

Dr.B.JEYAPRABHA, B.E., M.Tech., Ph.D

Professor / Civil

Velammal College of Engineering and Technology, Madurai

e-Mail Id:

Blog Address:

Educational Qualification:

- Doctor of Philosophy, Civil Engineering (July - 2016)
Anna University, Chennai, Tamil Nadu, India.
- Master of Technology, Structural Engineering (2003)
M.S. Ramiah Institute of Engineering and Technology, V.T. University,
Bangaluru, Karnataka, India.
- Bachelor of Engineering, Civil Engineering (2000)
Government College of Engineering, Salem,
University of Madras, Chennai, Tamil Nadu, India.

Experience in Years:

- ✓ Teaching Experience : 17 years
- ✓ Research Experience : 15 years
- ✓ Industrial Experience : 1 year

Employment History:

- Professor, Department of Civil Engineering, Velammal College of Engineering and Technology, Madurai (07.07.2025 to till date)
- Professor and Head, Department of Civil Engineering, Sethu Institute of Technology, Virudhunagar (07.09.2020 to 23.02.2022)
- Professor and Head (PG), Department of Civil Engineering, Sethu Institute of Technology, Virudhunagar (24.06.2019 to 06.09.2020)
- Professor, Department of Civil Engineering, Sethu Institute of Technology, Virudhunagar (02.05.2019 to 23.06.2019)
- Professor, Department of Civil Engineering, Fatima Michael College of Engineering and Technology, Madurai (01.09.2016 to 30.04.2019)
- Associate Professor, Department of Civil Engineering, Fatima Michael College of Engineering and Technology, Madurai (06.05.2013 to 31.08.2016)
- Assistant Professor, Department of Civil Engineering, Velammal College of Engineering and Technology, Madurai (01.06.2009 to 29.04.2013)
- Lecturer, Department of Civil Engineering, K.L.N. College of Information Technology, Madurai (11.06.2007 to 29.05.2009)
- Structural Designer, Lord's Structural Engineering Consultancy, Hosur (08.01.2006 to 14.01.2007)
- Lecturer, Department of Civil Engineering, Adhiyamaan Polytechnic College (02.07.2003 to 31.08.2005)

Interested Research Areas:

- Sustainable alternatives to river sand
- Fire performance of concrete
- High-performance concrete (HPC)
- Corrosion mitigation in reinforced concrete

Scholarships and Awards received:

1. **Received Best Paper Award** in the Paper Presentation Contest conducted by The Institution of Engineers and Anna University of Technology Madurai, for the paper entitled ‘Effect of water quenching on reinforced concrete structure under fire’ on 15.09.2011.
2. **Received a sponsorship of Rs 30,000 /- from CSIR** for conducting one-day National level seminar on ‘Recent Developments and Innovative Techniques in Civil Engineering’ – REDIT – 13 on 18.10.2013.
3. **Received Best Teacher Award** in the year 2015 from Fatima Michael College of Engineering and Technology

Publications Details:**1. International Journal Publication Details:**

S.No.	Journal	Impact Factor
2023		
1.	Principle, design, strategies, and future perspectives of heavy metal ion detection using carbon nanomaterial-based electrochemical sensors: A review Jasmine Jose, P Prakash, B Jeyaprabha , Rani Abraham, Raji Mary Mathew, Elsa Susan Zacharia, Vinoy Thomas, Jeena Thomas, Journal of the Iranian Chemical Society, 20 (2023) 4, 775-791	2.2
2022		
2.	Novel carbon quantum dotted reduced graphene oxide nanosheets for pico – molar range cadmium quantification R, BarsanaBarvin, P.Sathish Kumar Ponnaiah, B.Jeyaprabha , P.Prakash, Electrocatalysis, 13 (2022) 4, 435-446	2.7
2021		
3.	Effective and reliable platform for nonenzymatic nanomolar-range quinol detection in water samples using ceria doped polypyrrole nanocomposite embedded on graphitic carbon nitride nanosheets Sathish Kumar Ponnaiah, Prakash Periakaruppan, Jeyaprabha Balasubramanian	8.1

