

BIO DATA



Name : **Dr.M. Indhumathi**

Designation : Associate Professor

Department : Civil Engineering

Address for Communication:

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<https://scholar.google.com/citations?user=rUpzS5gAAAAJ&hl=en&oi=ao>

1. Educational Qualification

Degree	Branch / Specialization	Institute/University	Year of Passing
B.E.	Civil Engineering	K.L.N. College of Information Technology, Madurai.	2010
M.E	Structural Engineering	PSN engineering college, Tirunelveli.	2013
Ph.D	Geopolymer Concrete	Thiagarajar College of Engineering/Anna university	2021

2. Professional/ Industry Experience: (in chronological order)

S.No	Designation	Institution/ Organization	Period	
			From	To
1.	Associate Professor	Ramco Institute of Technology	23.11.2020	Till Date
2.	Full Time Research Scholar	Thiagarajar College of Engineering	02.01.2017	2.11.2020
3.	Women Scientist DST, New Delhi	Thiagarajar College of Engineering	05.09.2018	22.11.2020
4.	Assistant Professor	Raja College of Engineering and Technology, Madurai	10.06.2016	30.11.2016

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5.	Assistant Professor	R.M.K Engineering College, Thiruvallur, Chennai	18.12.2013	30.04.2016
5.	Assistant Professor	Infant Jesus College of Engg and Technology, Tirunelveli	07.03.2013	05.12.2013
6.	Lecturer	Paavai Group of Institutions, Namakkal	04.06.2010	30.06.2011

3. Research Interest

Geopolymer concrete, Finite Element Analysis, Structural Engineering

4 Publications

4.1 JOURNAL PUBLICATIONS

1. **Indhumathi Anbarasan** and Nagan Soundarapandian, **2019**, "Investigation of mechanical and microstructural properties of geopolymer concrete blended by Dredged Marine Sand and Manufactured Sand under ambient curing conditions", Structural Concrete, DOI 10.1002/SUCO 201900343, pp 1-12
2. **Indhumathi, M** and Nagan,S, **2019**, " Investigation of geopolymer mortar using M-sand and Dredged marine sand under ambient curing conditions", Journal of Structural Engineering, Vol.46, No.1, April-May 2019 pp 65-70
3. **Dr.M. Indhumathi Anbarasan**, A. Leema Margret, V.Ragavan, and J.Ram Prashath, Investigation on Corrosion behaviour of geopolymer concrete using DMS and M-Sand as a fine aggregate under ambient curing conditions, Materials Today Proceedings
4. Ms.A. Dhana Lakshmi, Dr.B.G. Vishnuram, Dr.P. Muthupriya, and **Dr.M. Indhumathi** "An Experimental Investigation on strength properties and flexural behaviour of ternary blended concrete., Materials Today Proceedings
5. **M.Indhumathi**,V.Ragavan,A.Dhanalakshmi, D.Darling Helen Lydia" A Study On Non Destructive Tests And Flexural Strengths Of Geopolymer Concrete Using Combination Of different Fine Aggregates, E3S Web of Conferences 387, 04001 (2023).
6. Dhanalakshmi Ayyanar, **M. Indhumathi Anbarasan**, J. Ramprashath, S. Swathini and V. Ragavan "Experimental Investigation on GGBS and Nano Silica Based Fiber Reinforced Geopolymer Concrete" Nanoworld Journal Published on: March 15, 2024 doi: 10.17756/nwj.2024-s1-027
7. **Dr.M.Indhumathi**, A. Leema Margret, S.Ajandhadevi, G.Jenitha, M.Subalakshmi "Experimental investigation on packing density of different fine aggregate in geopolymer concrete"Journal of Science Technology and Research (JSTAR),Volume No.5, Issue No.1 (2024).
8. V. Ramesh,**M. Indhumathi Anbarasan**, B.Muthuramu,Advanced strategies in earthquake-resistant structural engineering:seismic design, materials, and innovations"Asian Journal of Civil Engineering"volume 26, pages 1413–1428, (2025) <https://doi.org/10.1007/s42107-025-01298-8>.
9. V. Ramesh and M. Indhumathi Anbarasan on Structural feasibility of glass fiber reinforced gypsum (GFRG) panels: a review on load bearing capacity, fire resistance, and durability "Journal of Infrastructure Preservation and Resilience"(2025) 6:24 Pg No 1-18.<https://doi.org/10.1186/s43065-025-00142-2>.

