

Curriculum Vitae

Full Name : **Dr SEERAM MADHURI**

Educational Qualification :

Degree Obtained	Year of Graduation	Specialization	Institute
Bachelor of Technology	2000	Civil Engineering	Nagarjuna University, Andhra Pradesh India
Master of Science by Research	2007	Berthing Structures	Department of Ocean Engineering, Indian Institute of Technology Madras, Chennai, India
Doctor of Philosophy	2013	Dynamics of Offshore Structures	Department of Ocean Engineering, Indian Institute of Technology Madras, Chennai, India

Area of specialization : (i) Structural Dynamics
(ii) Offshore Structures
(iii) Berthing Structures
(iv) Earthquake Engineering
(v) Safety Engineering

Software's familiar with : (i) ANSYS (ii) ANSYS AQWA (ii) SACS (iii) Staad Pro
(iv) Orcaflex (v) SAP (vi) AutoCAD (vii)Strad 7
(viii) Cadkey (ix) Image analysis (x) Mathcad
(xi) Matlab (xii) Grapher

Instrument management : Lab view, Catman

Membership in Professional bodies

Member of American Society of Civil Engineers (9865075)
Member of Institute of Engineers (India) (M-149409-0)
Indian Geotechnical Society (LM 4025)
Member of Society of Petroleum Engineers (4397156)

Publications

Journals

1. **Madhuri Seeram** and Manohar. Y. (2018). Two -Dimensional Analysis of Cable Stayed Bridge under Wave Loading, Journal of the Institution of Engineers (India): Series A, February 2018, pp. 1-7, <https://doi.org/10.1007/s40030-018-0261-3>.
2. Srinivasan Chandrasekaran and **Madhuri Seeram** (2015), Dynamic Response of Offshore Triceratops: Numerical and experimental investigations, *Ocean Engineering*, 109 (15), pp. 401-409, (doi:10.1016/j.oceaneng.2015.09.042).

3. Srinivasan Chandrasekaran, **Madhuri Seeram** and Jain. A. K. (2012) Aerodynamic Response of Offshore Triceratops, *Journal of ship and offshore structures*, Taylor and Francis, 8, No. 2, pp. 123-140, (DOI: 10.1080/17445302.2012.691271).
4. Srinivasan Chandrasekaran and **Madhuri Seeram** (2012) Stability Studies on Offshore Triceratops, *International Journal of Innovative Research and Development*, 1, Issue 10, pp. 398-404. (ISSN: 2278-0211)
5. **Madhuri. S.**, Sannasiraj. S. A., and Sundaravadivelu. R. (2007), Effect of Revision of Seismic Codal Provisions on the Analysis of Berthing Structures, *Journal of The Institution of Engineers (India)*, Volume 88, November 28, pp. 12-17. (National Journal).

International Conferences

1. **Madhuri. S.**, Satya Sravya. G., and Venkateswararao. K. (2018), Evaluation of Natural Period of Offshore Tension Leg Platform Wind Turbine Experimental Studies, Abstract Book, 4th International Conference in Ocean Engineering-2018, IIT Madras, Chennai, TS12: Ocean Renewable Energy, 51, pp. 58, 18-21 Feb. 2018.
2. **Madhuri. S.**, Narendra Kumar. B., and Venkateswararao. K. (2016), Non-Linear Static Analysis of Offshore J Lay Risers Using Finite Element Method, Structural Engineering Convention 2016, SERC, Chennai, Paper ID- 620, pp. 520-524, 21-23 Dec. 2016. (<https://drive.google.com/drive/folders/0B74m8HDGQPIrU3VjMld5ak5wTlk>) .
3. **Madhuri. S.**, Narendra Kumar. B., and Venkateswararao. K. (2016), Free Vibration Analysis of Risers Using Finite Element Method, Marine Hydrodynamics 2016, Department of Ocean Engineering, IIT Madras, 24 Nov. 2016.
4. **Madhuri. S.**, Muni Reddy M. G., and Savithri. M. (2016), Free Oscillation Analysis of floating bridge Panel at different water depths, Offshore Technology Conference Asia, Malaysia, 22-25 March 2016, (<http://dx.doi.org/10.4043/26760-MS>, ISBN 978-1-61399-391-0).
5. **Madhuri Seeram (2014)**, Conceptual Development of Resting and Floating House, Structural Engineering Convention 2014, IIT Delhi, Delhi, 22-24 Dec. 2014, pp. 4483-4491.
6. **Madhuri Seeram (2014)** Prevention of most possible accidents in public schools in India-Suggested safety precautions, XX World Congress on Safety and Health at Work 2014: Global Forum for Prevention, Lifelong Learning, F08.09, 24-27 August, Frankfurt, Germany.
(https://www.safety2014germany.com/en/programme/floor-plan.html?additions_conferenceschedule_action=detail&additions_conferenceschedule_controller=floorPlan&pid=183&hash=4a1ac462cbdb5039ae2810e191ad4a2b)
7. Srinivasan Chandrasekaran, and **Madhuri Seeram** (2012) Stability studies on offshore Triceratops, *Tech samudra 2012 - International Conference cum Exhibition on Technology of the Sea*, Indian Maritime University, Visakhapatnam, India, Vol. 1, Issue 10, pp. 398-404.
8. Srinivasan Chandrasekaran and **Madhuri Seeram** (2012) Free vibration response of offshore Triceratops: Experimental and Analytical investigations, 3rd Asian Conference