	Chemosphere, 271 (2021) 189533	
4.	Rebar properties in sand-substitute mortars after exposure to high temperatures Jeyaprabha Balasubramanian , Elangovan Gopal, Dhivya Kamaraj, Sathish Kumar Ponnaiah, Prakash Periakaruppan Gradevinar, 73 (2021) 4, 381 – 388	1.0
5.	A new nanocomposite electrode of carbon quantum dots doped functionalized multi-walled carbon nanotubes for lethal mercury sensing BarsanaBarvin RasulKhana, Prakash Periakaruppan, Sathish Kumar Ponnaiah, Ganesh Venkatachalam, B. Jeyaprabha , Journal of Cluster Science, (2021), 32, 135-144	2.7
2020		
6.	A new CQDs/f-MWCNTs/GO nanocomposite electrode for arsenic (10 ⁻¹² M) quantification in bore-well water and industrial effluents BarsanaBarvinRasulKhan, Sathish Kumar Ponnaiah, Prakash Periakaruppan, Ganesh Venkatachalam and Jeyaprabha Balasubramanian New Journal of Chemistry, 2020, 44, 18149-18156	2.7
7.	Clinically pertinent manganese oxide/polyoxytyramine /reduced graphene oxide nano composite for voltammetric detection of salivary and urinary arsenic Sathish Kumar Ponnaiah, Prakash Periakaruppan, MohannivasSelvam, Saravanan Muthupandian, B. Jeyaprabha , Rayappan Selvanathan Journal of Cluster Science, (2020),31:877–885	2.125
2019		
8.	Accelerated photo-deterioration of class I toxic monochrotophos in the presence of one-pot constructed Ag ₃ PO ₄ /polyaniline@g-C ₃ N ₄ nanocomposite: Efficacy in light harvesting Jeyaprabha Balasubramanian , Sathish Kumar Ponnaiah, Prakash Periakaruppan, Dhivya Kamaraj Environmental Science and Pollution Research International, 2020, DOI: https://doi.org/10.1007/s11356-019-06811-6	2.914
9.	Highly selective and sensitive sensing of toxic mercury ions utilizing carbon quantum dot-modified glassy carbon electrode Rasul Khan BarsanaBarvin, Periakaruppan Prakash, Venkatachalam Ganesh, Balasubramanian Jeyaprabha International Journal of Environmental Research, 13 (2019) 1015-1023.	2.468
10.	Effectual light-harvesting and electron-hole separation for enhanced photocatalytic decontamination of endocrine disruptor using Cu ₂ O/BiOI nanocomposite Sathish Kumar Ponnaiaha , Prakash Periakaruppana, ,	2.891

