

Dr. Ashwin.K.N

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Education

	Degree	Year	Institute	Specialization
1	Ph.D	2026	Indian Institute of Technology Madras (IIT Madras)	Computational Structural Mechanics / Solid Mechanics
2	M.Tech.	2011	Siddaganga Institute of Technology, Tumkur	Structural Engineering
3	B.Tech	2008	Siddaganga Institute of Technology, Tumkur	Civil Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	03-09-2011 to Till date	Assistant Professor	Siddaganga Institute of Technology, Tumakuru

(Please fill in reverse order. Current designation should be at the top)

Positions held

- Proctor
- Test Co-ordinator
- Placement Co-ordinator
- Department meeting convener

- Coordinator for PG seminars
- Coordinator for ICI student chapter SIT Tumkur
- Coordinator for ASCE student chapter SIT Tumkur
- Member of Accreditation Committee (NBA)
- Member of NAAC
- Member of Strategic Plan Implementation Unit
- Shelter Coordinator
- Departmental project evaluation Committee(DPEC) – convener
- Project work coordinator for UG
- Member of Departmental Research Committee
- Atlas Coordinator
- Member of Departmental Academic Affairs Committee (DAAC)
- Member of Departmental BOS Committee
- Member of Departmental Seminar Evaluation Committee (DSEC) for UG students.
- Concrete Laboratory In-charge.
- Member of curriculum committee (UG)
- Member of curriculum Committee (PG-Structures)
- Coordinator for Technical seminar- PG structures.
- Consultant for Building materials

Affiliations of Professional organizations

- Life member of Institute for Steel Development and Growth (INSDAG)
- Life member of Indian Concrete Institute (ICI)

Awards and Honors

- **Recipient of SIT Gold medal for I rank in M.Tech (Structures), 2011**
- **“Sundaram Merit Award 2011” for Best M.Tech dissertation, Association of Consulting Civil Engineers India ACCE(I) 2011.**

Courses Taught

Undergraduate Courses

- Elements of Civil Engineering (Engineering Mechanics).
- Numerical Methods in Civil Engineering
- Bridge Engineering

Postgraduate Courses

- Advanced Structural Analysis
- Advanced Steel Structures
- Optimization Techniques
- Transportation Structures
- Design of Bridges
- Theory of plates and Shells

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
	Nil		

M.TECH GUIDANCE DETAILS: Total 8

Sl No	Name of the student	Title of Thesis	Year Completed
1	Sindhu.B.V	Effect Of Skew Angle On Static Behaviour Of Reinforced Concrete Bridge Decks	2013
2	Hemalatha.A	Analysis Of Rc Bridge Decks For Selected Standard Loadings And Comparison Of Static And Fatigue Performance	2013
3	Abhilasha.L.R	Study on the Seismic Design of RC Framed Structures on Sloping Ground	2014
4	Shashank D Ajjar	Study on Seismic and Vertical Load Behavior of Flat Slab Systems	2014
5	Chandra. D	An Experimental Study on Flexural Behavior of Reinforced Concrete Beams by Incorporating Cement Bonded Fly ash Aggregates to Natural Aggregates	2015
6	Mallikarjun.I.G	Influence of Skew Angle on Static Behaviour of RC and PSC Slab Bridge Decks	2015

7	Satwik Mohan Bhat	Comparative Study of Rectangular and Trapezoidal Concrete Box Girder using Finite Element Method	2016
8	Bhosle Sanjay Tippanna	Study on Specimen Shape and Size Effect on the Compressive and Split Tensile Strength of High Strength Concrete	2016

Research Areas

- Numerical simulation and analysis of skew bridges
- Computational structural mechanics
- Atomic-scale modeling of polymer–cement interfaces
- Multiscale modeling of cementitious materials

Sponsored Projects

Ongoing Projects: Nil

Completed Projects:

