

# CURRICULUM VITÆ

## Dr. PRAKASH K. G.

Door No. D/4-20C5, "Bhramari", Near Keerthi Sagar Apartment,  
Vidyarathna Nagar, Dr. V S Acharya Road (D C office Road). Manipal-576104,  
Udupi. Karnataka.

Mobile: ☎ +91-9886106937☎ and ☎ +91-8277597026☎

e-mail: [prak.kg@gmail.com](mailto:prak.kg@gmail.com)✉

**Objective:** To be an integral part of a competitive work environment, which would, grow both on the intellectual and personal front, while contributing to the growth and success of the organization.

### Experience:

Positions Held	Institution/Industry	Period	Nature of Job	No. of Years
Assistant Professor	St. Joseph Engineering college, Mangalore	28-12-2023 to Till date	Teaching	
Adhoc Faculty	National Institute of Technology, Surathkal, Mangalore, Karnataka.	09-08-2023 to 27-12-2023	Teaching	0.5 year
Research Scholar	Manipal Institute of Technology, MAHE, Manipal, Udupi, Karnataka. (Formerly known as Manipal University)	01-07-2017 to 10-07-2023	Research	6 years
Assistant Professor	Jain Institute of Technology, Davangere, Karnataka.	12-08-2013 to 30-06-2017	Teaching	4 years
Lecturer	G M Institute of Technology, Davangere, Karnataka.	07-03-2011 to 20-11-2012	Teaching	2 years
Guest Lecturer	University B D T College of Engineering, Davangere, Karnataka.	12-08-2010 to 05-01-2011	Teaching	0.5 year
Engineer	Indian Register of Shipping, Bangalore, Karnataka.	06-07-2009 to 07-08-2010	Quality Control and 3 <sup>rd</sup> Party Inspection	1 year
Site Engineer	Gammon India Limited, Bangalore, Karnataka.	01-07-2008 to 30-06-2009	Site Engineer work	1 year

### Educational credentials:

Name of the Degree	Name of the Institute studied	Name of the University	Year of Passing
Ph.D. (Full Time)	Manipal Institute of Technology, Manipal, Karnataka.	Manipal Academy of Higher Education, Manipal, Karnataka.	2023
M Tech. (Structural Engineering)	B V B College of Engineering and Technology, Hubli, Karnataka.	Visvesvaraya Technological University, Belgaum, Karnataka.	2008
B.E. (Civil Engineering)	University B. D. T. College of Engineering, Davangere, Karnataka.	Kuvempu University, shankaraghatta, Shivamogga, Karnataka.	2006

### Subjects Taught:

1. Elements of Civil Engineering and Engineering Mechanics
2. Strength of Materials
3. Design of Prestress concrete structures
4. Design of RCC structures and drawing
5. Design of Steel structures and drawing
6. Finite Element Analysis
7. Design of Bridges
8. Geotechnical Engineering -I and II
9. Structural Analysis -I and II
10. Concrete Technology
11. Theory of Elasticity
12. Advance Concrete Technology

## Ph.D. Course Details:

### Name of Ph.D. Guide:

**Dr. A. Krishanmoorthy.**

Professor, Department of Civil Engineering,  
Manipal Institute of Technology,  
Manipal, Udupi, Karnataka.

### Details of Doctoral committee Members in Ph.D Tenure:

Internal Subject Experts:	<b>1. Dr. Purushotham G. Sarvade</b> <i>Professor and Head of Department</i> Department of Civil Engineering, Manipal Institute of Technology, Manipal, MAHE, Udupi, Karnataka	<b>2. Dr. Asha U. Rao</b> <i>Professor,</i> Department of Civil Engineering, Manipal Institute of Technology, Manipal, MAHE, Udupi, Karnataka
External Subject Experts:	<b>3. Dr. Sitaram Nayak</b> <i>Professor,</i> Department of Civil Engineering, National Institute of Technology, (NITK), Surathkal, Mangalore, Karnataka	<b>4. Dr. Shantaram Patil</b> <i>Professor, Faculty of Architecture,</i> Manipal School of Architecture and Planning, (MSAP), Manipal, MAHE, Udupi, Karnataka

### Course works completed during Ph.D. Tenure:

Sl. No.	Title of Course Work	Credits Assigned for each subject	Total Credits	CGPA obtained
1.	Advance Research Methodology	4	12	8.33
2.	Ground Improvement Technique	4		
3.	Finite Element Analysis	4		

