

## **Dr. M. P. MUTHURAJ – PUBLICATIONS**

### **JOURNAL PUBLICATIONS (International Refereed Journals)**

#### **INTERNATIONAL JOURNALS**

1. **Muthuraj, M. P.**, and Britto X J, "Prediction of compressive strength of bacteria incorporated GPC using ANN and MARS", Structural Engineering and Mechanics, ISSN: 1225-4568, Vol . 70, No. 6, pp. 671 – 681, **2019**
2. **Muthuraj, M. P.**, Nithyapriya K, Subramanian K and Britto X J, "Shear Behaviour of Glass Fibre-Reinforced Geopolymer Concrete", Recent Advances in Structural Engineering, Volume 1, ISBN 978-981-13-0362-3, pp. 999-1010, **2019**
3. **Muthuraj, M. P.** and Jayaprakash, G., "Prediction of Compressive Strength of Various SCC Mixes using Relevance Vector Machine", International Journal of Computer, Material and Continua, ISSN: 1546-2226, Vol.54, No. 1, pp.83 – 102, **2018**
4. **Muthuraj, M. P.** and Nithyapriya, K., "Experimental studies on multicellular GFRP bridge deck panels under static and fatigue loading", Sadhana, Indian Academy of Sciences, ISSN: 0256-2499, Vol. 42, No. 12, pp. 2171– 2181, **2017**
5. **Muthuraj, M. P.** and Nithyapriya, K., "Experimental and Numerical Investigations on Multicellular GFRP Bridge Deck Panels", International Journal of Computer, Material and Continua, ISSN: 1546-2226, Vol.48, No. 2, pp.119 – 132, **2015**
6. **Muthuraj, M. P.** "Experimental Investigation on Glass Fibre Reinforced Polymer Bridge Decks Subjected To Static and Fatigue Loading" International Journal of Applied Engineering Research, ISSN 0973-4562, Vol. 9, NO. 24, pp. 28749-28767, **2014**

#### **NATIONAL JOURNAL**

7. **Muthuraj, M. P.** and Jayaprakash, G., "Prediction of Fresh Properties of Various SCC Mixes using Support Vector Machine", Journal of Structural Engineering, ISSN 0970 – 0137, Vol.46, No. 3, pp. 179-189, **2019**
8. **Muthuraj, M. P.** and Karthick, B., "Specific Fracture Energy For Normal Strength Concrete, High Strength Concrete And Fibre Reinforced Concrete - Three Approaches", Journal of Structural Engineering, ISSN 0970 – 0137, Vol.46, No. 2, pp. 94-100, **2019**
9. **Muthuraj, M. P.** and Nithyapriya, K., "Determination of Size-independent specific fracture energy and corresponding stress vs crack width relation for various concretes", Journal of Structural Engineering, ISSN 0970 – 0137, Vol.42, No. 2, pp. 167-175, **2015**

#### **CONFERENCES (International / National)**

10. **Muthuraj M. P.** et al, Presented paper "Retrofitting of RCC columns by Concrete Jacketing" National Conference on "**Advanced construction materials and Techniques in Civil Engineering**" – 25<sup>th</sup> 26<sup>th</sup> April **2019**, C.I.T, Coimbatore
11. **Muthuraj M. P.** et al, Presented paper "Study on Bacterial Concrete" National Conference on "**Advanced construction materials and Techniques in Civil Engineering**" – 25<sup>th</sup> 26<sup>th</sup> April **2019**, C.I.T, Coimbatore
12. **Muthuraj M. P.** et al, Presented paper "Studies on Mechanical Properties and Durability Characteristics of Bacterial Geopolymer Concrete" National Conference on "**Advanced construction materials and Techniques in Civil Engineering**" – 27<sup>th</sup> April **2018**, C.I.T, Coimbatore
13. **Muthuraj M. P.** et al, Presented paper "Design Optimization for a Dep Test Tank Facility on a River Bank" National Conference on "**Advanced construction materials and Techniques in Civil Engineering**" – 27<sup>th</sup> April **2018**, C.I.T, Coimbatore
14. **Muthuraj M. P.** et al, Presented paper "Experimental investigation on the strength of Geopolymer Bacterial Concrete" National Conference on "**Innovations in Material, Mechanics and Processes for Sustainable Development**" – 13<sup>th</sup> April **2017**, C.I.T, Coimbatore

