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**Designation** : Professor

**Department** : Civil

**Mail Id** : [chandramohanrao\\_bdv@vnrvjiet.in](mailto:chandramohanrao_bdv@vnrvjiet.in), bdvcmrao@gmail.com

**Experience (in years)** : Teaching–26, Research–6, Others (If any, Specify) - Nil

### 1.Educational / Technical Qualifications :

S.No.	Level (UG / PG / Ph.D.)	Year of passing	Specialization
1	B.Tech.	1992	Civil Engineering
2	M.Tech.	1996	Structural Engineering
3	Ph.D.	2012	Civil Engineering

### 2. Teaching and Learning :-

#### 2.1 Teaching Interests :

Engineering Mechanics, Strength of Materials, Structural Analysis, Design of Reinforced Concrete Structures, Design of Steel Structures, Earthquake Engineering.

#### 2.2 Novel Teaching & Learning Techniques adopted :

WIT&WIL, Learning by doing, NPTEL Lectures & Videos

#### 2.3 Involvement in curriculum updating / Design :

- ❖ Actively involved in the preparation of R15, R18, R19, R22 Syllabi.
- ❖ BoS Member of Civil Engg. Dept.
- ❖ In-charge for Dept. Academic Committee

### 3. Co-curricular and Extra-Curricular Activities :-

#### 3.1 Interests and Hobbies :

- ❖ Zeal to learn up-to-date knowledge.
- ❖ Providing helping hand to the students for their all-round development.

### **3.2 CCA / ECA Organized :**

- ❖ Active member in most of the Co-Curricular activities organized by the Civil Engg. Dept.

### **3.3 CCA / ECA Participated :**

- ❖ Participated in most of the Co-Curricular activities organized by the Civil Engg. Dept.

### **3.4 Counseling and Mentoring Activity :**

- ❖ Mentor for 20 Students (I B.Tech.–10, IV B.Tech.–10) of Civil Engineering.

### **3.5 Committees involved in :**

#### **Department Level :**

- ❖ I/c - Strength of Materials Lab
- ❖ I/c – UG NBA
- ❖ I/c – PG (Structural Engg.) NBA
- ❖ I/c – CED Budget
- ❖ I/c - Department Academic Committee
- ❖ Member, BoS

#### **Institute Level :**

- ❖ MR - ISO
- ❖ Member - Institute Finance Committee
- ❖ Member - IQAC

## **4. Conferences / Workshops / Seminars / Guest Lectures :**

### **4.1 Conducted :**

- ❖ Organizing Secretary – International Conference on “Construction Materials and Smart Structures for Sustainable Development”, Organized by VNRVJIET, Hyderabad from 29<sup>th</sup> – 31<sup>st</sup> Jan’ 2020
- ❖ Coordinator – AICTE Sponsored Faculty Development Program on “Computer Oriented Applications in Civil Engineering”, scheduled from 16/05/16 to 28/05/16.
- ❖ Coordinator – AICTE Sponsored Faculty Development Program on “Finite Element Applications in Civil Engineering”, Organized by VNRVJIET, Hyderabad from 3<sup>rd</sup> to 15<sup>th</sup> June 2013.
- ❖ Coordinator - National Conference on “Recent Trends in Structural Engineering”, Organized by VNRVJIET, Hyderabad during 6<sup>th</sup> & 7<sup>th</sup> Jan’ 2012.

### **4.2 Attended (Last 2 Years – Min. 1 Week) :**

- ❖ UK–India Education and Research Initiative (UKIERI) - Technical Education Leadership Development and Management Program (TELDP), Organized by British

Council - Dudley College, UK in association with AICTE, New Delhi from Oct' 2020 – March 2021.

