

Dr. PREBHA KUMARI K S

SNRA- 38, Sivasakthi Nagar Thuruvikkal, Trivandrum Pin 695011. Kerala, India Prebha.kumari@gmail.com +91-9447254798

SUMMARY

Dr.PREBHAKUMARI K S with more than 30 years' experience (21 years in teaching, GovtEngineering Colleges, Trivandrum, India) is a professional with proven performance in the Teaching, Management of students as Advisor (UG &PG), Structural Engineering Consultant, Construction Project Engineer and Assistant Engineer in various Departments.

EDUCATION

Qualification	Year	Institution&University	Branch/Division
Ph. D.	2019	CET, Kerala University	Structural Engineering
M. Tech.	2006	NIT Calicut	Structural Engineering
B. Tech.	1987	CET, Kerala University	Civil Engineering

Other Qualifications

ManagementProgrammes:

Diploma in Management IGNOU 1992
Diploma in Operations Management IGNOU1995
Diploma in Operations Management IGNOU1997
Advanced Diploma in management IGNOU1998
Integrated Management Programme in Information Technology(C++,VB,Java) ER&DCI2001

Teaching

- **Professor**, Department of Civil Engineering, College of Engineering Trivandrum from 2019to2021 (Retired from service on 31st March 2021)
- **Associate Professor**, Department of Civil Engineering, College of Engineering Trivandrum from 2014 to 2019.
- **Assistant Professor**, Department of Civil Engineering, College of Engineering Trivandrum from 2006 to 2014.
- **Lecturer**, Department of Civil Engineering, College of Engineering Trivandrum from 2002 to 2006.
- **Lecturer**, Department of Civil Engineering, Govt. Engineering College Bartonhill, Trivandrum from 2001 to 2002.
- Vocational Lecturer VHSC PEROOR 2000

Industrial

- Assistant Engineer, Harbour Engineering Department, Govt. of Kerala, 1997
- **Site Engineer-** KGSAfor SreeChithra Institute of Medical Sciences, Trivandrum (1993-1997)
- Assistant Engineer –Kerala State Electricity Board (1991-1992)

RESPONSIBILITIES:

- Teaching subjects of both UG & PG courses
- Faculty Advisor of batches of students from UG&PG
- Lab in Charge of various Structural Engineering Laboratories
- Conducing Examinations (Internal & External Exams)
- Project Guidance for UG students
- Thesis Guidance for PG students
- Evaluator of university Examinations (KU & KTU)
- Question Paper setter and scrutiny for university Examinations (KU & KTU)

Subjects Taught

- Engineering Mechanics
- Mechanics of structures
- Concrete Technology
- Advanced Concrete Technology

- Deign of RC structures
- Advance Design of RC structures(PG)
- Fracture mechanics(PG)
- Forensic Engineering (PG)
- Principles of management
- Construction management
- Personal Management
- Disaster Management
- Civil Engineering Project Management

All academic works related to both UG and PG courses were performed as per NBA accreditation guidelines.

RESEARCH INTEREST

Area of Research Specialization

- Special Concretes (HSC,HPC,SCC)
- Direct Shear Behavior of Cementitious Composites
- Fracture Mechanics
- Fiber Reinforced Concretes

M. Tech. Thesis Guided (15Nos)

- Direct Shear Behavior of High Strength Concrete
- Studies on Interface Shear Transfer in High Performance Concretes
- Effect of Specimen and Notch Size on The Fracture Properties of Steel Fibre Reinforced High Strength Concrete
- Effect of Aggregate Size on Fracture Properties of Fibre Reinforced High Strength Concrete
- Interfacial Shear Behaviour of HSC with Steel Fibres and Steel Studs
- Studies on Interfacial Shear Strength of Hybrid Fibre Reinforced High Strength Concrete
- Nonlinear Fracture Properties of High Strength Concrete Interface in Mode 11 Fracture
- Shear Capacity of High Strength Concrete Interface with Varied Surface Textures
- Studies on Fracture Behaviour of Self Compacting Concrete with Alccofineas Mineral Admixture
- Comparative Studies on Conventional Slab and Voided Slab
- Interfacial Fracture Behaviour of Composite Beams
- Flexural behaviour of concrete beams reinforced with BFRP bars
- Axial Performance of Connection for Tubular GFRP Columns using steel hollow sections

• Studies on fracture properties of High Strength High Performance Concretes(External Guidance for MA College, Kothamangalam)

B. Tech. Projects Guided (More than 10)

- Analysisand Design of Multi Storied Buildings
- Mechanical and Fracture Properties on Concrete
- Design of Multistoried Building
- Glass Powder as Partial Replacement of Cement In Concrete
- Plastic as Partial Replacement of Aggregate In Concrete
- Coconut shell as Partial Replacement of Aggregate In Concrete

FUNDED RESEARCH PROJECTS

• Studies on Direct shear behavior of High strength concretes, Funding agency CERD, Kerala (2010-13)

PUBLICTION/CONFRENCES/SEMINARS

Publications: International Journals - 5
Conferences: World conferences - 1
International - 5

International - 5 National - 10

World conferences

• First World Conference on Fracture on Damage mechanics FRACTURE 2014

International Conferences

- ICTT 2010-Studies on the Mechanical Properties and Fibre Dispersion in High Performance Concretes, College of Engineering ,Trivandrum
- AMTID 2011 -Studies on direct shear strength of fibre reinforced high strength concrete NIT Calicut
- ICICE 2013- Effect of Specimen and Notch Size on the Fracture Properties of Steel Fibre Reinforced High Strength Concrete,
- ICSCI 2014, A study on interfacial shear behaviour of self compacting concrete © ASCE India Section Hyderabad, Telangana, India
- 3rd International Conference IMMM2017-Effect of Fine Aggregates on Shear Fracture Parameters of High Strength Concretes, College of Engineering ,Trivandrum
- ICEE2021- A review on Concrete with Fine Aggregates Partially Replaced by Granite Powder, Jyothy Engineering College ,Trissur.

