# CURRICULUM VITAE

**Dr.PADMANABAN.I, B.E(NIT), M.TECH (ACT), MISTE, PhD**

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## RESEARCH INTERESTS

Construction Materials, Concrete Technology, Construction Management,

## TEACHING & RESEARCH EXPERIENCE

- Currently working as **Professor and Head** of Civil Engineering Department at National Engineering College, Kovilpatti, from May 2024 to till date
- **Professor and Head** of Civil Engineering Department at Sri Krishna College of Technology from October 2015 to till April 2024 (9 yrs)
- **Professor and Head** of Civil Engineering Department at Jansons Institute of Technology from December 2010 to October 2015(5 years)
- Worked as **Senior Lecturer** in Civil Engineering Department at V.L.B Janakiammal College of Engineering and Technology(from July 2007 to December 2010, (3years)
- Worked as **Lecturer** in Civil Engineering Department at Kumaraguru College of Technology, Coimbatore (from May 2006 to June 2007 for a period of 1 year)
- **Teaching Research Associate** in Govt. Engg. College, Salem from April 2002 to April 2006 (acquired teaching and research experience for a period of 4 years)
- Experience in Developing High Volume Fly ash Concrete Mix Design of High Performance Characteristics
- Testing and consultancy experience in Soil Engineering and concrete mix design
- Introduced First of its kind Experiential Learning in Civil Curriculum starting from first year
- Established Industry Supported Laboratories
    - FOSROC chemicals supported Concrete and Highway Laboratory,
    - Tatva (solid waste management industry) supported Environmental Laboratory
    - Tex Pump Industry Supported Fluid Mechanics Laboratory
    - VLANDS Centre of Excellence Computational Laboratory
- MOU collaboration with 12 of established construction Industries
- One of the Coordinator for NAAC, NBA, NIRF, Autonomous activities
- Established 3 Special Labs 1)Advanced Material Composite Research Lab 2) Environmental Biotechnology Research Lab
  3) Hazardous waste Research Lab ( DST supported)

**RESEARCH PUBLICATIONS**

No of Phd Students Guiding 4( 2 submitted synopsis)
No of Phd Scholars produced 2
No of PG Projected Guided 22
No of UG Projects Guided 54 batches

| Sl No. | Title of Paper/ Report / Book | Author(s) | Name. Vol. And Number of Journal, and Year of Publication | Page No From To |
|---|---|---|---|---|
| 1 | High performance concrete –for Concrete Pavements | Padmanaban. I S.Kandasamy | IRC –Convention -169th Mid Term Council Meeting 2003) held at Pondicherry | 85-95 |
| 2 | High Performance Concrete- An Indian Scenario | Padmanaban. I S.Kandasamy | International Conference on Recent Trends in Concrete Technology and Structures (INCONTEST 2003) | Abs in Souvenir |
| 3 | Experimental Studies on HPC- A State of Art –Review | Padmanaban. I S.Kandasamy | ICFRC, International Conference on Fibre composites, High Performance concretes and Smart Materials On 8-10 Jan 2004 | 849-858 |
| 4 | Experimental Studies on Flyash Concrete (HVFAC) | Padmanaban. I S.Kandasamy | International Conference on Advances in Concrete Composites and Structures (ICACS-2005), SERC, Chennai | 105-112 |
| 5 | Durability Studies on High Performance concrete (HPC) – a state of art review | S.Kandasamy Padmanaban. I Nithya. G | REDEMAT – 2004 Department of Civil Engineering, National Institute of Technology, Calicut REC | 133-136 |
| 6 | Strength studies on High Performance Concrete (HPC) – a state of art review | S.Kandasamy Padmanaban. I T.Parthasarathy | REDEMAT – 2004 Department of Civil Engineering, National Institute of Technology, Calicut REC | 137-140 |
| 7 | Fracture Mechanics in High Performance Concrete – a state of art review | S.Kandasamy Padmanaban. I K. Vidhya | REDEMAT – 2004 Department of Civil Engineering, National Institute of Technology, Calicut REC | 141-148 |
| 8 | Study on concrete Pavement- State of the Art Review | S.Kandasamy Padmanaban. I K. Vidhya | NPPCES2005 Dept of Civil Engg Coimbatore Institute of Technology Coimbatore-641014 | 251-258 |
| 9 | Study on Fracture Properties of Flyash Concrete Beams | S.Kandasamy Padmanaban. I K. Vidhya | International Congress Flyash India 2005 | 63 |
| 10 | Impact Studies on High Volume Flyash Concrete | S.Kandasamy Padmanaban. I Baskar R | NPPCES2005 Dept of Civil Engg Coimbatore Institute of Technology | 45-48 |