on *Mechanics of Functional Materials and Structures 2012*. ACMFMS- 2012, IIT Delhi, New Delhi, 5-8 Dec 2012. 6-8, pp. 965-968.

9. Srinivasan Chandrasekaran, Sundaravadivelu. R., Pannerselvam. R., **Madhuri Seeram**, and Shyamala Varthini. D. (2011) Experimental investigations of offshore triceratops under regular waves, *Proc. 30th International Conf. on Ocean, Offshore and Arctic Engg.*, OMAE 2011, Rotterdam, The Netherlands, 19-24th June 2011, Paper No. 49826.
(http://proceedings.asmedigitalcollection.asme.org/solr/searchresults.aspx?q=Experimental%20investigations%20of%20offshore%20triceratops%20under%20regular%20waves&f_ContentType=Proceedings&SearchSourceType=3)
10. Srinivasan Chandrasekaran, **Madhuri Seeram**, Jain. A. K and Gaurav (2010) Dynamic response of offshore triceratops under environmental loads, *Proc. International Conf. of Marine Tech. (MARTEC-2010)*, Dhaka, Bangladesh, 11-12 Dec. 2010, pp. 61-66.
(<http://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&cad=rja&uact=8&ved=0CCIQFjAA&url=http%3A%2F%2Fwww.buet.ac.bd%2Fname%2Fmartec2010%2F2010%2FFile9MARTEC123.pdf&ei=tcJHVLrrH5GUuAStmLLIBw&usq=AFQjCNHwtuXalZZUTiXLwF0NeSjnet4Kfg&sig2=TPhBPjT0JBOyIIXeCO2D6Q&bvm=bv.77880786,d.c2E>)
11. **Madhuri Seeram**, Sannasiraj. S. A., and Sundaravadivelu. R. (2005) Effect of soil structure interaction on the seismic analysis of berthing structures, *1st international conference on Coastal zone management in the Middle East*, Dubai, 27-29 Nov. 2005, pp 181-185.

National Conferences

1. **Madhuri. S.**, and Vijayteja. K. (2016), Design of Floating Supporting system for Solar Panels, 2nd Andhra Pradesh Science Congress APSC-2016, paper ID- PMIESEAS-OP-044, 7-9 Nov. 2016, PP. 23, 24.
2. **Madhuri. S.**, and Muni Reddy M.G. (2016), Effect of Soil Structure Interaction Analysis on the Response of Fixed Offshore Jacket Structure, Indian Geotechnical Conference 2016, Department of Civil Engineering, IIT Madras, Chennai, Theme12, Paper ID 146, 15th to 17th Dec. 2016.
3. Anusha. K.S. R. and **Madhuri. S (2015)** Planning of a Smart City for Sustainable Development, All India Seminar on Quality management in Rural Roads and Bridges And Role of Civil Engineering in Smart Cities, The Institute of Engineers (India), Ranchi State Centre, 12-13 Sep. 2015, Ranchi, pp. 26-39.
4. **Madhuri. S.**, Raghupathi. K, Chandra Shekar Reddy K. L. P., Nirmal K. C., Chandan Kumar Gupta, Anusha. K. S. R. and Muni Reddy. M. G. (2015) Force Reduction technique on High Rise Buildings, 31st National Convention of Civil Engineers on Innovative Concepts Emerging in Modern Construction Technology and Use of Smart materials for Construction, The Institute of Engineers (India), Gujarat State Centre, 20-21 Sept. 2015, Ahmadabad, Technical Session 5, pp. 12-13.
5. Anusha. K.S. R., **Madhuri. S.**, and Muni Reddy. M. G. (2015) Two-Dimensional Soil Structure Interaction Analysis of Underground Railway Passage, Proceedings of Indian Geotechnical Conference 2015, Govt. College of Engineering, Pune, 17-19 Dec 2015, pp.-142-143.

