BIO-DATA

1. Name and full correspondence address Prabha Mohandoss, Assistant Professor,
C20, Department of Civil Engineering
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3. Institution National Institute of Technology Tiruchirappalli
4. Date of Birth 24 June 1990
5. Gender (M/F/T) F
6. Category Gen/SC/ST/OBC OBC
7. Whether differently abled (Yes/No) No
8. Academic Qualification (Undergraduate Onwards)

Degree	Year	Subject	University/Institution	CGPA
B.E.	2007-2011	Civil Engineering	Thiagarajar College of Engineering, Madurai, Tamil Nadu, India	8.43
M.E.	2011 – 2013	Structural Engineering	Anna University::Chennai Regional Centre, Madurai, Tamil Nadu, India	8.74
Ph.D.	2013 – 2019	Civil Engineering	Indian Institute of Technology Madras, Chennai, Tamil Nadu, India	9

9. Ph.D thesis title, Guide's Name, Institute/Organization/University, Year of Award.

Ph.D. Thesis title: "Assessment of transmission length and bond strength of pretensioned concrete systems", Guide: Dr. Radhakrishna G. Pillai, Institute: Indian Institute of Technology Madras, 2019

10. Work experience (in chronological order).

S.No.	Positions held	Name of the Institute	From	To	Pay Scale
1	Project Associate	Indian	Oct 2018	Jan 2019	
2	Project Officer	Institute of	Jan 2019	Aug 2019	

3	Senior Project Officer	Technology Madras	Sep 2019	March 2020	
4	Assistant Professor	National Institute of Technology Tiruchirappalli	April 2020	Present	

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S.No	Name of Award	Awarding Agency	Year
1	Half-Time Research Assistantship	MHRD, Govt. of India	2013-2018
2	Outstanding Poster Award – First Place	American Concrete Institute, USA	2018
3	All-Round Performance Award in Ph.D. Category	Civil Engineering Association, IIT Madras	2018
4	Gold Medalist and University Rank Holder	Anna University	2013

12. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1	Mohandoss P., Pillai R. G., and Gettu R.	Determining bond strength of seven-wire strands in prestressed concrete	<i>Structures</i>	33	2413-2423	2021
2	Mohandoss P., Pillai R. G., and Sengupta A.K.	Effect of compressive strength of concrete on transmission length of pretensioned concrete systems	<i>Structures</i>	23	304-313	2020
3	Mohandoss P., Pillai R. G., and Sengupta A.K.	Transmission length of pretensioned concrete system: comparison of codes and test data	<i>Magazine of Concrete Research</i>	17	881-893	2019
4	Gopinath S., Mohandoss P.,	Modelling of RC beams strengthened	<i>Journal of Institute of</i>	98	285-291	2017

	Murthy A. R., Iyer N. R.	with basalt reinforced concrete	<i>Engineers (India) Series A</i>			
5	Gopinath S., Murthy A. R., Iyer N. R. and Mohandoss P	“Behaviour of reinforced concrete beams strengthened with basalt textile reinforced concrete	<i>Journal of Industrial Textile</i>	44	924-933	2014

13. Detail of patents.

S.No	Patent Title	Name of Applicant(s)	Patent No.	Award Date	Agency/Country	Status
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14. Books/Reports/Chapters/General articles etc.

S.No	Title	Author's Name	Publisher	Year of Publication
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15. Any other Information (maximum 500 words)

INTERNATIONAL CONFERENCE PAPERS

* Indicates the presenter

CP 1. Kumar M. H*., and Mohandoss P., “Challenges in structural performance of prestressed concrete structures exposed to corrosive environment: A review” SMART AND SUSTAINABLE DEVELOPMENT OF URBAN GREEN INFRASTRUCTURE IN INDIA AND CANADA (SSDUGI 2022), Trichy, India, March 25 – 26, 2021.

CP 2. **Mohandoss P.***, Pillai R.G., and Gettu R., “Effect of prestress on the bond strength of pretensioned concrete systems”, 3rd R. N. Raikar Memorial International Conference & Gettu-Kodur International Symposium on Advances in Science & Technology of Concrete, Mumbai, India, December 14 - 15, 2018.

CP 3. **Mohandoss P.***, and Pillai R. G., “Effect of prestress on the bond strength of pretensioned concrete systems”, International Conference on Advances in Construction Materials and Systems (ICACMS) & 71st RILEM Week, Chennai, India, September 3-8, 2017.

