Faculty Profile

Name : Dr. R. Prakash

Designation : Associate Professor

Qualification: M.E., Ph.D.

Gender : Male

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Education

S.No.	Degree	Institution / University	Year	Branch of study / Specialization
1	Ph.D.	Anna University, Chennai	2020	Civil Engineering (Structural Engineering)
2	M.E.	Alagappa Chettiar Govt. College of Engineering and Technology / Anna University	2011	Structural Engineering
3	B.E.	Alagappa Chettiar Govt. College of Engineering and Technology / Madurai Kamaraj University	2003	Civil Engineering

Experience

S.No.	Name of the College / Industry	Position Held	From	To	Total years
1	Government College of Engineering, Tirunelyeli-627 007	Associate Professor	21.04.2023	Till date	1
2	Alagappa Chettiar Govt. College of Engineering and Technology, Karaikudi-630 003.	Assistant Professor	01.10.2016	19.04.23	7
3	Thanthai Periyar Govt. Institute of Technology, Vellore-632 002	Assistant Professor	21.10.2011	30.09.2016	5
4	Alagappa Chettiar Govt. College of Engineering and Technology, Karaikudi-630 003.	Assistant Professor	01.10.2006	21.10.2011	5
5	Tarapore & Co., New Delhi	Assistant Engineer	01.11.2003	31.01.2006	2
	Total Experience				20

Area of Interest:

Concrete Material Technology; Construction Materials; Alternate cementitious material: Alternate aggregates in concrete; Sustainability of Construction materials.

List of publications:

International Journals:

- 1. Infilled steel tubes as reinforcement in lightweight concrete columns: An experimental investigation and image processing analysis. N Divyah, **R Prakash**, S Srividhya. Computers and Concrete, Volume 33, Year 2024, Pages 41-53. DOI: https://doi.org/10.12989/cac.2024.33.1.041
- 2. Experimental Study on Mechanical and Durability Behaviour of a Sustainable Masonry Block Incorporating Agricultural and Industrial Wastes. **R Prakash**, S Srividhya, S Sivakumar, P Neelamegam. Indian Journal of Science and Technology, Volume 17, Year 2024, Pages 830-840. DOI: 10.17485/IJST/v17i9.70
- 3. Characterization and Image Processing Analysis on Polypropylene Fiber Reinforced Foamed Concrete. **R Prakash**, N Divyah, V Selvapriya, P Mahakavi. Indian Journal of Science and Technology, Volume 17, Year 2024, Pages 333-342. DOI: 10.17485/IJST/v17i4.2843
- 4. Exploring the effects of eco-friendly and biodegradable biocomposite incorporating eggshell and walnut powder as fillers. Sivakumar A Srividhya S **Prakash R** Subbarayan M R. Global Nest Journal, Volume 26, Year 2024, Pages 1-6. DOI: https://doi.org/10.30955/gnj.005471
- 5. Development of Sustainable Concrete from Hypo Sludge Combined with Basalt Fibre and Latex. Krishnan Chandra Sekar ., Ramasamy Murugesan ., Muthusamy Sivaraja ., Ramaiah Prakash . Sustainability (Switzerland), Volume 15, Year 2023. https://doi.org/10.3390/su151410986
- 6. Properties of biocomposites from waste eggshell as fillers. Sivakumar A Srividhya S **Prakash R** Padma S. GlobalNest journal **2023.** DOI:https://doi.org/10.30955/gnj.005095
- 7. Sujatha, V.; Lavanya, G.; **Prakash, R**. Quantifying Liveability Using Survey Analysis and Machine Learning Model. Sustainability 2023, 15, 1633. https://doi.org/10.3390/su15021633
- 8. Control of vibrations in high-rise structures using base isolation technology. N Divyah, **R Prakash**, S Srividhya, KA Prakash. Materials Today: Proceedings 2023
- 9. Divyah, N.; **Prakash, R**.; Srividhya, S.; Avudaiappan, S.; Guindos, P.; Carsalade, N.M.; Arunachalam, K.P.; Noroozinejad Farsangi, E.; Roco-Videla, Á. Experimental and Numerical Investigations of Laced Built-Up Lightweight Concrete Encased Columns Subjected to Cyclic Axial Load. Buildings 2023, 13, 1444. https://doi.org/10.3390/buildings13061444
- 10. Tharmar E, Abraham M, **Prakash R**, Sundaram A, Flores ES, Canales C, Alam MA. Hydrogeochemistry and Water Quality Assessment in the Thamirabarani River Stretch by Applying GIS and PCA Techniques. Sustainability. 2022; 14(24):16368. https://doi.org/10.3390/su142416368
- 11. **Prakash, R**.; Divyah, N.; Srividhya, S.; Avudaiappan, S.; Amran, M.; Naidu Raman, S.; Guindos, P.; Vatin, N.I.; Fediuk, R. Effect of Steel Fiber on the Strength and Flexural Characteristics of Coconut Shell Concrete Partially Blended with Fly Ash. Materials 2022, 15, 4272. https://doi.org/10.3390/ma15124272
- 12.Padma, S.; Vidhya Lakshmi, S.; **Prakash, R**.; Srividhya, S.; Sivakumar, A.A.; Divyah, N.; Canales, C.; Saavedra Flores, E.I. Simulation of Land Use/Land Cover Dynamics Using Google Earth Data and QGIS: A Case Study on Outer Ring Road, Southern India. Sustainability 2022, 14, 16373. https://doi.org/10.3390/su142416373
- 13. Performance evaluation and statistical analysis of saw dust as concrete. C Vijayaprabha, **R Prakash**, P Karmugilan Journal of Materials and Engineering Structures «JMES» **2020**: 9 (2), 197-206
- 14. Parametric study on lightweight concrete-encased short columns under axial compression-Comparison of design codes. N Divyah, **R Prakash**, S Srividhya, A Sivakumar Structural Engineering and Mechanics, An Int'l Journal, 2022

