K N V CHANDRASEKHAR



Permanent Address

Plot No: 25, Road No: 2B, handrapuri colony, L.B.Nagar, Hyderabad, 500074

Telengana.

Email-id: biml.koralla1@gmail.com

Mobile: 7036155043

Academic Qualification:

Degree	Name of the Institute	University	Year of passing	Percentage
SSC	Presidency High School	Board of Secondary	1991	80%
		education		
Intermediate	Rajadhani Jr. College	Board of Intermediate	1993	83%
		Education		
B.E.	M.V.S.R.Engineering	Osmania University	1998	85%
	College			
MTech	IITBombay	IITBombay	2000	9.15 GPA
MBA	Johns Hopkins University	Johns Hopkins University	2006	3.6 CGPA
		USA		

Graduate Aptitude Test of Engineering (GATE) – All India Rank – 100⁺

Functional areas of expertise:

Finite element analysis, structural analysis, solid mechanics, structural optimisation

Technical Areas of expertise:

Operating Systems: Win 10, UNIX

Software: Marc Mentat®, RISA 3D®, MS Office, VC++, MatLab®

Databases: MS SQL server, MS Access

Tools: MS Word, MS Excel, MS Power Point

Professional Life Memberships

- 1. Life Member of Indian Society for Theoretical and Applied Mechanics, IIT Kharagpur
- 2. Life Member of Indian Society for Applied Mechanics, IIT Madras

GIAN Courses Attended

- 1. Isogeometric Analysis at IIT Varanasi
- 2. Isogeometric Analysis at NITWarangal

CAREER PATH

Total Experience of 23.5 years of teaching, research and industry experience

Mahaveer Institute of Science and Technology Hyderabad

2021 to tilldate

Associate Professor in the Department of Civil Engineering

CVR College of Engineering Hyderabad

2016 - 2021

Assistant Professor in the Department of Civil Engineering

Teaching Strength of Materials, Structural Analysis, Numerical Methods, Finite Element Analysis

Global Institute of Engineering and Technology Hyderabad

2016

Affiliated to JNTUH

Associate Professor in the Department of Civil Engineering

Sirindhorn International Institute of Technology, Thailand

2013

Research Scholar

Aurora Technical & Research Institute Hyderabad

2011

Associate Professor & Head, Department of Civil Engineering

Teaching Structural Analysis, Building Materials and Construction, RCC, Surveying Lab, SOM Lab

Bentham Institute of Management

2009

Dean Academics, Quality Nominee, Finance Faculty

AdamSmith Institute of Management

2008

Economics, Banking and Finance Faculty

ICICI Bank Bandra-Kurla Complex, Mumbai

2006

Role: Senior Manager

Cross selling and Up selling

CITICORP Citibank London, United Kingdom

2001

Role: Project Lead

Zero Balancing Accounting (ZBA) Account Server

CITICORP

2000

Role: Team Member

PERSONAL DETAILS:

Father's name: Shri. K. Eswara Rao

Date of Birth: 25-07-1976

Age: 47 Years

Marital Status: Married

Scopus Author ID: 57209400740

ORCID 0000-0003-3930-1196

Publons Web of science Id ABB-3964-2020

AICTE Id 1-3199093162

JNTU Academic Audit ID 3060-160315-080646

New JNTU Faculty Registration ID 1050-210708-141630

Academic Bank of Credits ID 564-817-219-619

Reviewer

- 1. International Structural Engineering Conference, Chicago, USA, 2023
- 2. The Fourth European and Mediterranean Structural Engineering and Construction Conference June 20-25, 2022, Leipzig, Germany
- 3. IEEE Access
- 4. Advances in Structural Engineering Journal

List of Publications

International Journals (Scopus Indexed)

- 1. Sahithi, KNV Chandrasekhar, "Isogeometric Topology Optimisation of continuum structures using Evolutionary algorithms", *J. Appl. Comput. Mech*, DOI: <u>10.22055/JACM.2018.26398.1330</u>
- 2. KNV Chandrasekhar, V Bhikshma, Syed Abdul Mohi "On the six node hexagon elements to perform topology optimisation of plates carrying in plate loading and shells carrying out of plane loading" *J. Appl. Comput. Mech.*, 6(3) (2020), DOI: 10.22055/JACM.2019.28993.1532
- 3. KNV Chandrasekhar, V Bhikshma, K Udaya Bhaskara Reddy "Topology optimisation of laminated composite shells" *J. Appl. Comput. Mech*, In the press 8(2), 2022