CP 4 **Mohandoss P.***, Pillai R. G., and Sengupta A. K., “Comparison of prediction models for transmission length and shear capacity of pre-tensioned concrete systems”, 4th Asian conference on Ecstasy in Concrete (ACECON), Kolkata, India, October 08-10, 2015.

CP 5. **Mohandoss P. ***, Gopinath S., Murthy A.R., and Iyer N.R., “Numerical modelling of RC beams with basalt fibre reinforced polymer”, International Conference on Advances in Engineering and Technology, Dr. M.G.R. Educational and research institute university, Chennai, India, March 15, 2013.

NATIONAL CONFERENCE PAPERS

1. **Mohandoss P.*** and Pillai R. G., “Bond performance of pretensioned concrete system”, 10th Structural engineering convention (SEC), Chennai, India, December 21-23, 2016.
2. **Mohandoss P.***, Gopinath S., Murthy A. R., and Iyer, N.R., “Flexural behaviour of RC beams strengthened with Basalt Reinforced concrete”, 5th Innovations in civil engineering (ICE), Kumaraguru college of Technology, Coimbatore, India. April 19, 2013

STUDENT GUIDANCE

Ph.D.

1. Mr. Mooveri Hithesh Kumar (Regular: May 2021 - Present)
Research area: Structural behavior of pretensioned concrete system
2. Mr. Narayanan R. (Part-time: May 2021 - Present)
Research area: Evaluation of off-shore structures
3. Mr. Jagandas (Regular: March 2022 – Present)
Research area: Understanding the structural behavior of precast concrete system.

M.Tech

1. Mr. Bharath K.Kumar (2020 – 2022)
Project title: Mechanical characterization of GFRP rebar.
2. Mr. Bharath Potharaju (2020 – 2022)
Project title: Modelling the interface between precast concrete and grout at joints
3. Mr. Srinivas (2020 – 2022)
Project title: Modelling the flexural performance of prestressed concrete
4. Mr. Sumanth Reddy (2020-2022)
Project title: Modelling the fatigue performance of prestressed concrete
5. Mr. Bhasha I (2019 – 2021)
Project title: Effect of corrosion on shear performance and service life of pretensioned concrete members.
6. Govardhan P (2019 – 2021)
Project title: Developing a numerical model to evaluate the bond strength of pretensioned concrete system
7. Mr. Vaibhav Agarwal (2019 – 2021)
Project title: Bond performance of precast grout with the concrete substrate

PROJECTS INVOLVED IN

- Assisting in the revision of IS 456 (2000)
 - Analysing the mechanical properties of high strength steel reinforcement
- Research Project on ‘Structural behaviour of corroding prestressed concrete systems and extension of service life using cathodic protection’ – Science and Engineering Research Board (SERB), Govt. of India, 2018-21
 - Leading the working team of the project
 - Design and fabrication of experimental setup and specimens
 - Experimental design to determine the effect of corrosion on flexural behaviour of pretensioned concrete members
- Performance assessment of concrete used for manholes in Karaikudi Municipal area
 - Collection of samples from manholes

- Testing the specimens to check the quality of materials used
- Reporting the test results and recommendations
- Performance evaluation of cementitious grout for applications in precast concrete construction
 - Evaluated and reported the fresh and mechanical properties
- Strand testing
 - Tested and reported the mechanical properties and surface characteristics of 3 and 7 wire prestressing strands
 - Tested the surface characteristics of 3-wire strands used in railway sleepers

PROFESSIONAL MEMBERSHIP AND SERVICES

- **Life-time member** of the Indian Concrete Institute (ICI)
- **Life-time member** of the Society for Failure Analysis (SFA)
- **Affiliate Member** of RILEM, International Union of Laboratories and Experts in Construction Materials, Systems and Structures
- **Young professional member** of Bureau of Indian Standard (BIS)
- **Research Coordinator** – Construction materials research scholars’ group in BTCM Division, Department of Civil engineering, IIT Madras, from Feb 2016 – August 2016.
- **Peer Reviewer:** YCRETS (Young Concrete Researchers Engineers and Technologists Symposium) University of Witwatersrand, Johannesburg, South Africa
- **Peer Reviewer:** SCI indexed journals - *Structural Concrete, Sugar Tech, Construction Building Materials and CRC publications*