6. Anusha. K.S. R., **Madhuri. S.**, and Muni Reddy. M. G. (2015) Soil Structure Interaction Analysis of Three Dimensional Underground Railway Passage, Proceedings of Indian Geotechnical Conference 2015, Govt. College of Engineering, Pune, 17-19 Dec 2015, pp.-144-145.
7. Phani Sanker. V., **Madhuri. S.**, and Muni Reddy. M. G. (2015) Soil Structure Interaction Analysis of 5MW Horizontal Axis Wind Turbine under seismic loading, Proceedings of Indian Geotechnical Conference 2015, Govt. College of Engineering, Pune, 17-19 Dec 2015, pp.-167-168.
8. Phani Sanker. V., **Madhuri. S.**, and Muni Reddy. M. G. (2015) Soil Structure Interaction Analysis of 5MW Horizontal Axis Wind Turbine, Proceedings of Indian Geotechnical Conference 2015, Govt. College of Engineering, Pune, 17-19 Dec 2015, pp.-59-60.
9. **Madhuri Seeram**, Sannasiraj. S. A., and Sundaravadivelu. R. (2006) Effect of soil structure interaction analysis methods on the estimation of natural period of berthing structures, *Indian Geotechnical conference 2006*, IIT Madras, 10-14 Dec 2006, pp. 3-7.

Magazine

Srinivasan Chandrasekaran and **Madhuri Seeram** (2013) Nonlinear dynamic response analysis of offshore triceratops, *Remag Annual Magazine showcasing the research of IIT Madras*, pp. 57-61.

Workshop proceedings

Madhuri. S., Coastal Protection structures and Coastal Disaster Management, Coastal Erosion & Environmental Challenges – CEEC 2015, 6th & 7th March 2015, Department of Civil Engineering, UCEK (A), JNTU Kakinada, pp. 157-165.

Patents applied

Filed a patent application on “***Resting and Floating house resistant to floods and earthquake***”. To Indian Patent office
Patent application No. 1994/CHE/2015.

Role: Inventor

Contribution: Developed a resting and floating house to safeguard maximum four people in a house during flood or earthquake. Performed laboratory test on the scaled model and tested for lift up of the structure under hydrostatic pressure.

Filed a patent application on “***Floating Support System for a Solar Power Plant and Methods Employed***”. To Indian Patent office
Patent application No. 20161045047.

Role: Inventor

Contribution: Concept of floating system for supporting solar panel on water bodies to save the available space.

Awards:

Best paper award at IGC-2006 for the paper titled “Effect of Soil Structure Interaction Analysis Methods on Estimation of Natural Period of Berthing Structures”, pp. 351-354.

Fellowship

Indian Geotechnical Society Best Paper (awarded in IGC-2008)

Fellowship to participate in “XX World Congress on Safety and Health at Work 2014” held at Frankfurt, Germany from 24th – 27th Aug. 2014.

Fellowship at IIT Madras for doing PhD

Fellowship at IIT Madras for doing M. S (By Research)

Thesis Guided

Master of Technology (Structural Engineering)