15. Fresh and mechanical characteristics of roselle fibre reinforced self-compacting concrete incorporating fly ash and metakaolin.

R.Prakash, Sudharshan N.Raman, N.Divyah, C.Subramanian, C.Vijayaprabha, S.Praveenkumar *Construction and Building Materials. Volume 290, 5 July 2021, 123209*

16. Fibre reinforced concrete containing waste coconut shell aggregate, fly ash and polypropylene fibre **R Prakash**, R Thenmozhi, SN Raman, C Subramanian

Revista Facultad de Ingeniería Universidad De Antioquia, 33-42, 2020.

17. Characterization of eco-friendly steel fiber-reinforced concrete containing waste coconut shell as coarse aggregates and fly ash as partial cement replacement

R Prakash, R Thenmozhi, SN Raman, C Subramanian

Structural Concrete 21 (1), 437-447, 2020.

18. An investigation of key mechanical and durability properties of coconut shell concrete with partial replacement of fly ash

R Prakash, R Thenmozhi, SN Raman, C Subramanian, N Divyah *Structural Concrete*, 2020

19. Mechanical characterisation of sustainable fibre-reinforced lightweight concrete incorporating waste coconut shell as coarse aggregate and sisal fibre

R Prakash, R Thenmozhi, SN Raman, C Subramanian, N Divyah

International Journal of Environmental Science and Technology, 1-12, 2020

20. Life-Cycle Sustainability Assessment in the Design of Concrete Structures in the Tropics: A Fundamental Analysis

F Jahandideh, SN Raman, M Jamil, R Prakash

Journal of Design and BuiltEnvironment 20(3), 43-51, 2020

21. Characterization and behavior of basalt fiber reinforced lightweight concrete

N Divyah, R Thenmozhi, M Neelamegam, R Prakash

Structural Concrete 2020

22. Mechanical characterisation and flexural performance of eco-friendly concrete produced with fly ash as cement replacement and coconut shell coarse aggregate

R Prakash, R Thenmozhi, SN Raman

International Journal of Environment and Sustainable Development 18 (2), 131-148, 2019.