4.2 CONFERENCE PUBLICATIONS

1. Investigation of flyash based GPC using GGBS under ambient curing conditions, Authors- R.Chinthika, M.Indhumathi, Dr.S.Nagan on International Conference On Emerging trends in Engineering and Technology (ICETET'18) held on 9 to 10 march, 2018 at Pandiyan Sarasawathi Yadav Engineering college.
2. Investigation of fracture parameters in geopolymer concrete Authors - R.Abdul Shabi, **M.Indhumathi**, Dr.S.Nagan on International Conference On Recent Advances In Civil Engineering (ICRACE - 2019) Organized by Department of Civil Engineering, Karunya Institute of Technology and Sciences, Coimbatore.
3. **Dr.M. Indhumathi Anbarasan**, A. Leema Margret, V.Ragavan, and J.Ram prashath, Investigation on Corrosion behaviour of geopolymer concrete using DMS and M-Sand as a fine aggregate under ambient curing conditions, Fourth International Conference on Materials Science and Manufacturing Technology (ICMSMT 2022), Page No 126-138, April 2022, Coimbatore.
4. Ms.A. Dhanalakshmi, Dr.B.G. Vishnuram, Dr.P. Muthupriya, and **Dr.M. Indhumathi** An Experimental Investigation on strength properties and flexural behaviour of ternary blended concrete., Fourth International Conference on Materials Science and Manufacturing Technology (ICMSMT 2022), Page No 126-138, April 2022, Coimbatore.
5. **Dr.M.Indhumathi Anbarasan**, Mr.V.Ragavan, Ms.A.Dhanalakshmi Ayyanar, A study on Nondestructive tests and flexural strengths of geopolymer concrete using combination of different fine aggregates, International Conference on 'Sustainable Technology in Civil Engineering and Applied Sciences (ICSTCA'23), Pg No 24-25, March 2023, Rajapalayam.

4.3 Book/Book chapter publications

1. **Dr.M.Indhumathi**, S.R.Sanjaiyan, Dr.S.Nagan book chapter titled "Geopolymer Concrete under Ambient Curing" published. UK Publisher: IntechOpen. DOI: <http://dx.doi.org/10.5772/intechopen.97541>
2. Dr.P. Vincent, Mr. Herald Lessly, Mr.J. Siva Subramanian, **Dr.M.Indhumathi** Book Titled "Construction Materials and Technology" R-2021 by Sruthi Publishers
3. **Dr.M.Indhumathi Anbarasan**, Mr.T.Gowtham Published one book in Estimation Costing and Valuation Engineering by Magnus publications with ISBN number of 978-81-972240-5-8
4. Finite Element Analysis of structures – under progress

5.Funded Projects Applied

Sl. No.	Title of the Research Project	Grant applied (Rs. in Lakhs)	Name of the Funding Agency	Project Duration (Years)
1.	Development of carbon sequestering geopolymer concrete and monitoring its behavior for sustainable environment through industrial Internet of Things	25,54,560	SERB-POWER	3 Years
2.	Effective utilization of flyash, dredged materials, hazardous industrial wastes promoting sustainable construction technology	37,15,891	DST-Technology Development Transfer	3 Years
3.	Figure Diminishing Geopolymer Building Products	29,20,300	DST-Swarna Jeyanthi Fellowship	3 Years
4.	Geopolymer Piles using DMS under ambient Curing Conditions	15,00,000	SERB-TARE	3 Years
5.	Figure Diminishing Geopolymer Building Products	14,00,000	MSME-Idea Hackathon	2 Years