	T. Arumuganathana , B. Jeyaprabha Journal of Photochemistry & Photobiology A: Chemistry (2019) 380, 111860	
2017		
11.	Strength and Microstructure of Fired Mortars with River Sand Alternatives after Air Cooling B.Jeyaprabha , G.Elangovan, P.Prakash Materials and Structures, (2017), 50:76 DOI 10.1617/s11527-016-0886-5	2.453
12.	Adsorption and corrosion inhibiting behavior of <i>Lannea coromandelica</i> leaf extract on mild steel corrosion. P.Muthukrishnan, B.Jeyaprabha , P.Prakash Arabian Journal of Chemistry, (2017), 10, pp. S2343 – S2354	4.553
2016		
13.	Effects of Elevated Temperature and Water Quenching on Strength and Microstructure of Mortars with River Sand Substitutes B.Jeyaprabha , G.Elangovan, P.Prakash Construction & Building Materials, (2016), 114, pp. 688 – 698	3.169
14.	Double-Layer Silicon Dioxide/ Titanium Dioxide Sol-Gel Coating for Wearable Gold Accessories S. Ramasubramanian, B. Jeyaprabha , P. Prakash Materials Performance, (2016) 55, 2, pp. 26-30	0.105
15.	Strength and microstructure of mortar with sand substitutes B.Jeyaprabha , G.Elangovan, P.Prakash, Gradevinar, (2016), 68, pp. 41-49	0.158
2015		
16.	Stigmasterol extracted from Ficus hispida leaves as a green inhibitor for the mild steel corrosion in 1M HCl solution P. Muthukrishnan, P. Prakash, B. Jeyaprabha , K.Shankar Arabian Journal of Chemistry, (2015) doi:10.1016/j.arabjc.2015.09.005	4.553
17.	Effect of Acidified Feronia elephantum Leaf Extract on the Corrosion Behavior of Mild Steel Pitchaipillai Muthukrishnan, Periakaruppan Prakash, Murugan Ilayaraja, Balasubramanian Jeyaprabha , Karikalan Shankar Metallurgical and Materials Transaction B (2015) 46:1448-1460 DOI 10.1007/s11663-015-0322-1	1.874
18.	Anti-Corrosion Inhibition of Mild Steel in 1M Hydrochloric Acid solution by using <i>Tiliacora acuminate</i> leaves Extract R. Karthik, P. Muthukrishnan, Shen-Ming Chen, B. Jeyaprabha , P. Prakash International Journal of Electrochemical Science, 10, (2015), pp. 3707 – 3725	1.692
19.	Corrosion Inhibition and Adsorption Behavior of 4–Amino Acetophenone Pyridine 2-Aldehyde in 1 M Hydrochloric Acid	1.692

	R. Karthik, G. Vimaladevi, Shen-Ming Chen, A. Elangovan, B. Jeyaprabha , P. Prakash International Journal of Electrochemical Science , 10 (2015), 4666 – 4681	
20.	Adsorption and Corrosion Inhibiting Behavior of a New S-Triazine Derivative R. Karthik, P. Muthukrishnan, A. Elangovan, M. M. Sri vidhya, B. Jeyaprabha , and P. Prakash Protection of Metals and Physical Chemistry of Surfaces , (2015), Vol. 51, No. 4, pp. 667–679 DOI: 10.1134/S2070205115040152	0.609
21.	The corrosion inhibition of mild steel in acidic media by a new antipyridine derivative P.Muthukrishnan, B.Jeyaprabha , P.Tharmaraj, P.Prakash Research on Chemical Intermediates , (2015), 41 , 5961 - 5984 DOI: 10.1007/s11164-014-1714-6	1.833
22.	Adsorption and corrosion inhibiting behavior of <i>Passiflora foetida</i> leaf extract on mild steel corrosion S.Muthumanickam, B.Jeyaprabha , R.Karthik, A.Elangovan, P.Prakash International Journal of Corrosion and Scale Inhibition , (2015), 4 , 4 , pp. 365–381 DOI: 10.17675/2305-6894-2015-4-4-5	0.446
23.	<i>Kleinia Grandiflora</i> Leaf Extract as Green Corrosion inhibitor for Mild Steel in 1M Hydrochloric acid P. Muthukrishnan, B.Jeyaprabha and P.Prakash Roots International journal of multidisciplinary researches (2015) 1, pp. 5-8.	5.830
24.	Defluoridation of water using a natural adsorbent, <i>solanum trilobactum</i> S.Rayappan, B.Jeyaprabha and P.Prakash Roots International journal of multidisciplinary researches (2015) 1, pp. 57-63.	5.830
25.	1-hexyl-3-methylimidazolium chloride as corrosion inhibitor for mild steel in chloride medium S. Velrani, B.Jeyaprabha and P.Prakash Roots International journal of multidisciplinary researches (2015) 1, pp. 110-115.	5.830
2014		
26.	Anticorrosive Activity of <i>Kigelia Pinnata</i> Leaves extract on Mild steel in Acidic Media P.Muthukrishnan, B.Jeyaprabha , P.Prakash Metallurgical and Materials Transactions A , (2014) 45 , pp. 4510 - 4524 DOI: 10.1007/s11661-014-2366-2	1.730
27.	Benevolent Behavior of <i>Kleinia grandiflora</i> Leaf extract as Green Corrosion Inhibitor for Mild steel in Sulphuric Acid Solution P.Muthukrishnan, B.Jeyaprabha , P.Prakash International Journal of Minerals, Metallurgy and Materials , (2014) 21 (11) 1083 – 1095	0.943