- ❖ AICTE sponsored FDP on “Advanced Computing in Civil Engineering”, Organized by VNRVJIET, Hyderabad from 16<sup>th</sup> – 28<sup>th</sup> Nov' 2020.
- ❖ Workshop on “Machine Learning & Artificial Intelligence using Python”, Organized by Dept. of CSE, VNRVJIET, Hyderabad from 12<sup>th</sup> - 14<sup>th</sup> Aug' 2020.
- ❖ AICTE sponsored STTP on “Advances in Finite Element Method for Industry & Research Applications”, Organized by VCE, Hyderabad from 03<sup>rd</sup> – 08<sup>th</sup> Aug 2020.
- ❖ FDP on “MATLAB for Mechanical Engineers”, Organized by BMSCE, Bangalore from 20<sup>th</sup> – 24<sup>th</sup> July 2020
- ❖ FDP on “Advances in Concrete Science and Technology for Sustainability”, Organized by VNRVJIET, Hyderabad from 13<sup>th</sup> – 18<sup>th</sup> July 2020.
- ❖ FDP on “Recent Trends and Research Scope in Civil Engineering”, Organized by CBIT from 06<sup>th</sup> – 10<sup>th</sup> July 2020
- ❖ Workshop on “Effective Online Teaching using ICT Tools”, Organized by Dept. of CSE, VNRVJIET, Hyderabad from 29<sup>th</sup> June - 04<sup>th</sup> July 2020.
- ❖ FDP on “Structural Health Monitoring and its implications”, Organized by BMSCE, Bangalore from 15<sup>th</sup> – 19<sup>th</sup> June 2020
- ❖ FDP on “Performance of Engineering Structures under extreme loading”, Organized by VBIT, Hyderabad from 08<sup>th</sup> – 13<sup>th</sup> June 2020
- ❖ Workshop on “Effective and Efficient Online Teaching in the age of Corona”, Organized by IIT Bombay on 24<sup>th</sup> May 2020.
- ❖ Webinar on “Indian Seismic Codes IS 1893:2016 and & IS 13920:2016”, Organized by RMKEC, Gummidipoondi from 18<sup>th</sup> – 22<sup>nd</sup> May 2020
- ❖ Short Course on “Basic Conventional Bridges”, Organized by Midas-Civil from 11<sup>th</sup> – 16<sup>th</sup> May 2020.

## **5. Academic contribution and Research & Consultancy :**

### **5.1 Invited Lectures :**

- ❖ Delivered a lecture on “MATLAB – Applications to Civil Engineering” at the AICTE sponsored FDP on “Advanced Computing in Civil Engineering”, Organized by VNRVJIET, Hyderabad on from 21/11/2020.
- ❖ Delivered a lecture on “Introduction to MATLAB” at the AICTE sponsored FDP on “Advanced Computing in Civil Engineering”, Organized by VNRVJIET, Hyderabad on from 20/11/2020.
- ❖ As a resource person, delivered a lecture on Design of RC beams & columns at the workshop organized by MLRIT, Hyderabad.
- ❖ As a resource person, delivered a lecture on Design & Detailing of RC Structures at the workshop organized by Geethanjali College of Engg. & Tech., Hyderabad

### **5.2 Articles / Chapters published in books : Nil**

### 5.3 Books published as single author or as editor : Nil

### 5.4 Projects Guided :

- (a) UG : Guided more than 20 B.Tech. Projects in Civil Engineering.  
(b) PG : Guided more than 20 M.Tech. Projects in Structural Engineering.

### 5.5 Research Interests :

Structural Dynamics, Earthquake Engineering, Finite Element Analysis, Structural Optimization.

### 5.6 Ph.D. Students :

- (a) Enrolled : 2                      (b) Submitted : Nil                      (c) Awarded : Nil

### 5.7 Papers Published in Reviewed Journals :

S.No.	Title of the Paper	Journal Name Vol. No., Page No.	ISBN/ ISSN No.	Impact Factor/ Citation Index	National/ International
1	Analysis and Optimization of Box girder bridges in Curved Planform	Journal of The Institution of Engineers (India) : Series A, Vol. 93, Issue 1, Feb –Apr. 2012, pp. 1-8	ISSN 2250-2149	Indexed in Scopus	National
2	Free Vibration Analysis and Optimization of Conical Shells	Journal of The Institution of Engineers (India), Vol. 92, August 2011, pp.28– 35	ISSN 0020-336x	Indexed in Scopus	National
3	Analysis and Optimization of Conical Shells with prescribed movement directions of Shape design variables	Journal of Structural Engineering – SERC, Vol. 38, No. 6, Feb – March 2012, pp.596 – 601	ISSN 0970-0137	Indexed in Scopus	National
4	Analysis and Optimization of Cylindrical Shells with Stain energy and Stress leveling index as Objective functions	Journal of Structural Engineering – SERC, Vol. 37, No. 5, Dec’ 2010 – Jan’ 2011, pp. 313 – 321	ISSN 0970-0137	Indexed in Scopus	National
5	Analysis and Optimization of Spherical Shells with	Journal of Structural Engineering – SERC Vol. 37, No. 2, June–	ISSN 0970-0137	Indexed in Scopus	National