5.1 Funded Projects Completed

S.No	Period		Years, Months	Designation	Institute/ Organisation
	From	To			
1.	05.09.2018	31.10.2020	2.2	Women Scientist under DSTWOS-A scheme RefNo: SR/WOS-A/ET-152/2017(G) dt. 05.09.2018	Thiagarajar College of Engineering, Madurai.15
	Title of work : Investigation of Geopolymer Concrete using M-Sand and Dredged Marine Sand (DMS) under ambient curing conditions Sanctioned Amount: Rs.19.9Lakhs (includes Fellowship ofRs.46,400/-permonth)				
	Duration :3years (completed in 2years)				
	Mentor : Dr.S. NAGAN, Professor, CivilDept, TCE, Madurai.15				

2	Funded Workshop: Title of Workshop: MATLAB-A Modelling Tool on Civil Engineering Applications Sanctioned Amount: Rs,25,000 Govt Organization: CSIR-HRDG Month and Year : March 2022
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5.2 Funded Projects granted

1	Title of work : Experimental Investigation on GI panels with Mesh grid Clay wall & Slab Panel Govt organization : Tamilnadu Government Nanmudhalvan Niral thiruvizha Sanctioned Amount : Rs.1Lakh Duration : 6 months Mentor : Dr.M.Indhumathi, Associate professor, Department of Civil Engineering
2	Title of work : Figure Diminishing Geo-polymer Products Govt organization : MSME Idea Hackathon 3.0 (Women)" under the Incubation Component of MSME Innovative Scheme Sanctioned Amount : Rs.14Lakhs Duration :3years Mentor : Dr.S. NAGAN, Professor, Civil Dept, TCE,Madurai.15
3	Funded Workshop: Title of Workshop: MATLAB-A Modelling Tool on Civil Engineering Applications Sanctioned Amount: Rs,25,000 Govt Organization: CSIR-HRDG Month and Year : March 2022

6. Ph.D. guidance: Recognized as Supervisor under Anna University

Anna University Recognised Supervisor (Ref No: 4010010)

Scholars Details

1. 24131891200-Mr.Muthuramu B(Part Time)
2. 24141891199-Mr.Ramesh V (Part Time)
3. 24241897128-Ms.Rebekhal D (Part Time)
4. 24236797104-Ms.Manju.A (Part Time)
5. 25121891125 -Mr.S.Raja(Part Time)
6. 25141897159-Mr.R.Vignesh(Part time)

7. Short term Courses / Seminars /FDP/Workshop/Conference Attended:

Sl.No	Title of the event	Organized by	Date	
			From	To
1.	Generative AI “ A comprehensive Approach to research writing,proposal development and writing”	Nehru arts ans Science college,Coimbatore	25.11.2024	30.11.2024
2.	Building Information Modelling	Nan Mudhalvan,Government of Tamilnadu	10.02.2025	16.02.2025
3.	International Conference on Recent Advances in Sustainable Materials (GC-RASM 2023)	PGP College of Engineering & Technology, Tamil Nadu, India	27.07.2023	28.07.2023
4.	Admixtures and Special Concretes	NPTEL	July 2023	October 2023
5.	Intellectual Property Rights for sustainable and technological development	Galgotias university,Noida,India	06.02.2024	10.02.2024
6.	International Conference on Recent Trends in Engineering & Technology 2024 (ICRTET 2024	Nandha Engineering College, Erode, Tamil Nadu.	14.03.2024	15.03.2024
7.	Revit Architecture	MSME	16.10.2023	16.11.2023
8.	Non destructive Evaluation of reinforced concrete structures	Ultra Tech Cements Ltd.	05.08.2023	05.08.2023
9.	Workshop on Chat GPT & AI Tools	Skill Nation	08.02.2024	08.02.2024
10.	“Interior Design Techniques Demystified”	Nan Mudhavlvn, Government of Tamilnadu	05.08.2024	10.08.2024
11.	Land and Building	IOV Registered Valuers Foundation	21.10.2022	30.10.2022
12.	Deterioration, Damage Assesment and Strengthening of Structures	S.V National Institute of Technology, Surat	27.12.2021	30.12.2021
13.	Artificial Intelligence in Construction Industry	Sona College of Technology	03.09.2021	03.09.2021
14.	Quality Assurance in Cement Industry for World Class construction	Ultra Tech Cement Ltd	28.08.2021	28.08.2021
15.	Seismic hazard assessment and mitigation techniques	Karpagam college of engineering	23/08/2021	27/08/2021
16.	Implementation of National Educational Policy 2020	Ramco Institute of Technology	24.03.2021	24.03.2021