### Details of the DAC meetings:

DAC meetings	Dates
Protocol Presentation	13-12-2017
University Presentation	10-02-2018
DAC 1	23-08-2018
DAC 2	20-03-2019
DAC 3	28-09-2019
DAC 4	19-06-2020
DAC 5	16-12-2020
DAC 6	14-09-2021
Summary	24 -11-2022
Synopsis	22-12-2022
Submission of Thesis	10-02-2023

### Ph.D. Credential Details:

Name of the candidate	Prakash K. G.
Course	Ph.D.
Institute	MIT, Manipal, (MAHE)
Designation	Research scholar
Scheme of Ph.D.	Dr. T M A Pai Scholarship Scheme
Date of Joining	01-07-2017
Date of Ph.D. Registration	10-02-2018
Ph.D. Registration No.	170900114
Date of Thesis Submitted	10-02-2023
Date of Defence	10-06-2023

**Ph.D. Thesis Title:**

**“Stability analysis of an embankment on soft consolidating soil improved with various types of columns and composite column systems”**

**Abstract of the Ph.D. work:**

The embankment construction over soft soil is a challenging task. Performance issues from post construction may sometimes be so severe that they would render the embankments ineffective for their intended purpose. Many techniques have been suggested in the past based on cost, time and specific conditions of foundation soil to enhance soft soil properties. Among the different techniques for improving in situ ground conditions, the use of columnar inclusions is considered one of the most cost-effective and most efficient and appropriate method with various advantages such as improved slope stability and consolidation, improved bearing capacity and reduced post-construction settlement. The computation of settlement and factor of safety for an embankment constructed on soft consolidating soil is iterative, lengthy and time-consuming and hence requires computer tools. From the past few decades, numerical analysis has been gaining more importance to solve such a complex geotechnical problem and it is becoming a standard tool. The finite element method is the most prevailing numerical approach to analyse the problems associated with columns.

In this research, the effectiveness of various types of columns to improve both the settlement and factor of safety of embankment constructed on soft consolidating soil at various time intervals during the consolidation of foundation soil is investigated using finite element method in two-dimensional plane strain condition using lime, stone and Cement-Fly ash-Gravel (CFG) columns. A method to obtain both the settlement and factor of safety of embankment constructed on consolidating soil improved with columns is developed for the study. Two different approaches, one using the line elements and the other using plane strain elements to model the columns, are developed for the proposed analysis. The effect of length and spacing of columns on the stability of embankments is also studied.

The effectiveness of a composite column system consisting of different types of columns such as lime and CFG, lime and Soil-Cement (SC), lime and stone columns to improve the stability of embankment at various time intervals is also investigated. In addition to the different types of columns, the effects of combining short and long columns, and the effects of arrangement of columns in a composite column system on settlement and factor of safety is also investigated. Further, the combination of lime with Prefabricated Vertical Drains (PVDs) to improve the settlement and factor of safety of embankment on consolidating soil is also investigated. From the study, it is concluded that the proposed method can be used for the stability analysis of embankment constructed on consolidating soil with columns at various time intervals during consolidation of foundation soil. apart from all these, Provision of lime columns in combination with PVDs is also more effective than providing lime columns or PVDs individually to achieve the improvements in settlement, factor of safety and drainage performance simultaneously.

## **Papers Published: (Scoups Indexed Journals)**

- [1] **Prakash K. G.** and Krishnamoorthy A. (2023) “Effectiveness of Stone and Deep Mixing Lime Columns on Stability of Embankments Constructed on Soft Consolidating Soil” *Geotechnical and Geological Engineering*, 41(1), 533-552, <https://doi.org/10.1007/s10706-022-02269-5>. (Q1)
- [2] **Prakash K. G.** and Krishnamoorthy A. (2023) “Stability of embankment constructed on soft soil treated with soil-cement columns” *Transportation Infrastructure geotechnology*. 10(4), 595-615, <https://doi.org/10.1007/s40515-022-00237-3>. (Q3)
- [3] **Prakash K. G.**, Krishnamoorthy, A. Maddodi B. S., M. Prasanna Kumar and Girish M. G. (2022) “An embankment stability analysis using finite element method constructed over Soft consolidating soil improved from lime columns and prefabricated vertical drains” *Engineered Science*, 17, 309–318, <https://doi.org/10.30919/es8d643>. (Top 10 percent)
- [4] **Prakash K. G.** and Krishnamoorthy A. (2021) “Evaluation of Stability of Embankment Constructed on Soft Consolidating Soil with Lime-CFG Composite Column System”. *International Journal of Geosynthetics and Ground Engineering*, 7(3), 1-17, <https://doi.org/10.1007/s40515-022-00237-3>. (Q2)
- [5] **Prakash K. G.** and Krishnamoorthy, A. (2021). “Lime-cement columns with PVDs for embankment on soft consolidating soil”. In IOP Conference Series: *Earth and Environmental Science* (Vol. 796, No. 1, p. 012030). IOP Publishing. <https://doi.org/10.1088/1755-1315/796/1/012030>. (Q4)
- [6] Rao, A. U., Dhanalakshmi K, Arun Kumar G. S, **Prakash K. G.**, and B. S. Maddodi.(2022) “Effect of Polypropylene Macro Fiber on Geotechnical Characteristics of Black Cotton Soil: An Experimental Investigation and Correlation Analysis.” *Engineered Science*, Engineered Science Publisher, <https://dx.doi.org/10.30919/es8d775> (Top 10 percent)