International Journals (Web of Science Indexed)

4. KNV Chandrasekhar, V.Bhikshma, Ch.Madhusudhana Chary, Maduri Venkatsai "Cubic B-splines for Isogeometric Analysis of Laminated Composite Plates Subjected to Hygroscopic Loading Using Classical Laminated Plate Theory," Journal of Polymer & Composites, Vol.9, Issue 3, December 2021. ISSN: 2321-2810 (Online), ISSN: 2321-8525 (Print). DOI (Journal): 10.37591/JoPC

Indexed in Civilica

1. KNV Chandrasekhar, V Bhikshma, N Rakesh, Swapna Reddy, C Rakesh "Isogeometric analysis for topology optimisation of two dimensional planar and laminated composite plate continuum structures," J. Solid Mech., 13(2), 2021

International Conferences

- 1. B.Archana, K.N.V.Chandrasekhar, Dr. T. Muralidhara Rao "Topology Optimization of Continuum Structures Using Firefly Algorithm" Proceedings of *61st Congress of ISTAM* (http://istam.iitkgp.ac.in) Held at: VITU Vellore, India, Dec. 11-14, 2016
- 2. Sravali, Thulla, KNV Chandrasekhar, TMRao "A study on Performance Based Indices to perform Topology Optimisation of Continuum Structures using Swarm Intelligence Firefly Algorithm II" *62nd Congress of ISTAM*, IITKGP, To be held at: OU Hyderabad, India, Dec. 15-18, 2017
- 3. NSS Sahithi, KNV Chandrasekhar, TM Rao "Multi population parallel search engines to perform Isogeometric Topology Optimisation of continuum structures using Swarm Intelligence Aqua Search algorithm" 62nd Congress of ISTAM, IITKGP, To be held at: OU Hyderabad, India, Dec. 15-18, 2017.
- 5. KNV Chandrasekhar et.al. "Evolutionary algorithms for performance based topology optimisation of continuum structures," MJCET
- 6. KNV Chandrasekhar, V Bhikshma, M VenkatSai "Cubic b-splines for isogeometric analysis of laminated composite plates subjected to hygroscopic loading" VSAM, January 2021
- 7. KNV Chandrasekhar et.al., "Isogeometric analysis to perform topology optimisation of planar reinforced concrete structures using first order b-splines," VSAM May 2021

National Journals

1. KNV Chandrasekhar "Second order sensitivity analysis and fundamental frequency based optimisation to perform topology optimisation of continuum structures using evolutionary algorithm," *i-managers journal on structural engineering*, vol. 9 l no. 2 l June - August 2020, ISSN 2278-7887