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17.	Geopolymer Concrete and Its Applications	Sona College of Technology	09.03.2021	10.03.2021
18.	Waste Technology	Z. H. College of Engineering & Technology.	2021-2-24	2021-2-28
19.	Durability of Structural Concrete	Ultra Tech Cement Ltd	25.12.2020	25.12.2020
20.	Intellectual Property Rights	ISTE and IIC of Ramco Institute of Technology	04.12.2020	04.12.2020
21.	Application of NDT in Structure Evaluation	Ultra Tech Cement Ltd	04.12.2020	04.12.2020
22.	Concrete Microstructure Characterisation	NITK, Surathkal	18.06.2018	22.06.2018
23.	Textile Reinforced Concrete	IIT Madras	04.09.2017	04.09.2017

8. Short term Courses / Seminars /FDP/Workshop/Conference organized:

Sl.No	Title of the event	Organized by	Date	
			From	To
1.	Value Added Course on Hands on Training on Modelling,Analysis,Design of RCC,Steel Structures using STAAD	RIT	24.06.2025	28.06.2025
2.	One-day Workshop on “ Designing and Detailing of Structures ”	RIT	31.08.2023	31.08.2023
3.	Value Added Course on Quality Assurance and Quality Control in Construction	RIT	29.01.2024	02.02.2024
4.	Code Cracking	RIT	13.10.2023	13.10.2023
5.	International Conference on ‘Sustainable Technology in Civil Engineering and Applied Sciences (ICSTCA’23)	RIT	24.03.2023	25.03.2023
6.	Structural Analysis using Software	RIT	30.05.2022	30.05.2022
7.	Ergonomics in Construction	RIT	25.03.2022	25.03.2022
8.	MATLAB-A modeling tool for civil engineering applications	RIT	09.03.2022	09.03.2022
9.	Vaastu Shastra	RIT	17.06.2021	17.06.2021
10.	Virtual Tech Talk Series	RIT	14.05.2021	14.05.2021
11.	Dream Tech	RIT	09.04.2021	09.04.2021
12.	Intellectual Property Rights	RIT	04.12.2020	04.12.2020

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9. Refresher Courses

S.No.	Course Title	University	Date
1	Admixtures and Special Concretes	NPTEL	July-October 2023
2	Application of Soft Computing Techniques in Structural Engineering (ASCSE-2022)	CSIR-SERC, Chennai	24.01.2022-25.01.2022
3	Geopolymer Concrete	CSIR-SERC, Chennai	28.01.2021-29.01.2021
4	Concrete Microstructure Characterization	NITK, Surathkal	18.06.2018-22.06.2018
5	Textile reinforced concrete systems	IIT Madras	04.09.2017

10. Patents awarded 01

Title of Invention : Method of Preparation of Geopolymer Concrete Using Alternative Fine Aggregates under ambient curing

Patent Application No:201941011883

Date of Entry :27thMarch 2019

In the name of : THIAGARAJARCOLLEGE OFENGINEERING

Inventors : Dr. M. Indhumathi and Dr. S. Nagan

Current Status : Granted

11. Copy Rights Awarded 01

Title of the work : Water and waste water Analysis Laboratory Manual

Reference number : L-147052/2024

12. Membership in Professional societies ISTE, AIV

13. Awards, Recognition & Achievements:

- ✧ Received an award for outstanding Doctoral thesis from ICI- UltraTech on 19-02-2025
- ✧ Anna University Supervisor (Ref No: 4010010)