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| | | | Coimbatore-641014 | |
| 11 | Durability Studies on Flyash Concrete | S.Kandasamy<br>Padmanaban. I | NPPCES2005<br>Dept of Civil Engg<br>Coimbatore Institute of Technology<br>Coimbatore-641014 | 51-57 |
| 12 | Effect of compressive strength on impact energy for fly ash concrete | Padmanaban. I<br>S.Kandasamy | **Journal of structural Engineering** Vol. 38, No. 2, June - July 2011 | 109–116 |
| 13 | Durability properties of fibrillated polypropylene fibre reinforced high performance concrete | Padmanaban. I<br>D.Maruthachalam | **Journal of Structural Engineering**<br>Vol. 38, No. 1, April - May 2011 | 1–9 |
| 14 | Statistical Modeling of High and Low Volume of Fly<br>Ash High Compressive Strength Concrete | Padmanaban. I<br>S.Kandasamy | **International Journal of Applied Engineering**<br>Research Volume 4 Number 7 (2009) | 1161–1167 |
| 15 | Influence of Polyolefin Macro-Monofilament Fibre on Mechanical Properties<br>of High Performance Concrete | Padmanaban. I<br>D.Maruthachalam | **KSCE Journal of Civil Engineering (2013) 17(7):2013**<br>Korean Society of Civil Engineers | 1682-1689 |
| 16 | Effect of compressive strength on abrasion<br>resistancefor fly ash concrete | Padmanaban. I<br>D.Maruthachalam | **Ecological. Environmental & Construction Journal . 20 (1) : 2014;** | 217-222 |
| 17 | Experimental study on Strengthening of RC Column by FRP Wire mesh | Eldho John,<br>I Padmanaban | International journal of modern trends in Engineering and Science , Vol 3, No7 2016 | 212-216, |
| 20 | Strength studies on special concrete beams using Bottom ash as partial replacement of fine aggregate | Manikandan , I Padmanaban | International journal of modern trends in Engineering and Science , , Vol 3, No8 2016 | 192-195 |
| 21 | Experimental Investigation on graphene oxide composites with ASH concrete | Nandihini<br>Padmanaban. I | International Journal of Earth science and Engineering, Vol 9, 3 June 2016 | 515-519 |
| 22 | Experimental study on Magnesium Silicate Hydrate Cement Blended with Partial replacement of GGBS | Sathyanathan V<br>Padmanaban. I | International Journal of Earth science and Engineering, Vol 9, 3 June 2016 | 534-537 |
| 23 | Study On Mechanical Properties Of Low Density Concrete With Partial Replacement Of Coarse Aggregate | Dinesh<br>Padmanaban. I | International Journal of Earth Science and Engineering, june 2016, | 471-475 |
| 24 | An Experimental Investigation on High Volume Fly Ash Concrete by Replacing Fine Aggregate using Bottom Ash | Deepak<br>Priya Kumaran<br>Padmanaban. I | Journal of ChemTech Research<br>Vol.10 No.8, 2017. | 110-118 |