	Stain energy and Stress leveling index as Objectives	July 2010, pp.101 – 109			
6	Free Vibration Analysis and Optimization of Cylindrical Shells	Advances in Vibration Engineering, Vol. 11, No.3, July – Sept’ 2012, pp. 325-336	ISSN 0972-5768	Indexed in Scopus	National
7	Optimal PZT Transducer location for effective damage identification in thin fixed plate	Advances in Materials and Processing Technologies, Vol. 6, Issue 2, Feb’ 2020, pp. 259 - 271	ISSN : 2374 – 068X	Indexed in Scopus	International
8	Parametric study of Silo Analysis	Materials Today : Proceedings, Vol. 51, Part 8, 2022, pp. 2450-2456	2214-7853	Indexed in Scopus, CPCI of WoS	International
9	MATLAB code for the design of High Strength Concrete mix	Materials Today : Proceedings, Vol. 46, Part 17, 2021, pp. 8381-8385	2214-7853	Indexed in Scopus, CPCI of WoS	International
10	Numerical Simulation for Health Monitoring of Thin Simply Supported Plate using PZT Transducers	Materials Today : Proceedings, Vol. 45, Part 2, 2021, Pages 3492-3498	2214-7853	Indexed in Scopus, CPCI of WoS	International
11	Comparative studies on LC <sup>3</sup> based concrete with OPC and PPC based concretes	Materials Today : Proceedings, Vol. 43, Part 2, 2021, Pages 2368-2372	2214-7853	Indexed in Scopus, CPCI of WoS	International
12	Experimental studies on Mechanical and Durability characteristics of LC <sup>3</sup> concrete	IOP Conf. Series: Materials Science and Engineering  doi:10.1088/1757-899X/1091/1/012075	1757-899X	Indexed in CPCI-S of WoS  H-Index = 44	International
13	Performance studies on limestone calcined clay based concrete	IOP Conf. Series: Materials Science and Engineering	1757-899X	Indexed in CPCI-S of WoS  H-Index =	International

		doi:10.1088/1757-899X/1091/1/012076		44	
14	A study on the effect of fiber orientation on simply supported laminated plates	Intl. Journal of Earth sciences and Engineering, Vol. 7, No.4, Aug' 2014.	ISSN 0974-5904	SJR=0.141 H Index=6	International
15	Effect of geometric parameters on seismic performance of RC chimneys	i-manager's Journal on Civil Engineering Vol. 9(2), March 2019, pp. 46-54	ISSN : 2231-1068	Indexed in Google Scholar	National
16	Modal Analysis of Hyperboloidal Shell Structures	i-manager's Journal on Civil Engineering Vol. 9(2), March 2019, pp. 55-61	ISSN : 2231-1068	Indexed in Google Scholar	National
17	Analysis of Transmission Towers for Optimal Bracing Configuration	i-manager's Journal on Structural Engineering Volume: 5, No. 4, Dec' 2016 – Feb' 2017, pp : 1-8	ISSN: 2278-7887	Indexed in Google Scholar	National
18	Dynamic Analysis of RC Chimneys	i-manager's Journal on Structural Engineering Volume: 5, No. 4, Dec' 2016 – Feb' 2017, pp : 30-37	ISSN: 2278-7887	Indexed in Google Scholar	National
19	A Comparative Study on Time History Analysis of Plan Irregular RC Buildings	i-manager's Journal on Structural Engineering Vol. 6, Issue 1, March 2017	ISSN : 2278-7887	Indexed in Google Scholar	National
20	Buckling Analysis of Plates with Holes of Various Shapes	i-manager's Journal on Structural Engineering Volume: 4, No. 4, Dec 2015 – Feb' 2016, pp : 1 - 9	ISSN: 2278-7887	Indexed in Google Scholar	National
21	Influence of Earthquake Incidence Angle on Seismic Response of Irregular RC Buildings	i-manager's Journal on Structural Engineering Volume: 4, No. 4, Dec 2015 – Feb' 2016, pp : 10 - 16	ISSN: 2278-7887	Indexed in Google Scholar	National
22	Effect of Symmetrical Floor Plan Shapes With	i-manager's Journal on Structural Engineering	ISSN: 2278-7887	Indexed in Google	National