23. Experimental and analytical study on properties of self-curing concrete

S Sowdambikai, C Vijayaprabha, **R Prakash**, MC Ravathi

AIP Conference Proceedings 2021: 2327 (1), 020029 2021

24. Mechanical Properties of Concrete with Partial Replacement of Bagasse Ash

R Prakash

International Journal of Advance Engineering and Research Development 4 (7), 14-20, 2017

25. Study on the Corrosion Rate of Rebars Embedded In Concrete Mixes of Various Grades

R Prakash, R Regupathi

International Journal for Research in Applied Science & Engineering Technology 5 (10),1819-1827, 2017

26. Study on properties of coconut Shell aggregate and compressive strength of coconut shell concrete **R Prakash**

Int J Eng Technol Sci Res 4 (7), 592-602, 2017

27. HIGH PERFORMANCE CONCRETE WITH PARTIAL REPLACEMENT OF QUARRY DUST AND SILICA FUME

R Prakash

28. Study on the Mechanical Properties of Ultra High Strength Concrete with Water Soluble Polymer on Partial Replacement of Quarry Dust as Fine Aggregate

R Prakash, R Regupathi

International Journal for Research in Applied Science & Engineering Technology 5(6), 2215-25, 2017

29. MECHANICAL CHARACTERISATION OF HIGH STRENGTH CONCRETE WITH PARTIAL REPLACEMENT OF OUARRY SAND

R Prakash

International Journal of Recent Scientific Research 8 (6), 17733-36, 2017

30. Mechanical Properties and Flexural Performance of Geopolymer Concrete **R Prakash**

Int. Res. J. Eng. Technol.(IRJET) 4 (6), 5720-24, 2017

31. COMPARATIVE STUDY ON THE CORROSION RATE OF REBARS EMBEDDED IN FIBRE REINFORCED CONCRETE AND FIBRE REINFORCED POLYMER CONCRETE R Prakash

Int. Res. J. Eng. Technol.(IRJET) 3 (5), 3366-72, 2016

32. Cost Evaluation in Seismic Analysis and Aseismic Design of RC Framed Structure R Regupathi, **R Prakash**

International Journal for Research in Applied Science & Engineering Technology, 5(11), 2381-2404, 2017

33. Experimental Studies on Concrete Made With Ceramic Waste, Copper Slag and Lathe Waste **R Prakash**

International Journal for Research in Applied Science & Engineering Technology, 5(9), 503-508, 2017

International Conferences:

- 1. R. Prakash, N. Divyah, R.U.Deepak and C.Vijaya Prabha 2020, 'Behaviour of Self Compacting Concrete using Marble Powder as Partial Replacement of Cement and Polypropylene Fibre'. Recent Developments in Sustainable Infrastructure: Research and Practices (ICRDSI2020), School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar.
- 2. R. Prakash, N. Divyah, R.U.Deepak and C.Vijaya Prabha 2020, 'Experimental Study of Glass Fibre Reinforced Concrete with Marble Powder as Partial Replacement of Cement'. Recent Developments in Sustainable Infrastructure: Research and Practices (ICRDSI2020), School of Civil Engineering, KIIT Deemed to be University, Bhubaneswar.
- 3.R. Prakash, N. Divya H,2019. 'Experimental investigation of sustainable fibre reinforced lightweight eco-friendly concrete'. 1st International Conference onRecent Trends in Clean Technologies for Sustainable Environment (CTSE-2019). SSN College of Engineering, Chennai-603110.
- 4. R. Prakash, N. Divyah, 2019. 'Mechanical characterisation of fibre reinforced lightweight concrete from agricultural waste'. 1st International Conference on Recent Trends in Clean Technologies for Sustainable Environment (CTSE-2019). SSN College of Engineering, Chennai-603110.
- 5. K. Ramachandran, R. Prakash, 2019. Mechanical Characterisation of fibre reinforced lightweight concrete made from agricultural waste, 3rd International conference on Recent Trends in Engineering, Science and Technology, SBM College of Engineering and Technology, Dindigul.
- 6. R. Prakash, R. Thenmozhi, 2017, 'Study on Properties of Coconut Shell Aggregate and Compressive Strength of Coconut Shell Concrete', Proceedings of 5th International Conference on Research Trends in Engineering, Applied Science and Management (ICRTESM-2017), IETE, Pune.