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| 25 | Effect of Steel Fibres as Reinforcement in Self Compacting Concrete | T Sathya<br>Padmanaban. I | International Journal of Advanced Research Methodology in Engineering & Technology, Volume 1, Issue 2, March 2017, | |
| 26 | Experimental Study on Polypropylene Fiber Reinforced Self Compacting Concrete | Najilah Farouk<br>Padmanaban. I | International Journal of ChemTech Research Vol.10 No.14, 2017 | 345-352, |
| 27 | An Experimental Investigation on High Volume Fly Ash Concrete by Replacing Fine Aggregate using Bottom Ash | Padmanaban. I | Journal of ChemTech Research, 2017. | 110-118 |
| 28 | A case study on necessity of retrofitting the existing structure against seismic force | Padmanaban. I | International journal for research in applied science & engineering Technology,2017 | 1005-1009 |
| 29 | Effect of Steel Fibres as Reinforcement in Self Compacting Concrete | Padmanaban. I | International journal of advanced research methodology in Engineering & Technology,2017 | 1(2), 170-174 |
| 30 | Experimental Studies of Coconut Shell Ash Composites in Concrete | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 23-25 |
| 31 | Sub grade modification using natural coir fibres | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 6-13 |
| 32 | Experimental Study on Frames for Seismic Performance Assessment | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 26-30 |
| 33 | Experimental study on low cost concrete using waste foundry sand and m-sand | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 19-26 |
| 34 | Characteristic Study of Cement Mortar by Addition of Natural Resin | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 8-12 |
| 35 | Strength Studies on Recycled Aggregate Concrete with Partial Replacement of Cement by Using Flyash | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 72-74 |
| 36 | Stabilization of black cotton soil by using ground granulated blast furnace slag and steel slag | Padmanaban. I | International Journal of Latest Engineering and Management Research,2018 | 2(3) 36-39 |
| 37 | Trial Examination of synthetic polymer as shear reinforcement | Padmanaban. I | International journal of Innovative technology and exploring Engineering,2019 | 9(2),481-486 |
| 38 | Experimental check on physical and mechanical properties of saw blocks | Padmanaban. I | International journal of Innovative technology and exploring Engineering,2020 | 9(4),658-663 |
| 39 | Experimental studies on interlocking block as wall panels | Padmanaban. I | Materials Today: Proceedings,2020 | 21,1-6 |
| 40 | Replacement of fine aggregate by using construction demolition waste steel powder in concrete | Padmanaban. I | Materials Today: Proceedings,2020 | 26<br>Pages: 1551-1556 |

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| 41 | Assessment of Physical and Mechanical Behaviour of Foam Concrete using Bottom Ash and Fly Ash | Padmanaban. I | International Journal of Innovative Technology and Exploring Engineering, March 2020 | 9(6):392-396 |
| 42 | Structural Characteristic Studies on two Layer Skin Encased Composite Reinforced Columns | Padmanaban. I | Test Engineering and Management (May-June 2020): | 83,15041 - 15046 |
| 43 | Prediction of the strength of self-compacting cementitious mix with glass fibre using machine learning | Padmanaban. I | Journal of Ceramic Processing Research 2022, | 23(6), pp. 806–816 |
| 44 | Environmentally Conscious Manufacturing and Life Cycle Analysis: A State-of-the-Art Survey | Padmanaban. I | Journal of Nano Materials,2022 | Doi 10.1155/2022/8438462 |
| 45 | Synthesis of Graphene Oxide and Study on Strength Properties of Graphene Oxide in Cement Mortar | Padmanaban. I | AIP Conference Proceedings 2023, | 2766, 020093 |
| 46 | Experimental Behavior of High-Strength Concrete Reinforced with Aramid Fiber and Polyurethane Resin | Padmanaban. I | Buildings 2023 | DOI 10.3390/buildings13071713 |
| 47 | Effect of sisal and coconut fibers on the strength performance of recycled aggregate concrete using copper slag | Padmanaban. I | International Journal Of Advanced Manufacturing Technology,2023 | DOI 10.1007/s00170-023-12695-1 |
| 48 | Analytical investigation of GO-reinforced cement composite using improved Zhang network | Padmanaban. I | International Journal Of Advanced Manufacturing Technology,2023 | DOI10.1007/s00170-023-12538-z |

