Dr. NAHUSHANANDA CHAKRAVARTHY H.G

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Education

	Degree	Year	Institute	Specialization
1	B.E	2005	Malnad College of Engineering, Hassan	Civil Engineering
2	M.Tech	2008	Sri Jayachamarajendra College of Engineering, (JSS Science and Technology University), Mysuru	Industrial Structures
3	Ph.D	2018	Universiti Tenaga Nasional (The Energy University), Malaysia	Cold formed steel structures

Professional Experience

	Date (from-to)	Designation	Organization
1	2019-Present	Assistant Professor	Siddaganga Institute of Technology, Tumakuru, India
2	2011-2013	Assistant Engineer	WS Atkins India Pvt Ltd, Bangalore
3	2008-2011	Design Engineer	Semac Pvt Ltd, Hyderabad
4	2005-2006	Design Engineer	Design Makers, Bangalore

Positions held

- *Placement Co Ordinator*
- *Internship Co Ordinator*

Affiliations of Professional organizations

- Member of Institute of Engineers
- Charted Engineer (India)
- Indian Concrete Institute (ICI)

Awards and Honors

- Nil

Courses Taught

Undergraduate Courses

- Engineering mechanics
- Strength of Materials
- Structural Analysis
- Design of reinforced concrete structures
- Design of steel structures
- Prestressed Concrete structures
- Advanced concrete technology
- Environmental science.
- Innovation & Design thinking

Postgraduate Courses

- Advanced design of RCC structures
- Design of Industrial structures

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	Anusha T	Study on progressive collapse of braced steel buildings	2020
2	Punith S N	Analysis of concrete filled double skin steel tubular columns under axial load	2020
3	Chidanand J	Effect of floating column in high rise building located in seismic zone and a case study on disproportionate collapse	2020
4	Hema H	Prediction of Ultimate loads of Cold formed steel columns using Machine learning Approach	2021
5	Jahnavi S J	Numerical studies on CFRP strengthened cold formed steel built-up columns	2021
6	Shivaprasad	Experimental investigation of incinerated medical waste ash on the properties of self-compacting concrete	2022
7	Karthik M.S	Experimental investigation and numerical prediction of compressive strength of Self-compacting Concrete by machine learning techniques	2022

8	Rahul Gowda B A	Experimental and Numerical Investigation of Hot-Rolled Steel I-Section Columns using Machine Learning Approach	2024
9	Bhoomika D L	Soft computing techniques and FEM investigation of CFS channel columns	2024
10	Manjunatha H N	Durability studies on self-compacting concrete incorporating arecanut husk ash and Iron slag.	2024
11	Chandana B	A study on hot rolled steel equal angle section using experimental, FEM and machine learning techniques.	2025

Research Areas

- **Cold formed/Hot rolled steel** -Experimental, FEM, Design, AI
- **Concrete**-Self compacting Concrete, Geo polymer concrete, Lime Mortar etc

Sponsored Projects

Ongoing Projects:

1. Title: Durability and Performance of lime mortar using kadukkai (terminalia chebula)
   Funding Agency: KSCST
   Amount: 4500 Rs
   Duration: -
   Role: Guide
2. Title: CBIC-TITL project
   Funding Agency: L& T
   Amount: 47,20,000 Rs
   Duration: 2 Years
   Role: Proof check Consultant

Completed Projects:

1. Title: Nil
   Funding Agency:
   Amount:
   Duration:
   Role:
2. Title: Nil
   Funding Agency:
   Amount:
   Duration:

Role:

Publications

Journals

- Nahushananda Chakravarthy, H. G., Rahul Gowda, B. A., Tantri, A., & Naganna, S. R. (2025). An Investigation Into the Axial Capacity of Hot-Rolled I-Section Steel Columns Using Machine Learning. Engineering Reports, 7(7), e70261.
- Nahushananda Chakravarthy, H.G., Chandana, B. & Naganna, S.R. Axial Strength of Short Hot-Rolled Steel Equal Angle Members: Experimental Analysis, Numerical, and Machine Learning Modeling. J. Inst. Eng. India Ser. A (2025).
- Nataraja, M. C., Chakravarthy HG, N., Shivaprasad, R., & Naganna, S. R. (2023). Self-compacting concrete incorporating incinerated biomedical waste ash: a performance assessment. Journal of Engineering and Applied Science, 70(1), 22.
- Hema, H., Chakravarthy, H. N., & Naganna, S. R. (2022). Prediction of ultimate load carrying capacity of short cold-formed steel built-up lipped channel columns using machine learning approach. Sādhanā, 47(4), 207.
- Chakravarthy, N., Jahnavi, S. J., & Naganathan, S. (2022). Numerical Studies on CFRP Strengthened Cold formed Steel built-up Columns. International Journal of Sustainable Construction Engineering and Technology, 13(1), 264-272.
- Chakravarthy, N., Naganathan, S., Kalavagunta, S. and Mustapha, K.N.B., 2021. Structural Performance of Experimentally Investigated CFRP-Strengthened Cold-formed Steel Built-Up Columns. Iranian Journal of Science and Technology, Transactions of Civil Engineering, pp.1-8.
- Naganathan, S., Chakravarthy, H.N., Anuar, N.A., Kalavagunta, S. and Mustapha, K.N.B., 2019. Behaviour of Cold Formed Steel Built-Up Channel Columns Strengthened Using CFRP. International Journal of Steel Structures, pp.1-10.
- Chakravarthy, N., Naganathan, S., Aun, J. T. H., Kalavagunta, S., Mustapha, K. N., & Veena, T. R. (2017). Experimental investigation of CFRP strengthened I-shaped cold formed steel beams. Jurnal Teknologi, 79(5), 83-89.
- Chakravarthy, N., Naganathan, S., Bhakri, R. S. A. B., Kalavagunta, S., Mustapha, K. N. B., & Phalguna, H. G. (2017). Cost Effectiveness of CFRP Repair Technique for Cold Formed Steel Beams. Indian Journal of Science and Technology, 10(18).
- Chakravarthy, N., Naganathan, S., Beddu, S., Akmal, M. H., Kalavagunta, S., Bin Mustapha, K. N., & Phalguna, H. G. (2017). Load carrying capacity of

CFRP strengthened cold formed steel built up box sections. International Journal of Advanced and Applied Sciences, 4(10), 175-180.

- Mutusva, N.C., 2015. Investigation of properties of concrete with seashells as a coarse aggregate replacement in concrete, matter. Int. J. Sci. Technol, 1, pp.285-295.

Conference Proceedings

- Shivaprasad, R., Chakravarthy, H. N., Chandru, R., & Kiran, S. (2023). Behavior of self-compacting concrete by the addition of recycled aggregates and nano-silica. Materials Today: Proceedings.
- Hema, H., & Nahushananda Chakravarthy, H. G. (2021, November). Analysis and Design Approaches of Cold-Formed Steel Members—A Review. In International Conference on Civil Engineering Trends and Challenges for Sustainability (pp. 745-757). Singapore: Springer Nature Singapore.
- Anusha, T., & Nahushananda Chakravarthy, H. G. (2021). Progressive collapse of steel-framed structures. In Sustainability Trends and Challenges in Civil Engineering: Select Proceedings of CTCS 2020 (pp. 311-323). Singapore: Springer Singapore.

Book Chapters

- Nil

Books

- Nil

Editorial

- Nil

Reviewer of Journals

- Nil

Editor/ Reviewer of Journal

- Nil

Patents

- Nil

Invited Lectures, talks and workshops

- Smart, sustainable & resilient roads-25th April 2025
- Quality control and assurance of road projects- 22nd May 2024
- Laboratory Testing of Cement & Concrete for Contractors- 28th July 2022
- Holistic Water Proofing Solutions & NDT for Concrete Structures- 25th March 2022
- Applicators training programme on Water Proofing-25th August 2021.