- 2. KNV Chandrasekhar "Static analysis of laminated composite plate using six node linear strain triangular elements," *i-managers journal on structural engineering*, vol. 8 l no. 4 l December 2019 February 2020, ISSN 2278-7887
- 3. KNV Chandrasekhar "Design of reinforced cement concrete corbel and perform free vibration and buckling analysis," *i-managers journal on structural engineering*, vol. 9 l no. 1 l March May 2020, ISSN 2278-7887
- 4. KNV Chandrasekhar "A study of free vibration and forced vibration characteristics of laminated composite elliptical paraboloid shells," *i-managers journal on structural engineering*, vol. 9 l no. 1 l March May 2020, ISSN 2278-7887
- 5. KNV Chandrasekhar "Optimisation of steel transmission tower structure using firefly algorithm," *i-managers journal on structural engineering*, vol. 61 no. 21 June August 2017, ISSN 2278-7887
- 6. KNV Chandrasekhar "Bending characteristics of reinforced concrete beams," *i-managers journal on structural engineering*, vol. 6 l no. 3 l September November 2017, ISSN 2278-7887
- 7. KNV Chandrasekhar "A step by step procedure to perform isogeometric analysis of beam and bar problems in civil engineering including sizing optimisation of a beam," *i-managers journal on structural engineering*, Vol. 7 | no.1 | Mar May 2017, ISSN 2278-7887structural engineering, Volume 6. no. 4 December 2017-February 2018, ISSN 2278-7887
- 8. KNV Chandrasekhar "A step by step procedure to perform hygroscopic analysis of laminated composite plate using six node linear strain triangular elements with coding in ForTran®," *i-managers journal on structural engineering*, Vol. 9 1 no. 4 1 December 2020 February 2021, ISSN 2278-7887
- 9. KNV Chandrasekhar "A study on parameters of firefly algorithm for topology optimisation of continuum structures II," *i-managers journal on structural engineering*, Vol. 6 l no. 1 l March May 2017, ISSN 2278-7887
- 10. KNV Chandrasekhar "Free vibration analysis of laminated composite conoidal shells using six node linear strain triangle elements," *i-managers journal on structural engineering*, Vol. 8 l no. 3 l September November 2019, ISSN 2278-7887.
- 11. KNV Chandrasekhar "A comparative study on evolutionary algorithms to perform isogeometric topology optimization of continuum structures using parallel computing," *Journal of aerospace engineering & technology*, Vol.8 Issue 1, 2018, ISSN 2348-7887
- 12. KNV Chandrasekhar "A step by step illustrative procedure to perform isogeometric analysis and find the nodal displacements for a two dimensional plate structure," *i-managers journal on structural engineering*
- 13. P. Srilatha, D.Narmada, D.Tarun Kumar, M.Arun, D.Yuva Kumar, KNV Chandrasekhar (2022) "First order basis splines to perform isogeometric topology optimisation to design the outline of the bridge pier and analyse using Idea Statica," imanager Journal on Civil Engineering, Vol.12, Issue 2, May 2022
- 14. KNV Chandrasekhar, V.Bhikshma (2022) "Cubic basis splines to perform topology optimisation of laminated composite regular cylindrical and elliptical and hyperbolic thin shell structures using inverse buckling formulation," imanager Journal on Civil Engineering, Vol.12, Issue 2, May 2022
- 15. KNV Chandrasekhar, V.Bhikshma (2022) "First Order Basis Splines to perform Isogeometric topology optimisation of three dimensional structures," imanager journal on Civil Engineering, Vol.12, Issue 3, August 2022
- 16. KNV Chandrasekhar, V.Bhikshma (2022) "Cubic b-splines to perform topology optimisation with buckling load on carbon fibre nano reinforced simply supported cross ply laminated composite square plates using inverse buckling formulation," imanager Journal of Civil Engineering, Vol.12, Issue 4, November 2022.

List of Patents/Designs

1. Title: Interlocking Gabion Frame for Structural wall

Design Application Number: 373584-001 Design application Granted Date: 04/11/2022

List of MTech Projects completed

S. No.	Project title	Year
1	Response of structural components subjected to blast loading	2016
2	Topology optimisation of continuum structures using firefly algorithm	2016
3	A study on performance based indices to perform topology optimisation	2017
	of continuum structures using swarm intelligence fire fly algorithm	
4	Nurbs based isogeometric analysis to perform topology optimisation of	2018
	continuum structures using evolutionary algorithms	
5	Second order sensitivity analysis and fundamental frequency	2018
	optimisation to perform topology optimisation of continuum structures	
	using evolutionary algorithm	
6	Free vibration and forced vibration	2019
	characteristics of laminated composite elliptical paraboloid shells	
7	Six node hexagon element to perform static analysis, vibration analysis	2019
	and topology optimisation of continuum structures	
8	Free vibration analysis of laminated composite conoidal shells using six	2019
	node linear strain triangle elements	
9	Strain Energy based and fundamental frequency based topology	2019
	optimisation of laminated composite plates and shells	
10	An experimental investigation on nano concrete for bubble deck slab	2019
	mixed with graphene oxide	
11	Bending characteristics of laminated composite plates and shells having	2020
	cutouts subjected to hygroscopic loading	
12	Cubic b-splines to perform topology optimisation with buckling analysis	2021
	of simply supported cross ply laminated composite square plates	
13	First order b-splines to perform topology optimisation of three	2021
	dimensional continuum structures	
14	First order b-splines to perform topology optimisation of two	2021
	dimensional reinforced concrete structures using optimality criteria	

List of BTech Projects

S.No.	Title of the Project	Year
1.	Design and analysis of bridge pier using idea statica®	2022
2.	Design and analysis of pratt truss bridge joint using idea statica®	2022
3.	Residual compressive strength of concrete cubes mixed with nano alumina	2023
	at high temperatures and estimate stress strain behavior using machine	
	learning - wip	