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| Google scholar | h index -5, | i10 index-2, | 52 citation |
| Scopus | h index -3 | | 22 citation |
| WOS | h index -3 | | 12 citation |

## CONTRIBUTION TO THE DEPARTMENT

- Got the Department accredited under NBA for two Cycles
- Convener for the **International conference on Frontline areas of Civil Engineering. 5-6 Jan 2018** at Sri Krishna college of Technology sponsored by AICTE
- Convener for the **Industrial Aspects of Cold Formed Steel Structures ", April 6, 2017**. sponsored by CSIR
- Motivated our Civil Engineering Students to be a finalist(Fourth Place) in Swatchthon1 organised by AICTE
- Motivated our Civil Engineering Students to be a finalist in Smart India Hackathon 2018
- Motivated our Civil Engineering faculty to obtain research funding under DST **SERB, DRDO,MOES,CSIR, ICMR to a tune of 35 lakhs**
- Coordinated the Testing and consultancy activities to tune of 14 lakhs
- Co-ordinatior for **Faculty Development Programme on "CE2302 Structural Analysis –I" from 11$^{th}$ to 17 June 2013** at Jansons Institute of Technology
- Convener for the **National conference NCONET'14 for Civil Engineering Department** at Jansons Institute of Technology
- Convener for the **National conference NCONET'13 for Civil Engineering Department** at Jansons Institute of Technology
- Co-Coordinatior for **Faculty Development Programme on "Remote Sensing Techniques and Applications" 12$^{th}$ – 24$^{th}$ Novemeber 2007** at V.L.B Janakiammal College of Engineering and Technology
- Organized **National Level Technical Symposium "Edificio" for 3 years** at Jansons Institute of Technology
- Organized **National Level Technical Symposium "Landmark" for 3 years** at V.L.B Janakiammal College of Engineering and Technology
- Organised 5 one day Workshops on various fields of civil Engineering at Jansons Institute of Technology
- **Treasurer of the International Conference "ICAMAT- 2010" and active member of the organizing committee** at V.L.B Janakiammal College of Engineering and Technology
- Staff Advisor of Civil Engineering Association in VLBJCET from 2007 to 2010 and arranged several special lectures to civil engineering students

## SHORT TERM COURSES ATTENDED

- **Advances in Construction Materials Technology at IIT Madras**
  12-17 July 2004
- **Modern Trends in Pavement and Traffic Engineering at IIT Kanpur**
  28-31 March 2004
- **Software Applications in Civil Engineering at KCT Coimbatore**
  05-11May 2008
- **Faculty Development Programme at VLBJCET, Coimbatore**
  08-12 December 2008
- **National Programme on Technology Enhanced Learning at IIT Madras**
  05-09 April 2010
- **International workshop on 3D Printing, Robotics in Construction Industry Mysore**

**FUNDS RECEIVED**

| Sl. No. | Funding Agency | Programme Details | Funding amount |
|---|---|---|---|
| 1 | Anna University | Faculty Development Programme on "CE2302 Structural Analysis –I" from 11th to 17 June 2013 | Rs 80,000 |
| 2 | DRDO | One Day Worshop "Tsunami and the Protection Measures" | Rs 30000 |
| 3 | Ministry of Earth Science , New Delhi | One Day National Workshop on"Application of Finite Element Method in Earthquake Engineering | Rs 30,000 |
| 4 | Anna University | Faculty Development Programme "Remote Sensing Techniques and Applications" 12th – 24th Novemeber 2007 | Rs 25000 |

**INNOVATIVE EFFORTS IN TEACHING LEARNING PROCESS INTRODUCED**

Experiential learning
Project Based learning
Virtual laboratory classes
Gamification
Project evaluation by industrial experts
Mooc/Nptel certification courses
Role play
Patents
Students special research groups
Appreciation to best performers Classwise & Monthwise
Model creative learning
Value added courses on latest trends
Need based workshops
Teaching human values through motivational videos