	Re-Entrant Corners On Seismic Behavior Of RC Buildings	Volume: 4, No. 2, Jun-Aug 2015, pp : 1-9		Scholar	
23	Static, Modal and Transient Dynamic Analysis of Laminated Composite Plates with Holes	i-manager's Journal on Civil Engineering Volume: 6, No. 1, Dec 2015 – Feb 2016, pp: 40 - 47	ISSN: 2231-1068	Indexed in Google Scholar	National
24	Seismic Strengthening of Plan Irregular RC Buildings With Re-entrant Corners Using Shear walls	Intl. Jl. of Research in Engg. & Technology, Vol. 5, Issue 2, pp. 21 - 26	eISSN: 2319-1163   pISSN: 2321-7308	Indexed in Google Scholar	National
25	Effect of Earthquake Incidence Angle on Seismic Performance of RC Buildings	Intl. Journal of Research in Engineering and Technology, Dec'2015	e- ISSN:2319-1163	Indexed in Google Scholar	National
26	Dynamic Analysis of Laminated Composite Plates	Intl. Journal of Research in Engineering and Technology, Dec' 2015	e- ISSN:2319-1163	Indexed in Google Scholar	National
27	Effect of location of shear wall on seismic performance of R C buildings	Intl. Journal of Emerging Technology and Advanced Engineering	ISSN : 2250 - 2459	UGC Approved	National
28	Optimum position of outrigger with belt truss in high rise building under horizontal loading	Journal of Emerging Technologies and Innovative Research, Vol. 4, Issue 11, Nov' 2017, pp. 270-275	ISSN : 2349-5162	UGC Approved	National
29	A comparative study on the analysis of single, double and triple cell RC box structures	Intl. Journal of Emerging Technology and Advanced Engineering	ISSN : 2250 - 2459	UGC Approved	National
30	Analysis and Optimization of Box girder bridges with Strain Energy Minimization as Objective	The IUP Journal of Structural Engineering, Vol. III, No. 4, October 2010, pp.26 – 36	ISSN 2250-2149	Indexed in Google Scholar	National
31	Analysis & Structural Shape Optimization of	Intl. Journal on Mechanical &	ISSN 0974-231X	---	National

	Cylindrical Shells	Automobile Engineering Vol. 2, No. 2, Nov' 2008 – Jan' 2009, pp.47-58			
32	Seismic Behaviour of Plan Irregular RC Buildings	Indo Global Journal of Applied Engineering, Vol. 5, Issue 1, March 2017, pp. 47-51	ISSN:2321-5267	---	National

### 5.8 Papers Presented at National / International Conferences :

S.No.	Title of the Paper	Name of the Conference/ Seminar	National/ International	Period
1	Analysis and Study of a Compartmental Silo	Innovations in Engineering and Technology, Organized by JNTUH, Hyd.	Inter National	15 <sup>th</sup> – 17 <sup>th</sup> Sept' 2022, Hyderabad.
2	Analysis of Double cell RC Box structures by varying cushion depths	Construction Materials and Smart Structures for Sustainable Development ISBN : 978-93-8935-488-1	Inter National	29 <sup>th</sup> – 31 <sup>st</sup> Jan 2020, Hyderabad.
3	Optimal PZT Transducer location for effective damage identification in thin cantilever beam	Construction Materials and Smart Structures for Sustainable Development ISBN : 978-93-8935-488-1	Inter National	29 <sup>th</sup> – 31 <sup>st</sup> Jan 2020, Hyderabad.
4	A comparative study on RCC and Laminated composite domes using FEM	Construction Materials and Smart Structures for Sustainable Development ISBN : 978-93-8935-488-1	Inter National	29 <sup>th</sup> – 31 <sup>st</sup> Jan 2020, Hyderabad.
5	Rail Structure Interaction analysis for providing continuous welded rail on Railway Bridges	Construction Materials and Smart Structures for Sustainable Development ISBN : 978-93-8935-488-1	Inter National	29 <sup>th</sup> – 31 <sup>st</sup> Jan 2020, Hyderabad.
6	Analysis of Single cell RC Box structures by varying cushion depths	Recent Advances in Civil Engineering Infrastructure ISBN: 978-93-8935-486-7	Inter National	16 <sup>th</sup> – 18 <sup>th</sup> Dec' 2019, Hyderabad.
7	Characterization of Admittance Signatures of PZT Transducer for Structural Health	Recent Advances in Civil Engineering Infrastructure ISBN: 978-93-8935-486-7	Inter National	16 <sup>th</sup> – 18 <sup>th</sup> Dec' 2019, Hyderabad.