National Conferences:

- 1. T. Arun parakaash, R. Prakash, 2019. Experimental investigation of sustainable fibre reinforced lightweight eco-friendly concrete, National conference on Recent Trends in Civil Engineering(NCRTCE'19), Mother Terasa College of Engineering and Technology, Pudukottai
- 2. S. Santhoskumar, R. Prakash, 2018. Experimental study on the durability properties of fibre reinforce coconut shell concrete. National conference on advanced techniques in concrete, Environmental and Geotechnical Engineering NC-ATCEGE'18, Kings College of Engineering, Pudukottai.
- 3. M. Jeeva, R. Prakash, R. Thenmozhi, 2017. Experimental study on mechanical properties of fibre reinforced coconut shell aggregate concrete. Proceedings of the National conference on Recent Innovation in Civil Engineering, Mohamed Sathak Engineering College (RICE 2K17), Kilakarai.
- 4. P.M. Ganesh babu, R. Prakash, R. Thenmozhi, 2017, 'Flexural toughness characteristics of steel-polypropylene hybrid fibre reinforced coconut shell concrete', Proceedings of the National conference on Recent Innovation in Civil Engineering (RICE 2K17), Mohamed Sathak Engineering College, Kilakarai.
- 5. R. Prakash, 2016. Engineering properties and structural behavior of geopolymer concrete. 2nd National Conference on Civil Engineering for Sustainable Development NCCESD-16, Nadar Sarawathi College of Engineering and Technology, Theni

Guest Lectures delivered:

- 1. Delivered a lecture on "Green buildings" at Sri Rajarajan College of Engineering and Technology, Karaikudi on 26.09.2015
- 2. Delivered a lecture on "Special concretes" at Sri Rajarajan College of Engineering and Technology, Karaikudi on 19.09.2015

Books Published:

Title: Handbook of Sustainable Concrete and Industrial Waste Management, Chapter 6: Eco-friendly fibre-reinforced Concrete, 2022, Publisher: Elsevier

Academic & Administrative responsibilities held:

- 1. Department Placement Coordinator
- 2. Civil Engineering Association Officer In charge
- 3. Faculty Advisor for B.E. Class (2019-2020 Batch)
- 4. In charge of Soil Mechanics Lab.
- 5. Department Entrepreneurship Development Cell Coordinator
- 6. A member of College Institution Innovation council
- 7. BOG state Government Nominee

Memberships in Professional Societies:

Professional member in Institute of Scholars, Bangalore (Id: InSc202001896)

Workshop / FDP Organized:

S.No.	Title of the Course	Name of the Institution	Duration

1	Webinar on Career Opportunities in Civil Engineering conducted by Mr.R.Sugumar, Scientist, Engineer-SC, Vikram sarabhai Space Centre ISRO for 74 BE students	ACGCET	07.06.2020
2	"Introduction to Structural Engineering"	Thanthai Periyar Govt. Institute of Technology, Vellore ISTE,MHRD (Coordinated IIT video conferencing workshop)	26.11.2013 to 06.12.2013

Workshop / FDP Attended:

S.No.	Title of the Course	Conducted By	Place	Duration
1	Industrial Training on Telecom Tower Construction	Industrial Training Program for Faculty conducted by RGMTTC,BSNL	BSNL, Karaikudi	15.5.2020 to 05.06.2020
2	Effective Online Teaching Methods	Dr. N.G.P. INSTITUTE OF TECHNOLOGY, Coimbatore	Online	June 8 - 14, 2020
3	Emerging Trends in Building Construction Technology	RISE Krishna Sai Prakasham Group of Institution	Online	24th - 25th June 2020
4	Advanced E-Learning in Structural Engineering Design Concepts	Prakasam District, AP. HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, Coimbatore	Online	29th June 2020 to 01st July 2020
5	Multi-Disciplinary Approaches in Civil Engineering	Nalla Narashima Reddy Education Society's Group of Institution. Medchal (Dist), Hyderabad	Online	29.06.2020 to 03.07.2020
6	Being a Super Teacher	BANNARI AMMAN INSTITUTE OF TECHNOLOGY, Erode	Online	July 6 to July 12, 2020
7	Advanced Strategies and Approaches in Civil and Environmental Engineering	HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY, Coimbatore	Online	14th July 2020 to 19th July 2020
8	Recent Trends & Description Research Opportunities in Civil engineering Field	Alagappa Chettiar Govt. College of Engineering & Technology, Karaikudi	Karaikudi	19-11-2018 to 30-11-2018
9	FDP on "Principles of Corrosion and Corrosion	Alagappa Chettiar Govt. College of Engineering	Karaikudi	27.112017 to

	Prevention in Engineering	& Technology,		3.12.2017
	Industries"	Karaikudi		
10.	One week ISTE STTP for Coordinators on "Introduction to Structural Engineering"	IIT, Karaghpur	Karaghpur	28.09.2015 to 02.10.2015
11	Two week ISTE workshop on "Fluid Mechanics"	TPGIT, Vellore (MHRD)	Vellore	20.05.2014 to 30.05.2014
12	One week FDP on "Rehabilitation of Highway Pavement Structures"	ACCET,Karaikudi (TEQIP)	Karaikudi	12.12.12 to 18.12.12
13	Two week ISTE workshop on "Aakash for Education"	TPGIT, Vellore (MHRD)	Vellore	10.11.2012 to 11.11.2012
14	Two weeks software training programme on Analysis and Design of Structures using STAAD Pro	TPGIT, Vellore	Vellore	13.08.2012 to 29.08.2012
15	Two week ISTE workshop on "Introduction to Research Methodologies"	TPGIT, Vellore (MHRD)	Vellore	25.06.2012 to 04.07.2012
16	Two week ISTE workshop on "Computational Fluid Dynamics"	TPGIT, Vellore	Vellore	12.06.2012 to 22.06.2012
17	FDP on "Spatial Information Technologies for Soil &Water Resources Monitoring & Management"	ACCET, Karaikudi	Karaikudi	05.12.11 to 18.12.11
18	FDP on "New Trends in Nano Science & Technology"	ACCET, Karaikudi	Karaikudi	27.09.2010 to 11.10.2010
19	Two week FDP on "Image Processing in Engineering Application"	ACCET,Karaikudi	Karaikudi	03.05.2010 to 15.05.2010
20	FDP on Limit State Design of steel Structures using IS 800-2007	GCE, Salem	Salem	09.02.2009 to 13.02.2009
21	Three week training programme on "STAAD Pro"	ACCET, Karaikudi	Karaikudi	22.07.2008 to 11.08.2008
22	Two week FDP on "Advanced Techniques in Earthquake Engineering"	ACCET,Karaikudi	Karaikudi	20.06.11 to 02.07.11
23	FDP on "ANSYS LEVEL I Tools"	ACCET, Karaikudi	Karaikudi	05.09.2007 to 14.09.2007
24	Three day workshop on "Repair and rehabilitation of structures"	ACCET, Karaikudi	Karaikudi	17.09.2007 to 19.09.2007
25	Three day workshop on "Geographic Information System"	ACCET, Karaikudi	Karaikudi	11.06.2007 to 13.06.2007

Any other Information:

Received "Research Excellence Award" from Institute of Scholars, Bangalore, for the paper

"Characterization of eco-friendly steel fiber-reinforced concrete containing waste coconut shell as coarse

aggregates and fly ash as partial cement replacement" Structural Concrete 21 (1), 437-447, 2020.

ACADEMIC IDENTITY

Scopus: https://www.scopus.com/authid/detail.uri?authorId=57208704617

RG: https://www.researchgate.net/profile/R_Prakash6

GS: https://scholar.google.co.in/citations?user=M1B-FYEAAAAJ&hl=en

ArcID: http://orcid.org/0000-0002-4695-0234