1. Title: Technical report on the Geotechnical and Assessment of Seismic Safety of Theetha Dam of Theetha Reservoir, Tumkur district
Funding Agency: Irrigation Dept., Govt. of Karnataka
Amount: **Rs 2.5 Lakhs**
Duration: 1 year
Role: Guide

Publications

Publications in International Journals (which are referred by SCI journals of high impact factors)

1. Nirrupama Kamala Ilango, Pratik Gujar, **Ashwin Konanur Nagesh**, Aleena Alex and Pijush Ghosh “Interfacial adhesion mechanism between organic polymer coating and hydrating cement paste” Cement and Concrete Composites, Volume 115, January 2021, <https://doi.org/10.1016/j.cemconcomp.2020.103856>.
2. **Ashwin Konanur Nagesh**, Nirrupama Kamala Ilango, Aleena Alex and Pijush Ghosh “Effect of pore solution calcium and substrate calcium on PMMA/cement paste interface during early stages of hydration” Journal of the American Ceramic Society, Volume 103, March 2020, Pages: 4664-4677, doi:

<https://doi.org/10.1111/jace.17104>.

3. Alex A, **Ashwin.K.N**, Ghosh P. Surface dissimilarity affects critical distance of influence for confined water. RSC Advances, **Volume 7, Year 2017, Pages 3573-3584** DOI:10.1039/C6RA25758E

Publications in International Journals (which are **not** referred by SCI journals of high impact factors)

1. Bhat SM, **Ashwin KN**, Dattatreya JK. Comparative Study of Rectangular and Trapezoidal Concrete Box Girder using Finite Element Method. J Civ Eng Environ Technol. 2016; volume3, pages 489–494.
2. Tippanna BS, **Ashwin KN**, Dattatreya JK. “Study on Specimen Shape and Size Effect on the Compressive and Split Tensile Strength of High Strength Concrete ”. J Civ Eng Environ Technol. 2016; volume: 3, page:535–539.
3. Mallikarjun I.G, **Ashwin K.N**, Dattatreya J.K, Dinesh S V “Influence Of Skew Angle on Static Behaviour of RCC”. Int J Eng Res Adv Technol. 2015; volume 1, page:7–15.
4. Hemalatha A, **Ashwin KN**, Dattatreya JK, Dinesh S V “Analysis Of RC Bridge Decks For Selected National and International standard Loadings Using Finite Element Method. Int J Res Eng Technol. 201, page:59–66.
5. Sindhu B V, **Ashwin KN**, Dattatreya JK, Dinesh S V “Effect of Skew Angle on Static Behaviour Of Reinforced Concrete Slab Bridge Decks”. Int J Res Eng Technol. 2013, page50–58.

Publications in International Conferences

1. **Ashwin K N** and Pijush Ghosh “Interfacial Performance of Coating Polymer on Calcium-Silicate-Hydrates During Different Stages of Cement Hydration” 3rd Rilem Spring Convention 2020 Ambitioning A Sustainable Future For Built Environment: Comprehensive Strategies For Unprecedented Challenges Guimarães, Portugal, 9 - 14 MARCH 2020
2. Nirrupama Kamala Ilango, Aleena Alex, **Ashwin K N**, Pijush Ghosh “The Temporal Evolution of Polymer-Cement Interface: A Study on Acrylic Coatings” 73rd RILEMWEEK 2019 International Conference on Innovative Materials for Sustainable Civil Engineering 21 – 25 August, Nanjing China.
3. Chandra D, **K.N.Ashwin** and Dr. J. K. Dattatreya (2015), “An Experimental Study on Flexural Behavior of Reinforced Concrete Beams by Incorporating Cement Bonded Fly Ash Aggregates to Natural Aggregates”, **International conference On Recent research in Engineering and Technology (ICRRET-**