## **Papers presented in conference:**

- ❖ Presented a paper in conference ACTM-2021, titled with “*Analysis of an embankment supported with lime-cement columns on soft consolidating soil*” on 11<sup>th</sup> and 12<sup>th</sup> March-2021 held at College of Engineering, Pune, Maharashtra, India, organised by civil engineering Department.
- ❖ Presented a paper in conference CBRICE-2021, titled with “*Lime-cement columns with PVDs for embankment on soft consolidating soil*” on 18<sup>th</sup> and 19<sup>th</sup> March-2021. Manipal University, Jaipur, Rajasthan, India organised by civil engineering department.

## **Research identities:**

**Google Scholar link:** <https://scholar.google.com/citations?hl=en&user=krOE0K0AAAAJ>

**Orchid link:** <https://orcid.org/0000-0002-6533-9000>

**Scopus link:** <https://www.scopus.com/authid/detail.uri?authorId=57532092900>

**Web of science link:** <https://www.webofscience.com/wos/author/record/ABQ-4573-2022>

**Research Gate link:** <https://www.researchgate.net/profile/Prakash-G-3>

**LinkedIn link:** <https://www.linkedin.com/in/prakash-k-g-76302a106/>

**Facebook link:** <https://www.facebook.com/prakash.kgowda.90>

**Twitter link:** <https://twitter.com/prakkg>

**Faculty Development Programmes / Training / webinars / Summer/ Demianr/Winter Schools Attended**

Sl. No.	Name of training/workshop	Year/Duration	Organizers
1	'Transportation system Design' workshop in line with the National master plan of the PM Gati Shakti	20 <sup>st</sup> - 24 <sup>th</sup> November 2023 (5 Days)	Department of Civil Engineering National Institute of Technology, Surathkal, Karnataka.
2	One day National symposium on 'CIVIL ENGINEERING' -From Time Tested to Testing Times!	17 <sup>th</sup> November 2023 (1 Day)	Department of Civil Engineering National Institute of Technology, Surathkal, Karnataka.
3	Faculty Development Programme on " <i>Structural Engineering</i> ", organised by AIT, Chikkamagaluru, Karnataka.	21 <sup>st</sup> - 25 <sup>th</sup> September 2020 (5 Days)	Department of Civil Engineering, Adichunchanagiri Institute of Technology, Chikkamagaluru, Karnataka.
4	" <i>Structural Health Monitoring and concept of concrete Technology</i> " organised by Department of Civil Engineering, JIT, Davangere, Karnataka.	23 <sup>rd</sup> and 24 <sup>th</sup> July 2020 (2 Days)	Department of Civil Engineering Jain Institute of Technology, Davangere, Karnataka.
5	" <i>Quality of Reinforcement and Next Generation Concrete</i> " organised by Department of Civil Engineering, JIT, Davangere, Karnataka.	10 <sup>th</sup> and 11 <sup>th</sup> July 2020 (2 Days)	Department of Civil Engineering Jain Institute of Technology, Davangere, Karnataka.
6	" <i>Publishing in Scholarly Journals</i> " SEARCH-KMC Health Sciences Library and Dept. of Library & Information Science, MAHE-Manipal in association with Elsevier.	28 <sup>th</sup> November 2018 (1 Day)	Department of library & Information Science, MAHE- Manipal, Karnataka.
7	" <i>Advanced Design of steel structures</i> " Jointly organised by VTU Belgavi and BIT Bangalore, Karnataka.	4 <sup>th</sup> April 2017 (1 Day)	Department of Civil Engineering Bangalore Institute of Technology, Bangalore, Karnataka.
8	" <i>Advanced Excel certification Training Programme</i> " organised by MBA Department, JIT, Davangere, Karnataka.	8 <sup>th</sup> and 9 <sup>th</sup> August 2015 (2 Days)	Department of MBA Jain Institute of Technology. Davangere, Karnataka.
