SIDDESHA H	
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Vidwan ID	-
Scopus ID	57197852079
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Faculty ID	SITF0393

Education

S. No	Degree	Year	Institute	Specialization
1	SSLC	2000	Karnataka Secondary Education Examination Board	Maths + Science + Social+ 3 language
2	PUC	2002	Department of Pre-university Education	Maths+Phy+Chem + Biology
3	B. E	2006	University B.D.T. College of Engineering, Davanagere	Civil Engg.
4	M.Tech	2009	University B.D.T. College of Engineering, Davanagere	Computer-Aided Design of Structures-Substructures
5	Ph. D	2019	Visvesvaraya Technological University, Belgaum	Structural Health Monitoring

Professional Experience

	Date (from-to)	Designation	Organization
1	03-08-2009To 23-02-2023	Asst.Professor	Siddaganga Institute of Technology
2	24-02-2023 to Till date	Assoc. Prof.	Siddaganga Institute of Technology

Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

- Test Coordinator
- NAAC Coordinator

- NBA Coordinator
- PG Coordinator (Structural Engg.)

Affiliations of Professional organizations

- NIL

Awards and Honors

- NIL

Courses Taught

Undergraduate Courses

- Engineering Mechanics
- Design of RC Structures
- Matrix Methods of Structural Analysis
- Design of Steel structures
- Theory of Elasticity
- Introduction to Civil Engineering
- Environmental Studies
- Design of Bridge Structures
- Finite Element Method

Postgraduate Courses

- Finite Element Method
- Computational Structural Mechanics
- Design of Concrete Bridges
- Transportation Structures

Research Guidance

- NIL

Research Areas

- Structural Engineering: Structural Health Monitoring, Concrete Technology

Publications

Journals

- **Siddesha H**, D S Rajendra Prasad, Pavan Kumar Emani, Sharma H. D. (2025). Machine Learning Regression and Optimal Neural Network Models for Prediction of Compressive Strength of High Strength Self-Compacting Concrete-A Comparative Study, *Structural Engineering and Mechanics*

- **Siddesha Hanumanthappa**, T.K. Bharath, H.O. Chethan Naik, Vaishali, D.S. Rajendra Prasad and A.R. Pradeep (2025). Investigation on partial replacement of cement with coconut shell ash and coarse aggregate with coconut shell with the addition of steel fibers. *Structural Engineering and Mechanics*, Vol. 93, No. 2 (2025), Pages 125-134. https://doi.org/10.12989/sem.2025.93.2.125

- **Siddesha Hanumanthappa** (2024). Damage detection in steel beam using Generalized Flexibility Quotient Difference based damage index and Artificial Neural Network. *Journal of Vibration Engineering and Technologies*, Volume 12, Pages 2715-2728. DOI:10.1007/s42417-023-01009-0

- **Siddesha Hanumanthappa** (2023). A new structural damage detection method for cantilever beam using Generalized Flexibility Quotient Difference Method. *Journal of Vibration Engineering and Technologies*, Volume 11, Pages 1525-1533. DOI:10.1007/s42417-022-00655-0

- Shreeharsha Dombale, **Siddesha H**, Sreedhar B M, Sujay Raghavendra (2023). Machine Learning Models for Damage Detection in Steel Beams. *International Journal of System Assurance Engineering and Management*, Volume 14, Pages 1898-1911
  DOI:10.1007/s13198-023-02020-0

- Siddesha Hanumanthappa, Ramya P (2023). The influence of blended polypropylene and polyethylene fibres on mechanical and durability properties of concrete. *Materials Today: Proceedings*, Volume 88, Part 1, 2023, Pages 19-28. DOI:10.1016/j.matpr.2023.04.459

- V Amruthavarshini, **Siddesha Hanumanthappa** (2023). Comparative study of ANN and ANFIS models for detection of damages due to cracks in single bay framed structure. *Materials Today: Proceedings*, Volume 88, Part 1, 2023, Pages 93-99. https://doi.org/10.1016/j.matpr.2023.05.021

- **Siddesha H**, Manjunath N Hegde (2017). Structural Damage Detection in Framed Structures using Under Foundation Settlement/ Rotation of Bases. *Structural Durability and Health Monitoring*, Volume 11, No.1, Pages 17-41
  https://doi.org/10.3970/sdhm.2017.012.017

Conference Proceedings

- V. Amruthavarshini, C. T. Monish Muthamma, **Siddesha Hanumanthappa** (2025). Flexibility Energy Quotient Difference Method for Structural Damage Detection in Beams. *Lecture Notes in Civil Engineering*, Pages 453 – 463.

https://link.springer.com/chapter/10.1007/978-981-97-9885-8_43

- Kumar A, Pradeep A.R.,Vijayanand M, **Siddesha H** (2024). Analysis of Multistory Steel Framed Structure with Different Infills Subjected to Seismic Loading. *Lecture Notes in Civil Engineering*, Volume 457, Pages 389-403. DOI:10.1007/978-981-99-9610-0_31

- **Siddesha Hanumanthappa**, A. S. Sinchana & Pavan Kumar Emani (2024). Structural Damage Detection in Double-Tapered Steel Beam Using Modal Strain Energy Method. *Technologies for Sustainable Buildings and Infrastructure*, Springer, Pages 23–33. DOI:https://doi.org/10.1007/978-981-97-4844-0_3

- V. Amruthavarshini, **Siddesha Hanumanthappa**, S. Sailesh (2024). Identification of Structural Damage in Single Bay Steel Frame Using ANFIS Software. *Proceedings of the First Artificial Intelligence Summit on Smart Sustainable Society*. Volume 1259, Springer, Singapore. https://doi.org/10.1007/978-981-97-7592-7_15.

- B.U. Darshan, **H. Siddesha**, T.Rajanna (2022). Structural damage detection for Plates using Flexibility based Strain Energy Method. Lecture Notes in Civil Engineering book series, *Recent Advances in Civil Engineering*, Volume 256, pp. 285 – 300, Springer Singapore. https://doi.org/10.1007/978-981-19-1862-9_18

Books

- NIL

Editorial

- NIL

Reviewer of Journals

- Nil

Editor/ Reviewer of Journal

- NIL

Patents

- NIL

Invited Lectures, talks and workshops

- NIL