28.	Corrosion inhibition of mild steel by aqueous extract of <i>Hyptis Suaveolens</i> (L) Poit leaves P.Muthukrishnan, B.Jeyaprabha , P.Prakash, <i>International Journal of Industrial Chemistry</i> , 2014 , 5: 5 http:// dx.doi.org/doi: 10.1007/s 40090-014-0005-9	0.524
29.	Extract of Cassia Senna as Green Inhibitor for the Corrosion of Mild Steel in 1 M Hydrochloric Acid Solution R.Karthik, P.Muthukrishnan, A.Elangovan, B.Jeyaprabha , P.Prakash <i>Advances in Civil Engineering Materials</i> (ASTM), (2014) , 3 (1) 413 – 433 DOI: 10.1520/ACEM20140010	1.57
30.	A study on removal of fluoride ions using Aloe Barbadensis as a low- cost natural adsorbent S.Rayappan, B.Jeyaprabha , P.Prakash <i>Journal of Applicable Chemistry</i> , (2014) 3 (3), pp. 1189-1201	3.49
31.	A study on removal of fluoride ions from drinking water using a low- cost natural adsorbent S.Rayappan, B.Jeyaprabha , P.Prakash <i>International Journal of Engineering Research and Technology</i> , (2014) 3(4), pp. 1340-1346	1.76
32.	Defluoridization using a natural adsorbent, <i>cissus Quadrangularis</i> S.Rayappan, B.Jeyaprabha , P.Prakash <i>World Journal of Pharmacy and Pharmaceutical Sciences</i> , (2014) , 3 (6), pp. 1899-1915	2.786
33.	Defluoridization Using a Natural Adsorbent, <i>Strychnos Potatorium</i> S.Rayappan, B.Jeyaprabha , P.Prakash <i>International Journal of Engineering Research and Applications</i> , (2014) 4 (10), pp.67-74	1.69
34.	Corrosion Inhibition of Mild Steel By 1-Benzyl-3-Methylimidazolium Chloride in 2M H ₂ SO ₄ and 3.5% NaCl Media S. Velrani, P.Muthukrishnan, B.Jeyaprabha , P. Prakash <i>International Journal of Engineering Research & Technology</i> , (2014) , 3 (4), pp. 2704 – 2720	1.76
35.	A Study on Distribution of Major ions and Heavy Metals in Drinking Water in Theni, Tamil Nadu, Season wise M. Amutha, A.Gubendran, B.Jeyaprabha , P.Prakash <i>Journal of Applicable Chemistry</i> , (2014) 3 (4), 1764 - 1775	3.494
36.	Environmental hydro chemistry and genesis of fluoride in drinking water of Govt. Kallar Hr. Sec Schools, in Dindigul District, Tamilnadu, India M. Amutha, A.Gubendran, B.Jeyaprabha , P.Prakash <i>IOSR Journal of Applied Chemistry</i> , (2014) , 7 (6), pp. 64 – 71.	1.327
37.	Electrochemical Studies of Mild Steel Corrosion Inhibition By 1-Butyl-3-Methylimidazolium Chloride In 2M H ₂ SO ₄ medium S. Velrani, B. Jeyaprabha , V. Balachandran, P. Prakash <i>Journal of Applicable Chemistry</i> , (2014) , 3 (4), pp. 1636 – 1648	3.494
38.	Thermodynamic characterization of metal dissolution and inhibitor adsorption processes on mild steel by 1-hexyl-3-	3.541

