

# Dr. R.S. Desai



**Full Name:** Dr. DESAI RAVINDRA SHASHIKANT  
Ph.D.(Civil Engg.),M.E.(Structural Engg.),B.E.(Civil)  
Associate Professor and PG-Coordinator (PG civ-Structures)

## Executive Summary:

Dr. Desai RS has started his career as Design Engineer in STUP Consultants ltd. Mumbai, India. His area of specialization is Earthquake Engineering, Engineering Optimization, Finite Element Analysis and Computer aided analysis and Design. He is in teaching field since 1999 with total of 27 years' experience.

He has worked in the capacity of PG faculty for about 5 years for structural engineering course in Pune Univ. and serving as PG faculty in Walchand College of Engineering, from 2015. He taught all major courses on analysis and design of structures and elective courses in civil engineering UG and PG programs. He supervised and *guided more than 60 Master's Thesis*. He keeps interest in interdisciplinary engineering research fields. He also works as proof consultant for Civil engineering projects of Govt. and Non-govt. establishments, and engaged in structural audits.

*He had opportunity to serve in premier organizations of Ministry of Defense such as College of Military Engineering Pune and AWES's Army Institute of Technology, Pune for more than 10 years together.*

*He has several research papers to his credit published in National and International journals and conferences.*

## Key Experience in Industrial projects: 1994 to 1999

- Project - Nuclear Power Corporation (NPC)-Nuclear power plants (Containment structures).
- Project – Konkan Railway-steel Bridge in Goa for train loading at design speed 160 Kmph.
- Project – Gammon India, Natural Draught Cooling Tower (NDCT)
- Project – INDAL, India -Factory workshop for Indian Aluminum Company, India.
- Done many miscellaneous designs in RCC, Pre-stressed and structural steel.

## Career Profile summary-starting with latest:

- *Currently working as PG Asso-Professor in Walchand College of Engineering Sangli from 2015*
- *Prior-Served as Lecturer in Private Engg. Colleges in Pune for about 7 years*
- *Prior-Served as Lecturer in Armed force run Engineering colleges about 10 years*
- *Prior-Served as Design Engineer in with STUP consultants ltd., Mumbai for about 4 years*

## **Publications and Consultancy**

25+ Publications in National, International Journals and Conferences

### **Consultancy**

Proof consultancy of many RCC and steel infrastructure projects

### **Membership/ Fellowship of Professional bodies:**

Life Member of Indian Society of Technical Education (ISTE) India

### **Special Achievements:**

1. Obtained UGC research Grant for paper publication in International Conference in Spain in 2018.
2. Was invited as ATAL-FDP resource faculty guest lecture in 2024 in Pune.
3. Working as Reviewer for Elsevier, Taylor & Francis group in 2024

