

National Institute of Technology, Tiruchirappalli: Performa for CV of Faculty/ Staff Members

Curriculum Vitae



Brief Profile: Doctorate and Masters in Structural engineering from IIT Madras with teaching, research and consultancy experience. Presently Assistant Professor at National Institute of Technology Tiruchirappalli. Proven excellence in academic performance both at Institute and National level competitive exams. Independent researcher with research articles published at nationally and Internationally peer-reviewed journals and renowned conferences. Experienced at handling structural design consultancy works and adopts practical approach in the teaching and learning methods of Structural Engineering concepts.

1. Name: Mashudha Sulthana U.
2. Designation: Assistant Professor
3. Office Address: C6, Department of Civil Engineering
4. Telephone (Direct) (Optional):
Telephone:
Extn (Optional):
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5. Email (Primary): smash@nitt.edu Email (Secondary):
6. Field(s) of Specialization: Structural analysis, Steel and concrete composite structures, stability of structures

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	NITT	11-5-2020	Present
Post-doctoral researcher	IITM-ICSR	1-8-2018	29-2-2020
Project Officer	IITM-ICSR	19-12-2012	31-1-2014
Structural Design Engineer	Francis Santiago and associates	1-7-2011	31-12-2012

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8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
PhD	IITM	2018	-	Structural Engineering
M.Tech	IITM	2011	8.59	Structural Engineering
B.E.	CEG, Anna University	2009	8.56	Civil Engineering
HSLC	TN State Board	2005	96.75	Maths, Science etc.
SSLC	TN State Board	2003	94.6	Maths, Science etc.

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
PhD admission coordinator	Faculty coordinator, Department of Civil Engineering	July 2020 & July 2022	present
MOOCS coordinator	NIT Trichy	July 2021	present
Guest house committee member	NIT Trichy	July 2021	present

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Observer for conducting exam for non-teaching staff (NITT) at Chennai center	NIT Trichy	July 2021	July 2021

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
-	-	-

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
-	-	-	-	-

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13. Details of Academic Work

(i) Curriculum Development

Board of studies for PG and UG curriculum, coordinator for MOOC programme

(ii) Courses taught at Postgraduate and Undergraduate levels

Mechanics of Solids, Analysis of indeterminate structures, Advanced Metal Design, Stability of Structures

(iii) Projects guided at Postgraduate level

- (1) Section classification of concrete sandwiched double layer steel tube under axial compression
- (2) Lateral torsional buckling of I steel beams partially encased in concrete
- (3) Moment resistance connection for I steel beam and concrete filled double steel tubular column
- (4) Experimental and numerical study on the beam-column connection behaviour of CFS beam and CFST column using screws
- (5) Studies on the axial compression behaviour of concrete filled linked double steel tube
- (6) Evaluation of direct analysis method for new cross sections in concrete filled steel tubular sections
- (7) A study of factors influencing cost variance in road projects (CTM Project)

(iv) Other contribution(s)

1. Faculty in charge for Structural Engineering Laboratory course for MTech (Structures) for the session July 2020, July 2021 and July 2022
2. Faculty coordinator for the evaluation of BTech Internship projects for the session July 2020 and July 2021
3. Faculty member for evaluating BTech final year project in Jan 2022
4. Faculty member for evaluating MTech (Structures) project for the academic year 2021-2022
5. Guided two batches of BTech students in their final year project (Jan 2020 and Jan 2021 sessions)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed
-	-	-	-	-

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award
Surya Prakash M.	Flexural and Shear behavior of partially filled steel tubular cross-sections	Supervisor	Present (comprehensive exam cleared)

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16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event	Role	Event Organized by	Venue
3-8-22 to 5-8-22	Parametric Studies on the Moment Resistant Beam-column Connection Behavior of Concrete Filled Double Steel Tubular Columns and I Steel Beams	International	Paper presenter	Jointly organised by Southwest Jiaotong University and Southwest Jiaotong University Chengdu Design Institute Co., Ltd.	Chendu, China
24-3-22 to 25-3-22	Experimental study on the axial compressive behavior of sand-filled single-skin and double-skin steel tubular stub columns	International	Paper presenter	Vellore Institute of Technology, Chennai campus	Online
6-1-22 to 8-1-22	Effect of initial Imperfections on the ultimate axial compressive strength of concrete filled steel tubular long columns	International	Paper presenter	Indian Institute of Technology Hyderabad	Online
9-12-19 to 12-12-19	Effect of initial Imperfections on the ultimate axial compressive strength of concrete filled steel tubular long columns	International	Paper presenter	National University of Technology, Singapore	NUT, Singapore
3-12-15 to 5-12-15	Experimental studies on CFDST sections under axial loading	International	Paper presenter	Tsingua University	Beijing, China