	methylimidazolium chloride in 2M sulphuric acid medium S. Velrani, B. Jeyaprabha , P. Prakash <i>International Journal of Research in Engineering and Science</i> , (2014), 2, (11), pp 38-50	
39.	Inhibition of mild steel corrosion in 3.5% NaCl medium using 1-butyl-3-methylimidazolium chloride S. Velrani, B. Jeyaprabha , P. Prakash <i>International Journal of Innovative Science, Engineering & Technology</i> , (2014), 1 (10) 57 - 69	6.72
40.	An Assessment of the Distribution of Heavy Metals in the Riverine Sediments of Kortalaiyar River in Tamilnadu, India, N. Bhuvana, B. Jeyaprabha , M. Amutha, P. Prakash <i>IOSR Journal of Applied Chemistry</i> , (2014), 7 (11), pp. 47 – 54.	1.327
41.	Effect of Elevated Temperature and Water Quenching on the Properties of Corroded and Uncorroded Reinforcing Bars B. Jeyaprabha , G. Elangovan and P. Prakash <i>International Journal of Applied Environmental Science</i> , 9 (4) 2014, pp. 2131-2139	-
2013		
42.	Corrosion inhibition of <i>Leucaena Leucocephala</i> Pod on mild steel in sulfuric acid solutions. P.Muthukrishnan, B.Jeyaprabha , P.Prakash, <i>Acta Metallurgica Sinica (English Letters)</i> , 26 (2013) 416-424.	1.292
43.	Corrosion Inhibition and Adsorption Behavior of <i>Setaria verticillata</i> Leaf Extract in 1M Sulphuric Acid. P.Muthukrishnan, B.Jeyaprabha , P.Prakash Journal of Materials Engineering and Performance , 22 (2013), 3792-3800	0.998
44.	Corrosion behaviour of steel bars Jeyaprabha, B , Elangovan, G, Muthukrishnan, P & Prakash <i>International Journal of Earth Sciences and Engineering</i> , 2013,ISSN: 0974-5904,Vol. 6, no. 2, pp.32-38	2.698
2008		
45.	Status of surface water quality of Hosur: Cultivation usefulness. C.Pragathiswaran, G.Paruthimal Kalaigan and P.Prakash, B.Jeyaprabha , H.Karibasappa and K.Suganandam, <i>Pollution Research</i> , 27 (3) (2008) 34-39.	0.18
46.	A Study on water quality in certain areas of an industrially colonized town-Hosur after monsoon. C.Pragathiswaran, G.Paruthimal Kalaigan, P.Prakash, B.Jeyaprabha , H.Karibasappa and K.Suganandam, <i>Ecology, Environment & Conservation</i> 14 (4) (2008) 95-101.	0.34
47.	Status of ground water quality in hosur during summer. C.Pragathiswaran, G.Paruthimal Kalaigan, P.Prakash, B.Jeyaprabha , H.Karibasappa and K.Suganandam, <i>Ecology, Environment & Conservation</i> 14 (4) (2008) 103-106.	0.34