15. **Muthuraj M. P.** et al, Presented paper "Strength and Durability Characteristic on Partial REplacement of Cement with Zeolite " National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 13<sup>th</sup> April **2017**, C.I.T, Coimbatore
16. **Muthuraj M. P.** et al, Presented paper "Mechanical and Durability Properties of Concrete Incorporating Zeolite and Silica Fume" National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 13<sup>th</sup> April **2017**, C.I.T, Coimbatore
17. **Muthuraj M. P.** et al, Presented paper "neural Networks and Multi Variate Adoptive Regression Splines for Prediction of Strength Properties of Concrete " National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 20<sup>th</sup> April **2016**, C.I.T, Coimbatore
18. **Muthuraj M. P.** et al, Presented paper "Analyzing Construction Project, Performance using Earned Value Through Fuzzy Approach and Develop a Model for Effective Implementation" National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 20<sup>th</sup> April **2016**, C.I.T, Coimbatore
19. **Muthuraj M. P.** et al, Presented paper "Study on Strength Characteristics of Concrete with Partial Replacement of Cement by Zeolite" National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 20<sup>th</sup> April **2016**, C.I.T, Coimbatore
20. **Muthuraj M. P.** et al, Presented paper "Strength Characteristics of Fibre Reinforced Geopolymer Concrete" National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 20<sup>th</sup> April **2016**, C.I.T, Coimbatore
21. **Muthuraj M. P.** et al, Presented paper "Investigation on Ternary Blend on Flexural Behaviour of Geopolymer Concrete" National Conference on **"Innovations in Material, Mechanics and Processes for Sustainable Development"** – 20<sup>th</sup> April **2016**, C.I.T, Coimbatore
22. **Muthuraj M. P.** et al, Presented Paper "Shear Behaviour of GFR based Geopolymer Concrete" International conference on **"Structural engineering Convention 2016"**, December 2016, CSIR SERC, Chennai
23. **Muthuraj M. P.** et al, Presented paper "Impact of value engineering in construction industry" National Conference on **"Innovations in Civil Engineering Systems for Sustainable Construction"** – 22<sup>nd</sup> April **2015**, C.I.T, Coimbatore
24. **Muthuraj M. P.** et al, Presented paper "Impact of various contract clauses dealing with construction project performance" National Conference on **"Innovations in Civil Engineering Systems for Sustainable Construction"** – 22<sup>nd</sup> April **2015**, C.I.T, Coimbatore
25. **Muthuraj M. P.** et al, Presented paper "Studies on the mechanical properties of concrete with internal self curing polymer" National Conference on **"Innovations in Civil Engineering Systems for Sustainable Construction"** – 22<sup>nd</sup> April **2015**, C.I.T, Coimbatore
26. **Muthuraj M. P.** et al, Presented paper "Experimental investigation on concrete with partial replacement of cement by bagasse ash" National Conference on **"Innovations in Civil Engineering Systems for Sustainable Construction"** – 22<sup>nd</sup> April **2015**, C.I.T, Coimbatore
27. **Muthuraj M. P.** et al, Presented paper in "Experimental investigation on steel scrap reinforced concrete" in TEQIP Sponsored National level Conference on **"Frontier applications in Civil and Environmental Engineering"**, 24-25<sup>th</sup> Feb **2014**, C.I.T, Coimbatore
28. **Muthuraj M. P.** et al, Presented paper in "Comparison of experimental investigation on glass fibre reinforced polymer bridge decks subjected to static loading with analytical evaluation using ABAQUS " in TEQIP Sponsored National level Conference on **"Frontier applications in Civil and Environmental Engineering"**, 24-25<sup>th</sup> Feb **2014**, C.I.T, Coimbatore