Sl. No.	Name of the student	Program	Title	Year of Completion	Status
1.	Savithri Manchala (12021D2018)	M. Tech Structures	Response studies of floating bridge	10-12-2014	Completed
2.	Yetrinthala Manohar (12021D2008)	M. Tech Structures	Dynamic analysis of cable stayed bridge under wave loading	10-12-2014	Completed
3.	Satyavathi (12022D1009)	M. Tech Structures	Quasi static analysis of elevated water tank under seismic loading	2015	Completed
4.	B. Praveen (1321D2001)	M. Tech Structures	Conceptual development of resting and floating house	29-10-2015	Completed
5.	Phani Shankar (1321D2013)	M. Tech Structures	Analysis and design of 5MW wind tower under earthquake load	29-10-2015	Completed
6.	Anusha KSR (1321D2014)	M. Tech Structures	Soil structure interaction analysis and design of underground railway passage under earthquake load	29-10-2015	Completed
7.	Narendra Kumar (14021D2503)	M. Tech Pipeline Engg.	Response studies of J shaped riser under wave loading	21-12-2016	Completed
8	B. Durga Kondala Rao (14021D2015)	M. Tech Structures	Wind Analysis of Industrial Chimney	24-4-2017	Completed
9	K. Vijayteja (14021D2022)	M. Tech Structures	Analysis of solar panel supporting truss under wind loading	24-4-2017	Completed
10	P. Naga Phaneendra (15021D2517)	M. Tech Pipeline Engg.	Response of Riser systems in still water with different fluid conduits	31-10-2017	Completed

UG Guidance

Sl. No.	Title of the project	Name of the student	Year of Graduation
1	Conceptual Development of Resting and Floating House	Kumar Raja, S. Siva Sai Kiran, Anil Dhungana, K. Manasa	2014

2	Analysis and Design of Green High Rise Structure	G. Niteesh Roy, M. Veda Vyas, G. Akhil Reddy, K. Vishunu Vardhan	2017
3	Drill Pipe Fatigue Analysis in Offshore Application	S. Srinivas Hari Kumar	2016
4	Conversion of abandoned offshore oil drilling rig platform for production system	K. Noah Madhuri	2016
5	Design of Spar	B. Sushma	2016
6	Design of Tension Leg Platform	G. Sowmya	2016
7	Analysis of Design of Residential G+3 Building	T. Sri Swetha, P. Ratna Kuma, D. N. S. S. Siddhartha	2017
8	Design of Tension Leg Platform Offshore wind turbine	G. Satya Sravya	2017
9	Risk Assessment and Hazop Analysis of Offshore Semisubmersible	Sai Mrudula	2017

Student Achievements

- a. Anusha. K. S. R., M. Tech Structural Engineering Student participated and awarded with cash award of Rs. 5000/- in Student fest held at NIT Bhopal on poster presentation on Planning and Development of a smart city
- b. Anusha K. S. R. M. Tech Structural Engineering student got Pratibha Award in University College of Engineering Kakinada for scoring high marks in her class.
- c. Anusha. K. S. R. published two no's of papers in IGC 2015
- d. Phani Sanker. V. published two no's of papers in IGC 2015
- e. Praveen B. filed a patent application to Indian Patent office on Resting and Floating House Resistant to Floods and Earthquake with patent application number, 1994/CHE/2015 A

The Institution of Engineers (India) Student Chapters of Civil Engineering, Petroleum & Petro-Chemical Engineering and Electronics and Electrical Engineering were initiated.

Sanction R&D Grant In Aid Student Research Project:

Title: Experimental investigation on free oscillations of tension leg platform wind turbine

B. Tech Project

Cost: Rs 40,000/-

Duration: 1-12-2016 to 31-3-2017.

Investigators: Dr. S. Madhuri and Ms. G. S. Sravya (IV B. Tech PE, Roll No. 13021A2633)

Consultancy work:

Title: CRP Jacket Marine Growth Analysis

Client: Reliance Industries Limited Gadimoga

Investigators: Dr. S. Madhuri and Prof. R. Sundaravadivelu

Cost: Rs 13,50,000/-

Duration: 1-12-2016 to 31-3-2017.

Experience Details

Sl. No.	Position	Organization	Duration From	To
1	Project Assistant	SERC Chennai	4-10-2002	30-4-2003
2	Junior Research Fellow	SERC Chennai	2-7-2003	31-12-2003
3	Project Officer	IIT Madras	9-3-2007	8-9-2007
4	Project Officer	IIT Madras	10-9-2007	21-01-2008
5	Project Officer	IIT Madras	7-3-2008	17-11-2008
6	Project Officer	IIT Madras	10-12-2008	11-8-2009
7	Project Officer	IIT Madras	12-08-2009	14-12-2009
8	Assistant Professor	JNTU Kakinada	28-2-2013	4-6-2018
9	Assistant Professor	NIT Jamshedpur	6-6-2018	Till Date