- 2015), organized by International institute of scientific research and technology (IISRT) held at Coimbatore, India on June 12th 2015, pp 1-7.
4. Shashank D Ajjar, J.K.Dattatreya, **K.N.Ashwin** “Improvement of Punching Shear Resistance of Flat Slabs & Flat Plate”, **International Conference on Advances in sustainable materials and innovative Technologies in Civil Engineering**, 5 – 6th Dec 2014.
 5. Hemalatha A, **Ashwin K.N**, Dattatreya J.K. and S.V Dinesh “Analysis of RC Bridge Decks For Selected National and International Standard Loadings Using Finite Element Method” **International Conference on Recent Innovations in Civil Engineering “IC-RICE 2013”** organized by the PDA Engineering College, to be held at Gulburga, during October 25-27, 2013 PP 147 – 154
 6. Sindhu B.V, **Ashwin K.N**, Dattatreya J.K. and S.V Dinesh(2013) “Effect of Skew Angle on Static Behavior of Reinforced Concrete Slab Bridge Decks” **International Conference on Recent Innovations in Civil Engineering IC-RICE 2013** organized by the PDA Engineering College, to be held at Gulburga, during October 25-27, 2013 pp 139 – 146
 7. **Ashwin.K.N**, Ramanjaneyulu.K and Dinesh.S.V (2011) “Analysis of Simply Supported Skew Slab Bridge Decks” **2nd International Conference on Current Trends in Technology NUICONE 2011**, Institute of Technology, Nirma University, Ahmedabad-382481, 08-10 December 2011, pp 1-6.

8.

(I) FACULTY DEVELOPMENT PROGRAMME

Workshops Attended (Inhouse/outside) : 14			
Sl. No	Nature of Programme	Period	Name of the Institution/Training center
1.	One day Awareness programme on Green Building	20 th September 2011	ICMQ and NIE Mysore
2.	Civil FEM	30 th -31 st January 2012	Innovent and VTU
3.	Advanced Course on Health Assessment of Structures using Innovative Technologies	8-10 February 2012	CSIR-SERC Chennai
4.	Recent Developments in Concrete Science and Technology	28-29 th February 2012.	Department of Civil Engineering, Siddaganga Institute of Technology, Tumkur
5.	Design and Construction of Steel Structures	4 th June to 5 th July 2012	INSTRUCT, Bengaluru and INSDAG, Kolkata
6.	Statistical application in civil engineering (INHouse)	25 th to 30 th of June 2012.	Dept of civil Engg., Siddaganga Institute of Technology, Tumkur

7.	International colloquium on Nanotechnology in Construction	16 th February 2013	Department of Civil Engineering, Siddaganga Institute of Technology, Tumkur
8.	Outcome Based Accreditation and SAR	3 & 4 th July 2013	Department of Civil Engineering, Siddaganga Institute of Technology, Tumkur
9.	Two weeks workshop on “Engineering Mechanics”	26 th November 2013 to 06 th December 2013	Department of Civil Engineering, BMS College of Engineering, Bengaluru jointly with IIT Bombay (under MHRD)
10.	Two days workshop on ‘Advanced Design of Steel Structures with Limit State Method’	24 th and 25 th January 2014	INSTRUCT Bangalore.
11.	One day ‘Author Workshop’	13 th February 2014	VTU, Belgaum and Springer at Central college, Bangalore
12.	One day workshop on “STRUCTURAL DYNAMICS: THEORY, EXPERIMENTS & APPLICATIONS (Smart Structures, Structural Health Monitoring, Advanced Sensing Technologies & Energy Harvesting)”	22 nd March, 2014	Indian Institute of Technology, Delhi. And IVS Noble Solutions
13.	Environment Management Framework (EMF) Workshop	21 th August-2014	NPIU & PSG College of Technology, Coimbatore
14.	Procurement Workshop	22 nd August-2014	NPIU & PSG College of Technology, Coimbatore
15.	Industry-Academia Conclave:”Employability Enhancement of Post Graduate Students”	5 th February 2016	R.V.College of Engineering, Bengaluru
16.	ICI Concrete Panorama and Deminar	25 th and 26 th February 2026	Nimhans conventional centre, Bengaluru