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17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue
Two-day hands-on online workshop on “ETABS software for structural analysis”	Local	18/06/2021 to 19/06/2021	Convenor	Online
Webinar on “Advances in cold formed steel construction”	National	28/07/2021	Coordinator	Online

18. Invited Talks delivered

Topic	Date	Inviting Organization
Joint teaching programme for taking ‘Structural Dynamics’ course for 12 lecture hours	13-4-22 to 14-5-22	Thiagaraja Engineering College, Madurai
Seismic behaviour of Steel concrete composite structures	4-12-21	AICTE and Thiagaraja Engineering College, Madurai
Seismic performance of Steel concrete composite structures	18-12-21	SRM University of Science and Technology, Chennai
Numerical analysis of steel concrete composite structures	28-11-2020	SRM University of Science and Technology, Chennai

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Ordinary member	IABSE, India	

20. Academic Foreign Visits

Country	Duration of Visit	Programme
Singapore	3 days	Conference
China	3 days	Conference

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21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Mashudha Sulthana & Arul Jayachandran	Concrete confinement effect in circular concrete sandwiched double steel tubular stub-columns	International journal on Steel Structures	20(4)	1364-1377	2020	Q2
Mashudha Sulthana & Arul Jayachandran	Experimental studies on the global stability of concrete sandwiched double steel tubular columns	International Journal on Advanced Steel Construction	16(2)	99-111	2020	Q2
Mashudha Sulthana & Arul Jayachandran	Numerical simulation and parametric studies on the behaviour of concrete sandwiched double steel tubular stub columns	Journal of Structural Engineering (SERC)	47(1)	65-79	2020	Q2
Mashudha Sulthana & Arul Jayachandran	Axial compression behaviour of long concrete filled double-skinned steel tubular columns	Structures	9	157-164	2017	Q1

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(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Mashudha Sulthana & Supriha T.	Parametric Studies on the Moment Resistant Beam-column Connection Behavior of Concrete Filled Double Steel Tubular Columns and I Steel Beams	Tenth International Conference on Advances in Steel Structures (ICASS'2020)	Accepted for presentation	Steel structures	Chendu, China	2022
Mashudha Sulthana	Experimental study on the axial compressive behavior of sand-filled single-skin and double-skin steel tubular stub columns	International Virtual Conference on emerging trends in Structural Engineering (ERTSE 2022)	36	Structural engineering	Online	2022
Mashudha Sulthana & Surya Prasanth M.	Flexural Behavior of Rectangular Tubular Steel Beams Partially Filled with Concrete	International Virtual Conference on emerging trends in Structural Engineering (ERTSE 2022)	24	Structural engineering	Online	2022
Mashudha Sulthana & Arul Jayachandran	Effect of initial Imperfections on the ultimate axial compressive strength of concrete filled steel tubular long columns	Indian structural steel conference (ISSC2020)	171	Steel structures	Online	2022
Mashudha Sulthana & Arul Jayachandran	Investigations on the global stability of high strength concrete sandwiched square double steel tubular columns	17th International Symposium on Tubular Structures	231-238	Tubular steel	NUS, Singapore	2019

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Mashudha Sulthana & Arul Jayachandran	Investigations on Global Buckling Behaviour of Concrete Filled Double-skinned Steel Tubular Columns	12th International Conference on Advances in steel-concrete composite structures (ASCCS2018)	419-424	Steel concrete composite	Spain	2018
Mashudha Sulthana & Arul Jayachandran	Experimental studies on CFDST sections under axial loading	11th International Conference on Advances in steel-concrete composite structures (ASCCS2015)	268-273	Steel concrete composite	China	2015

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number
-	-	-	-	-

22. Project Details List:

Ongoing Projects & Past Projects

i. Ongoing Projects:

Sl. No	Project Title	Project Invigilator & Co PI	Project Area	Funding Agency
1	<i>Experimentals studies on the flexural and shear behaviour of partially concrete filled steel tubular beams</i>	<i>Dr. Mashudha Sulthana</i>	<i>Steel-concrete composite</i>	<i>Institute Seed Grant</i>

ii. Past / Completed Projects:

Sl. No	Project Title	Project Invigilator & Co PI	Project Area	Funding Agency	Completed Year
-	-	-	-	-	