Publications:

- 1. Prebhakumari, K. S., Ganesan, N., Soumia, S. M. (2011), "Studies on Direct Shear Strength Fibre Reinforced High Strength Concrete", International Conference on Advances in Materials and Techniques for Infrastructure Development, Paper No. S072.
- 2. Prebhakumari, K. S., Jeenu, G., Divya, A. V. (2011), "Fracture Parameters of High Strength High Performance Concrete", Souvenir of 1st International Science Congress, Vol 7, Issue 2, pp 5-9.
- 3. Prebhakumari, K. S and Jayakumar, P. (2013), "Fracture Parameters of Steel Fibre Reinforced High Strength Concrete by Size Effect Method", International Journal of Scientific & Engineering Research, Vol.4, Issue 5, pp. 254-259.
- 4. Prebhakumari, K. S. (2014), "Analysis of Crack Formation and Crack Growth in High Performance Concrete by Fracture Mechanics", 1 st World Conference on Fracture and Damage Mechanics, Aug 09-11, IL 36.
- 5. Prebhakumari, K. S. (2014), "A Study on Interfacial Shear Behaviour of Self Compacting Concrete", ASCE India Section, Hyderabad, Oct 17-18, pp 251-257.
- 6. Prebhakumari, K. S., Ganesan, N., Safeer, A. (2017), "Influence of Surface Textures on Shear Capacity of High Strength Concrete Interfaces", International Journal of Engineering and Advanced Technology, Vol 7, Issue 2, pp 5-9
- 7. Prebhakumari, K. S., Safeer, K. P., Jayasree, K. V. (2017), "Effect of Fine Aggregate on Shear Fracture Parameters of High Strength Concrete", 3 rd International ConferenceIMMM, PP 178-18
- 8. Prebhakumari, K. S., Jayasree, K. V. (2017),". Influence of Fibers on Interface Shear strength of Cement Concrete Overlays" International Journal of Scientific & Engineering Research Volume 8, Issue 11, November-2017
- 9. Prebhakumari K S.,LindaDavid(2021),"A review on Concrete with Fine Aggregates Partially Replaced by Granite Powder", International Conference ICEE2021.
- 10. LindaDavid., Prebhakumari K S (2022), "Axial performance of Go-Through Bolt Connectoion for Tubular GFRP Columns" Materials Today Proceedings Volume 65 part2, pp2034-2041 July2022

OTHER ACHIEVEMENTS

- Worked as Technical Assistant for CERD
- Coordinator for Workshops, Seminars at department Level
- Lab in Charges –Material Testing and Department Computer facility
- Staff Advisor for UG and PG programmes
- Faculty-Gate coaching class
- Structural consultancy works under ITC&SR,CET.LBSITW
- Question paper setter for KTU, Kerala, Calicut, Kannur Universitees
- Reviewer of journal ADBU-Journal of Engineering Technology AJET, ISSN: 2348-7305
- Reviewer for conference papers inside and outside state

COURSES ATTENDED

FACULTY DEVELOPMENT PROGRAMMES(more than 25)

- Leadership Empowerment
- Advanced Software Applications in Civil Engineering
- Accreditation Awareness Programmes
- SPSS AND MS EXCEL
- Advanced Concrete Technology
- Modern Teaching Aids in Technical Education
- Steel Concrete Composite Structures
- Health Monitoring of RCC/ Steel Structures
- Mathematical and computational techniques
- Webinars of SERC, Engineers hub etc

STRUCTURAL CONSULTANCY WORKS

- Material Testing: Testing of all construction materials and building elements as per relevant IS code procedures in structural, concrete and Transportation Labs.
- Non-destructive Testing of Concrete
- Mix Design –conventional, pumpable, Ready mix and special concretes
- Structural Designing and Scrutiny
- Bar chart Preparation for Projects
- Forensic Engineering for Projects

SELF-APPRAISAL

Major strengths

- Sincerity
- Pleasant manners and positive thinking
- Good interpersonal relations
- Good relations with students for mentoring



FACULTY OF ENGINEERING AND TECHNOLOGY

The Senate of the University of Kerala hereby makes known that **Prebha Kumari K.S.** has been admitted to the Degree of Doctor of Philosophy, she having been certified by duly appointed examiners to be qualified to receive the same.

Subject Civil Engineering

Title of the Thesis STUDIES ON DIRECT SHEAR BEHAVIOUR OF CEMENTITIOUS COMPOSITES

Date of Syndicate Decision: 25/05/2019

Given under the seal of the University

University Buildings

0619386

Thiruxananthapuram August 20, 2020

July

Vice Chancellor

राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट National Institute of Technology Calicut

(On name or mosting)





Upon the recommendation of the Senate hereby confers on

PREBHA KUMARI K.S.

the degree of

Master of Technology

in Civil Engineering (Structural Engineering)

in the year 2006

and places him/her in First Class

Given at the National Institute of Technology Calicut

on 17th November, 2006

Registrar

*Director

NIT CALICUT, KERALA, INDIA - 673 601.

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FACULTY OF ENGINEERING & TECHNOLOGY
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that Drebbo Kurmari. K. S. has been admitted to
. the Degree of Bachelor of Technology under
Civil Branch be she having been
certified by duly appointed Examiners to be qualified to receive the same.
and having been by them placed in the
examination held in
Given under the seal of the University.
University Buildings.
University Buildings. Trivandrum, 15th December 1988. Vice - Chanceller