2. International Conference Presentation Details:

1. Presented a paper entitled, 'Development of smart Masonry Blocks Incorporating Waste Incineration Ashes' in the International Conference on Sustainable construction (ICSC 2021) conducted by St. Peter's Institute of Higher Education & Research on 15.06.2021.
2. Presented a paper entitled, 'Experimental study on Light Weight Concrete using Foam made out of Waste Medical Capsule' in the International Conference on Sustainable construction (ICSC 2021) conducted by St. Peter's Institute of Higher Education & Research on 15.06.2021.
3. Presented a paper entitled, 'A study on vehicle exhaust gases absorbing flexible pavement' in the International Conference on Emerging Trends in Engineering and Technology – ICETET'19 – 2019 conducted by Pandian Saraswathy Yadav Engineering College, Madurai on 15.03.2019 & 16.03.2019.
4. Presented a paper entitled, 'Water quality assessment of Sengottai Village in terms of water quality index' in the International Conference on Emerging Trends in Engineering and Technology – ICETET'19 – 2019 conducted by Pandian Saraswathy Yadav Engineering College, Madurai on 15.03.2019 & 16.03.2019.
5. Presented a paper entitled, 'Mechanical properties of concrete containing granite industry wastes' in the International Conference on Innovative Engineering Initiatives – ICIEI' – 2019 conducted by SRM TRP Engineering College, Trichy on 13.03.2019 & 14.03.2019.
6. Presented a paper entitled, 'Performance evaluation of bricks using paper mill sludge', in the 3rd International Conference on Recent Trends in Engineering, Science and Technology – ICRTEST'19 – 2019 conducted by SBM College of Engineering and Technology, Dindigul on 02.03.2019.
7. Presented a paper entitled, 'Experimental study on ecofriendly light weigh brick using paper mill sludge' in the International Conference on Emerging Trends in Engineering and Technology – ICETET'18 – 2018 conducted by Pandian Saraswathy Yadav Engineering College, Madurai on 09.03.2018 & 10.03.2018.
8. Presented a paper entitled, 'Soil stabilization by bagasse ash and granite powder' in the International Conference on Emerging Trends in Engineering and Technology – ICETET'18 – 2018 conducted by Pandian Saraswathy Yadav Engineering College, Madurai on 09.03.2018 & 10.03.2018.
9. Presented a paper entitled, 'Performance Evaluation of Mortars made with Granite Powder waste', in the International Conference on Advanced Engineering and Technology for Sustainable Development – ICAETSD – 2016 conducted by Karpagam College of Engineering, Coimbatore on 19.02.2016 & 20.02.2016.
10. Presented a paper entitled, 'A study on mortar made with manufactured sand', in the International Conference Design and Application of Structures, Drives, Communicational and Computing Systems – ICDASDC- 2014 conducted by K.L.N. College of Information Technology, Pottapalayam, Madurai on 19.12.2014 & 20. 12. 2014.
11. Presented a paper entitled, 'Corrosion behavior of steel bars', in the International Conference Design and Application of Structures, Drives, Communicational and Computing Systems – ICDASDC- 2012 conducted by K.L.N. College of Information Technology, Pottapalayam, Madurai on 21.12.2012 & 22. 12. 2012.
12. Presented a paper entitled, 'Behavior of Reinforcing Steel bars Under Fire', in the International Conference on Science Engineering and Technology (SET) Vellore Institute of Technology 17.11.11&18.11.11

3. National Conference Presentation Details:

1. Presented a paper entitled, 'A Study on Strength And Microstructure Of Mortars Using Tio₂ And Sio₂ Nano Particles' in the National Conference on Advancements in Sustainable Materials, Design and Applications conducted by M.Kumarasamy College of Engineering, Karur on 15.05.2020.
2. Presented a paper entitled, 'A Study on Application Of Tio₂ Nanoparticles In Concrete' in the National Conference on Advancements in Sustainable Materials, Design and Applications conducted by M.Kumarasamy College of Engineering, Karur on 15.05.2020.
3. Presented a paper in the UGC Sponsored National Conference on Frontier Areas in Chemistry, organized by the Department of Chemistry, Thiagarajar College, Madurai, held on 26th & 27th February 2015
4. Presented a paper entitled National Workshop on Disaster Mitigation with particular reference to Nuclear Power Plants. The Institution of Engineers and Nuclear Power Corporation of India Limited, Kudankulam Nuclear Power Project 31.08.2012.
5. Presented a paper entitled 'Behavior of TMT Bars under Fire' in the National Conference on Innovations in Engineering and Technology conducted by Anna University of Technology Madurai on 26.4.2012 & 27.4.2012
6. Presented a paper entitled 'Effect of water quenching on reinforced concrete structure under fire' in the Paper Presentation Contest conducted by The Institution of Engineers and Anna University of Technology Madurai on 15.09.2011 and Received Best Paper Award
7. Presented a paper entitled, 'Effect of Elevated Temperatures on the Properties of Reinforcing Steel bars', in the National Conference RACE -11 conducted by K.L.N. College of Information Technology, Pottapalayam, Madurai on 25.03.2011 & 26. 03. 2011

4. Google Scholar report:

Citation Indices as of 09 June 2025

- Citations: 1101
- h-index: 17
- i10-index: 23

<https://scholar.google.com/citations?hl=en&user=BI0ugL8AAAAJ>