	Monitoring			
8	Response Spectrum Analysis of RC Buildings with irregularities in Plan	Paradigms in Engineering and Technology	Inter National	28 <sup>th</sup> – 29 <sup>th</sup> Dec' 2018, Hyderabad.
9	Optimization of Bracing System for Steel Transmission Towers	Sustainable Materials and Management Systems in Civil Engineering	National	15 <sup>th</sup> - 16 <sup>th</sup> Dec' 2016, CBIT, Hyderabad.
10	Buckling Analysis of Plates With and Without Cut-Outs	International Conference on Innovations in Structural Engineering	Inter National	14 <sup>th</sup> - 16 <sup>th</sup> Dec' 2014, Osmania University, Hyderabad.
11	Seismic behaviour of RC framed buildings on hill slopes	Recent Research Advances in Civil Engineering, (RRACE-2014), pp. 319-325	National	7 <sup>th</sup> - 8 <sup>th</sup> Nov' 2014, Osmania University, Hyderabad.
12	A Study on the applicability of time period formula for highrise buildings	Recent Research Advances in Civil Engineering, (RRACE-2014), pp. 333-338	National	7 <sup>th</sup> - 8 <sup>th</sup> Nov' 2014, Osmania University, Hyderabad.
13	Influence of Mass & Stiffness irregularity on seismic analysis of buildings	Recent Research Advances in Civil Engineering, (RRACE-2014), pp. 345-352	National	7 <sup>th</sup> - 8 <sup>th</sup> Nov' 2014, Osmania University, Hyderabad.
14	Dynamic Analysis and Optimization of Laminated Composite Plates	Recent Advances In Structural Engineering (RASE 2013), pp. 200-206	National	12-14, Sept' 2013, Osmania University, Hyderabad,
15	Analysis and Optimization of Simply Supported Laminated Plates	Recent Trends in Structural Engineering, pp. 92-101	National	06-07 <sup>th</sup> Jan' 2012, VNRVJIET, Hyderabad.
16	Computer aided Concrete Mix Design	STHAPANA - 2K7, pp. 22	National	24-25 <sup>th</sup> Jan' 2007, VNRVJIET, Hyderabad.
17	Dynamic Analysis of Multistorey Buildings	National Workshop on Advances in Structural Engineering, pp. 323-328	National	21-22 <sup>nd</sup> Dec' 2001, SVU, Tirupati.

### 5.9 Sponsored Research Projects :

S.No.	Title	Agency	Period	Grant amount	Ongoing / Completed
1.	Investigation on Mechanical and Durability characteristics of Low Carbon Limestone Calcined Clay Cement (LC <sup>3</sup> )	JNTUH – TEQIP III	1 Year	Rs. 3,00,000	Completed

### 5.10 Consultancy Projects :

S.No	Title	Agency	Period	Sanctioned Amount (Rs.)	Ongoing / Completed
1	Design of Mezzanine Floor for T&P cell, PG block	VNRVJIET, Hyderabad	2006	In-House Project	Completed
2	Design of Student Activity Centre	VNRVJIET, Hyderabad	2007	In-House Project	Completed
3	Design of Industrial Shed for Velegonda Tunnel Project	Coastal Projects Hyderabad	2008	1,25,000/-	Completed
4	Design of Mezzanine Floor for Auditorium, PG block	VNRVJIET, Hyderabad	2009	In-House Project	Completed
5	Proof checking of D-Block	VNRVJIET, Hyderabad	2011-13	In-House Project	Completed
6	Proof checking of Hostel block	VNRVJIET, Hyderabad	2015–17	In-House Project	Completed
7.	Third Party Quality Control works	GHMC, Hyderabad	2017-23	2 Crores (Civil Engg. Dept.)	Ongoing

### 6. Awards / Honors received :

Secured **Elite + Silver** in the NPTEL Online Course titled “Python for Data Science” in Aug’ 2021.

Secured **Gold Medal and Topper** Certification in the NPTEL Online Course titled “Strength of Materials” in Oct’ 2018.

Secured **Topper** Certification in the NPTEL Online Course titled “Matrix Method of Structural Analysis” in Oct’ 2018.

Secured **Gold Medal and Topper** Certification in the NPTEL Online Course titled “Structural Analysis–I” in Oct’ 2017.

Received "Sir Arthur Cotton Memorial Award (**Gold Medal**)" for the best paper published in the Civil Engg. division of Institution of Engineers India Journal in Dec’ 2012.

### 7. Motto :

Commitment to strive to enhance the quality of life of students.