14. Any others (Board of studies/Governing Council/Staff Selection/ Reviewer/other duties)

1. Reviewed a paper titled on “Assessment of Core Strength of Concrete by Artificial Neural Networks: Non-Destructive Testing” for Materials and Technology.ISSN:1580-2949. Indexed in Scopus and Web of Science.
2. Reviewed a paper titled on “Effects of early-age temperature and salt ion corrosion on the micro-mechanism and macro-property deterioration of concrete” Archives of Civil and Mechanical Engineering.
3. Reviewed a Paper titled on “Mechanical and Microstructure Properties of Copper slag based Basalt Fiber Reinforced Concrete” Materials Today Proceedings.
4. Reviewed a paper titled on “Numerical investigation on bonding behavior of flyash based concrete blocks masonry prisms using copper slag as a partial replacement of fine aggregate” Revista dela construction
5. Delivered a Speech on “Advanced Construction Techniques” during the Online Seminar organized by Department of Civil Engineering, PSN College of Engineering and Technology (Autonomous), Tirunelveli, Tamil Nadu on 01.03.2025.
6. Acted as a Session Chair for ISTE, New Delhi Approved International Conference on "MODERN ADVANCES IN CIVIL ENGINEERING AND TECHNOLOGIES (ICMACET-2025)" on 27th and 28th March 2025 conducted by Department of Civil Engineering, Datta Meghe College of Engineering, Navi Mumbai.

15.Administration

15.1 Institutional Development Elements:

a. College Level

Sl.No	Position held	Period	Responsibility	Activities carried out
1.	International Conference Funding Committee Co-ordinator	Up to March 2021	Applying proposals for funding	Applied proposals to CSIR, MOEF, and Builders Association.
2.	Organising Secretary International Conference on ‘Sustainable Technology in Civil Engineering and Applied Sciences (ICSTCA’23)	24 th & 25 th March 2023	Coordinating all the committee and follow up of pre- and post-conference works	Monitored all the committees for the successful completion of conference
3.	Admission Coordinator	From Jan 2023	Promoting College for getting full Admission	Coordinating all the committee coordinators to get good Admission
4.	DAC Member-CSE	Academic Year 2022-2023 2023-2024 2024-2025	Member of Computer Science Department Advisory Committee	Attended the DAC Meeting and contributed through opinions to their department Growth

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b. Department Level

Sl.No.	Position held	Period	Responsibility	Activities carried out
1.	NAAC Criteria 2 Coordinator	From 2021 to till Date	Collecting the relevant information and documents related to criteria 2	Completed for 2024
2.	NBA Criteria 2 Coordinator	From 2021 to till Date	Collecting the relevant information and documents related to criteria 2	Under Progress
3.	Class advisor & Mentor	2021-2025	Managing and guide all students in a class in every activities	Completed
4.	International Conference Organising Secretary	Upto March 2023	Managing all the activities regarding conference	Organized all the activities regarding International Conference-Completed
5.	Department Academic Coordinator	Odd Semester 2022-2023	Academic activities	Periodically monitored the following <ul style="list-style-type: none"> • Regular Class Committee Meeting • Regular Department Meeting • Log Books, Course File, Records.
6.	Project Coordinator	Odd Semester 2022-2023, 2023-2024, 2024-2025	Student Project for final year	Periodically monitored the following <ul style="list-style-type: none"> • Regular Class Committee Meeting • Log Books, Course File, • Project review meeting
7.	CAD Lab and Seminar Hall Incharge	Odd Semester 2022-2023	Lab Incharge	Managing all the stocks and activities held in the lab and seminar hall.
8.	Department website update Coordinator	Odd and Even Sem 2022-2023	Updating data in the college website	Preparation and updation of department co-curricular activities, faculty/student participation, achievements, consultancy, innovative practices and department level program organized during the academic year of 2019-2020, 2020-2021, and 2022-2023.
9.	Fluid Mechanics Lab	2022-2023(Even Sem) to	Lab Incharge	Managing all the stocks and activities held in the lab and seminar hall.

		2023-2024(Even sem)		
10.	ICI-Faculty Coordinator	Odd & Even 2023-2024	Faculty Coordinator	Organised all the activities and Events under ICI-Student Chapter
11.	Value Added Course Coordinator	Odd & Even 2023-2024 2024-2025	Faculty Coordinator	Conducted a Value-added course on Quality Assurance and Quality Control in Construction
12.	Class Committee Chairperson	Odd & Even 2023-2024 2024-2025	Faculty Coordinator	Acted as a chairperson for I year class committee Meeting