**CERTIFICATE OF APPRECIATION**

- 100% Pass Percentage in Anna University Examination Dec 2007 & Dec 2008 for the subject Building Services
- 100% Pass Percentage in Anna University Examination Dec 2008 for the subject Advanced construction Technology
- **Dr. APJ Abdul Kalam Teaching Excellence award , Marina Labs, Chennai, 2017**
- **The Best faculty of Civil Engineering under Senior Category by Nehru Group of Institutions.**
- **HOD of the Year 2020 awarded by InSc (Institute of Scholars )**
- **Education Hero Award 2023 by EGN India**

**ACADEMIC PROFILE**

**Ph.D**

Research Area "Experimental Studies on flyash Concrete"
Publications in International Conference- 4
Publication in National Conference 12
Publication in Journals 32

**M.Tech. (Advanced Construction Technology)**

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| CGPA | : 7.56 (First Class) |
| Course Period | : 2000 –2001 |
| Insititution | : Pondicherry Engineering College, Pondicherry |
| University | : Pondicherry University |

**B.E., (Civil Engineering )**

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| Aggregate | : 78.56% (First Class with Distinction) |
| Course Period | : 1995 – 1999 |
| Insititution | **: Regional Engineering College, Bhopal( REC- Bhopal Presently NIT-Bhopal)** |
| University | : Bharakatullah University, Bhopal |

**Higher Secondary**

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| Percentage | : 89.5% |
| Year of Completion | : 1995 |
| School | : Fatima Higher Secondary School |
| Board | : Tamilnadu Educational Board, Chennai. |

**Secondary**

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| Percentage | : 78.00% |
| Year of Completion | :1993 |
| School | : Fatima Higher Secondary School |
| Board | : Tamilnadu Educational Board, Chennai. |

**PROJECT WORK**

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| **M.Tech.,** | : Impact Studies on Polymeric Mesh Reinforced Panels (Dissertation) |
| | : Studies on Fibre Reinforce Concrete (Mini Project) |
| **B.E.,** | : Experimental Studies to find the Safe Bearing Capacity of the Soil for a Building |

**SUBJECTS TAUGHT**

**U.G.**

1. Concrete Technology
2. Soil Mechanics
3. Construction Planning Management
4. Engineering Mechanics.
5. Strength of Materials
6. Construction Techniques & Equipments
7. Estimation and Costing Engineering
8. Pavement Engineering
9. Building Services
10. Managements Concepts for Civil Engineers.

**P.G.**

1. Maintenance, Repair Rehabilitation of Structures
2. Advanced Concrete Technology

3. Advanced Construction Technology
4. Experimental Techniques and Instrumentation

## LABORATORIES HANDLED AND ESTABLISHED

1. Strength of Materials Lab
2. Survey Lab
3. Soil Mechanics Lab
4. Fluid Mechanics and Machinery Lab
5. Concrete and Highway Lab

## FIELD OF INTEREST

- Concrete Technology
- Construction Management
- Construction Materials

## COMPUTER PROFICIENCY

Languages : C
Packages : M.S OFFICE, AutoCad 2000, Ansys, STAAD.PRO
O.S : WINDOWS XP,

## Membership in Professional Societies:

- Life member in ISTE (LM 50181)
- Member in International Association of Engineers(371064)

## EXTRA CIRICULAR ACTIVITES

Player : Badminton

## PERSONAL PROFILE

Qualification : PhD, M.Tech.,(Advanced Construction Technology), B.E
Date of Birth : Jan 9, 1978
Sex : Male.
Father's Name : Mr. R. Ilangovan.
Father's Occupation : Assistant Engineer in Fisheries, Govt of Pondicherry
Nationality : Indian.
Languages Known : English, Tamil, French, Hindi

(Dr. I.Padmanaban)