9	" <i>FEEL TEACHER</i> " Conducted by CLHRD, Mangalore, Karnataka.	29 <sup>th</sup> -31 <sup>st</sup> January 2016 (3 Days)	Jain Institute of Technology. Davangere, Karnataka.
10	" <i>Plagiarism Issues and Essential Tools for Research Write-ups</i> "	18 <sup>th</sup> April 2015 (1 Day)	Department of E&C Engineering, Jain Institute of Technology, Davangere, Karnataka.
11	National Seminar, live product Demonstration and Exhibition in concrete panorama and Deminar 2013(4 <sup>th</sup> Edition) on " <i>innovative and Decorative concretes</i> ".	28 <sup>th</sup> and 29 <sup>th</sup> January 2013 (2 Days)	ICI, Bangalore centre, at BMS college of Engineering, Bangalore, Karnataka.
12	National seminar and Exhibition in REDECON 2012 on " <i>Recent Developments in Repair, Rehabilitation and Retrofitting</i> ".	22 <sup>nd</sup> , 23 <sup>rd</sup> and 24 <sup>th</sup> February 2012 (3 Days)	ACCE(India) Bangalore center, Bangalore, Karnataka.
13	National Seminar, live product Demonstration and Exhibition in concrete Panorama and Deminar 2012 (3 <sup>rd</sup> Edition) on " <i>innovative concretes &amp; Affordable Housing</i> "	9 <sup>th</sup> and 10 <sup>th</sup> January 2012 (2 Days)	ICI, Bangalore centre, at BMS college of Engineering, Karnataka.
14	VTU-VGST sponsored Faculty Development Programme on " <i>Re-engineering of Environmental Impact Assessment Process (REIAP)</i> "	5 <sup>th</sup> , 6 <sup>th</sup> and 7 <sup>th</sup> March 2011 (3 Days)	Bapuji Institute of Engineering and Technology, Davangere, Karnataka.

### **Activities for Institutional/Department Development in Past Employment:**

- a) Worked as Alumni association coordinator, student counseling coordinator, Time table coordinator, Internal Assessment coordinator, Academic coordinator, Seminar and project coordinator and student forum coordinator for Department.
- b) Worked as in-charge of laboratories, Geotechnical engineering, Basic materials testing, Concrete and Highway materials testing.
- c) Conducted Industrial, Study Tour and Survey camp to students along with department faculties as Part of Academic work.
- d) Worked as Internal DCS and External DCS, Member in flying squad, Evaluator for UG and PG in VTU examinations.

### **Capabilities:**

- An intrinsic to face tougher and newer challenges either in academic or practice.
- Learning the current trends in practice emphasizing into academic or practice.
- Presenting seminars and paper publishing for journals.
- Learning new subjects and teaching with effective methods to the students.

### **Strength:**

- Good in interpersonal skills and written skills and an able team worker.
- Confident, goal-oriented and ready to take responsibilities.
- Adaptability to different environments and quick learning capabilities.
- Pleasing personality and ability to cope up with workload under pressure and stress.

### **Computer proficiency:**

- ✓ **Drafting packages:** Auto-CAD.
- ✓ **Modeling and Analysis packages:** STAAD-Pro, ETABS.
- ✓ **Computer Languages:** C-programming. Good in preparing excel sheets.

### **Personal Details:**

**Date of Birth** : 02-02-1984.

**Marital Status** : Married.

**Languages known** : English, Hindi and Kannada.

**Hobbies** : Reading Newspapers, Magazines, listening music, playing cricket.

**Permanent Address** : Prakash K. G., S/o Murthy K, # 559/12, Sri Shivakumara Swamy Nagar, 2<sup>nd</sup> Stage, 8<sup>th</sup> 'B' cross, Hadadi Road, Davangere-577005, Karnataka.

**I PRAKASH K. G.,** hereby affirm that, the above information is true to the best of my knowledge.

**Signature**