Dr. Radhakrishna G. Pillai Associate Professor Building Technology and Construction Management Indian Institute of Technology Madras Chennai

Phone: +91-44-22574303 Email: pillai@iitm.ac.in

List of Publications:

- 1.Effect of compressive strength of concrete on transmission length of pre-tensioned concrete systems, Prabha Mohandoss ., Radhakrishna G. Pillai ., Amlan K. Sengupta .,e Structures, **Volume** 23, **Year** 2020, **Pages** 304-31 DOI:10.1016/j.istruc.2019.09.016
- 2. Macrocell corrosion mechanisms of prestressing strands in various concretes Sripriya Rengaraju ., Anand Godara ., Prasanth Alapati ., Radhakrishna G. Pillai ., Magazine of Concrete Research, Volume 72, Year 2020, Pages 194-206 DOI:10.1680/jmacr.18.00284
- **3.** Perspectives on Durability of Blended Systems with Calcined Clay and Limestone Manu Santhanam ., Yuvaraj Dhandapani ., Ravindra Gettu ., Radhakrishna Pillai .r RILEM Bookseries, **Volume** 25, **Year** 2020, **Pages** 581-591 DOI:10.1007/978-981-15-2806-4_65
- **4.** Chloride-Induced Corrosion Resistance of Steel Embedded in Limestone Calcined Clay Cement Systems

 Sripriya Rengaraju Radhakrishna G Pillaj Lakshman Neelakantan Rayindra Gettu

Sripriya Rengaraju ., Radhakrishna G. Pillai ., Lakshman Neelakantan ., Ravindra Gettu ., Manu Santhanam ., RILEM Bookseries, **Volume** 25, **Year** 2020, **Pages** 613-619 DOI:10.1007/978-981-15-2806-4_68

- **5.** Perspectives on blended cementitious systems with calcined clay-limestone combination for sustainable low carbon cement transition

 Article Indian Concrete Journal, **Volume** 94, **Year** 2020, **Pages** 31-45
- **6.** Factors affecting productivity and functionality of precast concrete building construction Article Indian Concrete Journal, **Volume** 94, **Year** 2020, **Pages** 26-37
- **7.** Microstructural and corrosion characteristics of Quenched and Self-Tempered (QST) steel reinforcing bars

Sooraj A.O. Nair ., Radhakrishna G. Pillai .cle Construction and Building Materials, **Volume** 231, **Year** 2020 DOI:10.1016/j.conbuildmat.2019.117109

- **8.** Effect of surface preparation on corrosion of steel rebars coated with cement-polymer-composites (CPC) and embedded in concrete**Deepak K. Kamde.**, **Radhakrishna G. Pillai**. **e Construction and Building Materials, Volume 237, Year 2020** DOI:10.1016/j.conbuildmat.2019.117616
- 9. Bond performance of pretensioned concrete systems Mohandoss, Prabha;Kompella, Sriram K.;Pillai, Radhakrishna G.r Lecture Notes in Civil Engineering, Volume 11, Year 2019, Pages 277-286 DOI:10.1007/978-981-13-0362-3_22 10. Investigation on the polarization resistance of steel embedded in highly resistive cementitious systems An attempt and challenges Rengaraju, Sripriya;Neelakantan,

Lakshman; Pillai, Radhakrishna G e Electrochimica

Acta, Volume 308, Year 2019, Pages 131-141 DOI:10.1016/j.electacta.2019.03.200 11. Compressive Strength and Elastic Modulus of Concretes with Fly Ash and Slag T. Sakthivel., Ravindra Gettu., Radhakrishna G. Pillai. Journal of The Institution of Engineers (India): Series A, Volume 100, Year 2019, Pages 575-584 DOI:10.1007/s40030-019-00376-w

12. Restoration of Reinforced Lime Concrete Sunshades of a Century Old Heritage Building in New Delhi, India

Joseline, Dyana; Haridasan, Hareesh; Rathnarajan, Sundar; Rani, Divya; Raja, Thangadurai; Pillai, Radhakrishna G.; Sengupta, Amlan K.; Menon, Arunr RILEM Bookseries, Volume 18, Year 2019, Pages 778-787 DOI:10.1007/978-3-319-99441-3_84 13. Impact of different climates on the resistance of concrete to natural carbonation Huy Vu, Quoc; Pham, Gabriel; Chonier, Alain; Brouard, Eric; Rathnarajan, Sundar; Pillai, Radhakrishna; Gettu, Ravindra; Santhanam, Manu; Aguayo, Federico; Folliard, Kevin

J.;Thomas, Michael D.;Moffat, Ted;Shi, Caijun;Sarnot, Anule Construction and Building Materials, Volume 216, Year 2019, Pages 450-467

DOI:10.1016/j.conbuildmat.2019.04.263

14. Sustainability-based decision support framework for choosing concrete mixture proportions Gettu, Ravindra; Pillai, Radhakrishna G.; Santhanam, Manu; Basavaraj, Anusha S.; Rathnarajan, Sundar; Dhanya, B. S. Materials and Structures/Materiaux et Constructions, Volume 51, Year 2018 DOI:10.1617/s11527-018-1291-z

15. Assessment of stress-strain behavior of corroded steel reinforcement using digital image correlation (DIC)

Rajagopal, Ranjitha;Sharma, Sameer;Pillai, Radhakrishna G.;Subramanian, Sankara J.Journal of Testing and Evaluation, **Volume** 46, **Year** 2018, **Pages** 1874-1890DOI:10.1520/JTE20160487

16. Statistical distributions for the corrosion rates of conventional and prestressing steel reinforcement embedded in chloride contaminated mortar J. Karuppanasamy., R.G. Pillai. Corrosion, Volume 73, Year 2017, Pages 1119-1131 DOI:10.5006/2330

17. Performance evaluation of curing compounds using durability parameters Surana, Saarthak; Pillai, Radhakrishna G.; Santhanam, Manu Construction and Building Materials, Volume 148, Year 2017, Pages 538-547

DOI:10.1016/j.conbuildmat.2017.05.055

18. Probabilistic corrosion rates of cold-twisted deformed and thermo-mechanically treated steel in chloride-contaminated mortar **Karuppanasamy**, **Jayachandran**; **Pillai**,

Radhakrishna G. e Indian Concrete Journal, Volume 90, Year 2016, Pages 45-55

19. Promoting precast concrete for affordable housing -An overview on promotional policies worldwide and challenges and possibilities in India Sherfudeen, Arifullah P.; Kumar, Nitish; Raghavan, N.; Pillai, Radhakrishna G.; Kalidindi, Satyanarayana N.

Artice Indian Concrete Journal, Volume 90, Year 2016, Pages 13-24

20. Evaluation of corrosion rates of reinforcing bars for probabilistic assessment of existing road bridge girders

Firodiya, Payal K.;Sengupta, Amlan K.;Pillai, Radhakrishna Gcl Journal of Performance of Constructed Facilities, **Volume** 29, **Year** 2015

DOI:10.1061/(ASCE)CF.1943-5509.0000579

21. Chloride-induced corrosion rates of steel embedded in mortar with ordinary portland and limestone calcined clay cements (OPC and LC3) Rengaraju, Sripriya;Pillai, Radhakrishna G. RILEM Bookseries, **Volume** 10, **Year** 2015 DOI:10.1007/978-94-017-9939-3 86