## **Publications by Dr. R. S. Desai and Co-authors.**

Sr. No	Publication
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1	Potnis S.C., Desai R.S. and Gupta I.D. (2008), "Estimation of strong ground motion stationary duration from stochastic structural response analysis", The 14th World Conference on Earthquake Engineering, Beijing, China
2	Potnis S.C., Desai R.S. and Gupta I.D., (2010) , "Practical Engineering approach for generating torsional excitation from translational components", International Journal of Advanced structural engineering, vol-2,No.-1,July2010,pp. 1-10
3	Potnis S.C., Desai R.S. and Gupta I.D. (2010), "Stochastic approach for determination of stationary duration of strong ground motion", Journal of structural engineering(CSIR-SERC), vol.-37, No.5, DEC-2010JAN-2011, pp347-349
4	Priti R. Satarkar and R.S. Desai, (2012), "Seismic Capacity Evaluation of Post-Tensioned Flat Slab",8th Biennial Conference on Structural Engineering Convention (SEC-2012) Applied Mechanics Department, S.V. National Institute of Technology, Surat-395 007, Gujarat, India.
5	Potnis S.C., Desai R.S. and Gupta I.D. (2012),"seismic response analysis under simultaneous action of two horizontal components of ground motion", ISET GOLDEN JUBILEE SYMPOSIUM Indian Society of Earthquake Technology, paper no. DO12
6	C.A. Badave, R.S. Desai, S.C. Potnis (2012), "Analysis of Railway Track Components for Train Speed Up-gradation", Advances in Computational Sciences and Technology,ISSN 0973-6107 Volume 5 Number2 (2012) pp. 595-612© Research India Publications, <a href="http://www.ripublication.com/acst.htm">http://www.ripublication.com/acst.htm</a>
7	Milind T. Palav, R.S. Desai, S.C. Potnis, I.D. Gupta (2012)" Dynamic Characteristics Evaluation of through Type Arch Bridge for Moving Loads", Advances in Computational Sciences and Technology,ISSN 0973-6107 Volume 5 Number2 (2012) pp. 771-780© Research India Publications, <a href="http://www.ripublication.com/acst.htm">http://www.ripublication.com/acst.htm</a>
8	Harshwardhan Shinde,Minakshi Jagtap,Kalpna Patil,R.A. Dubal and Desai R.S. (2012)" Improving the Seismic Performance of Soft Storey ", Advances in Computational Sciences and Technology,ISSN 0973-6107 Volume 5 Number2 (2012) pp. 145-151© Research India Publications, <a href="http://www.ripublication.com/acst.htm">http://www.ripublication.com/acst.htm</a>
9	Alka Avasthi,,R.S. Desai (2012)" Non Linear Push over Analysis of Asymmetric Buildings", Advances in Computational Sciences and Technology,ISSN 0973-6107 Volume 5 Number2 (2012) pp. 163-173© Research India Publications, <a href="http://www.ripublication.com/acst.htm">http://www.ripublication.com/acst.htm</a>
10	Desai R.S., Tande S.N. (2016), "Improving Torsional seismic response of plan asymmetric structures using energy dissipation devices", Compendium of selected best papers of Techno-Societal 2016, "Proceedings of the International Conference on Advanced Technologies for Societal Applications", Dec.2016, Springer. <a href="https://doi.org/10.1007/978-3-319-53556-2_98">https://doi.org/10.1007/978-3-319-53556-2_98</a>
11	Goushiya Sayyed, Ravindra Desai and Isaq Patil (2016), "Performance enhancement of Reinforced Concrete Transfer Girder in High Rise Building by effective use of modern technology.", International conference on 'Advanced Technologies for societal applications- Techno Societal 2016', India
12	Desai R.S. and Tande S.N. (2017), "Estimation of Spectral Velocity at Long Periods for Application in Velocity Dependent Seismic Energy Management Devices", Journal of structural engineering (CSIR-SERC)-April-May 2017, vol.44, No.1, pp 14-22.
13	Ravindra S. Desai, Shrirang N. Tande (2017), "Multiobjective Optimization Strategy for Seismic Response Control of Buildings using Genetic Algorithm", International Journal of Engineering Trends and Technology (IJETT), V49(4),256-263 July 2017. ISSN: 2231-5381.
14	Prajyot Kakde, Ravindra Desai (2017), "comparative study of outrigger and belt truss structural system for steel and concrete material", International Research Journal of Engineering and Technology (IRJET), May 2017, vol.40, No.5, pp 142-147
15	Ravindra S. Desai, Shrirang N. Tande (2018), "Optimised Seismic Structural Performance by Energy Management Devices Using Multi-criterion Genetic Algorithm", International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES), (www.ijtimes.org   UGC and issn Approved) V4(4) April-2018, e-ISSN: 2455-2584,pp. 335-341.
16	Quazi Syed Shujat and Ravindra Desai (2018), "Comparative Study of Design of Industrial Warehouse Using CSB, PEB and Tubular Sections", Int. Journal of Engineering Research and Application, ISSN : 2248-9622, Vol. 8, Issue5 (Part -I) April 2018, pp53-57
17	Vaibhav Waghambare and Ravindra Desai (2018), "Re-Assessment and Strengthening Analysis for Life Extension of Offshore Jacket Oil Platform", IJSRSET   Volume 4   Issue 4   Print ISSN: 2395-1990   Online ISSN : 2394-4099

18	Mirza Danish Baig, Ravindra Desai (2018), “Comparative Study of Square and Cylindrical Diagrid Building Structures”, JETIR May 2018, Volume 5, Issue 5, (ISSN-2349-5162)
19	Makwana Krishna Arvind, Prof. Ravindra Desai (2018), Efficacy of Twisted Jacket for Offshore Wind Turbine Foundation, Journal of Engineering Research and Application, ISSN : 2248-9622, Vol. 8, Issue5 (Part -IV) May 2018, pp 67-72, DOI: 10.9790/9622-0805046772
20	Ravindra Desai, Shrirang Tande (2018), Estimate of Peak Relative Velocity from Conventional Spectral Velocity for Response Spectrum Based Force Evaluation in Damping Devices, Structures 15 (Aug-2018) 378–387. <a href="https://doi.org/10.1016/j.istruc.2018.07.014">https://doi.org/10.1016/j.istruc.2018.07.014</a>
21	Ravindra S. Desai, Shrirang N. Tande (2018), Seismic Response Control with Multiobjective Optimization Using Genetic Algorithm 13 <sup>th</sup> International conference on Comp&Str Technology Spain 4-6Dec-2018.
22	A.S.Shaikh, Dr.R.S.Desai, H.S.Nakhwa, "Comparative Study of Multi-storey building with and without Transfer Floor ", International Journal of Emerging Technologies and Innovative Research (www.jetir.org), ISSN:2349-5162, Vol.6, Issue 5, page no.53-59, May-2019, Available : <a href="https://www.jetir.org/view?paper=JETIR1905N10">https://www.jetir.org/view?paper=JETIR1905N10</a>
23	Miss.Ankita Dattatray Kokane, Dr. R.S.Desai, Mr. A.R.Panjawani ,Analysis of Pre-Stressed Concrete I Girder by Varying the Length to Depth Ratio for Various Spans of the Bridge, International Journal of Emerging Technologies and Innovative Research (www.jetir.org   UGC and issn Approved), ISSN:2349-5162, Vol.6, Issue 5, page no. pp60-67, May-2019, Available at : <a href="https://www.jetir.org/view?paper=JETIR1905N11">https://www.jetir.org/view?paper=JETIR1905N11</a>
24	Desai, R., Makwana, K., Potnis, S. (2020). Structural Performance Assessment of Offshore Wind Turbine Jackets-a Comparative Study Under Dynamic Loading Environment. In: Pawar, P., Ronge, B., Balasubramaniam, R., Vibhute, A., Apte, S. (eds) Techno-Societal 2018 . Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-16848-3_74">https://doi.org/10.1007/978-3-030-16848-3_74</a>
25	Ravindra Desai, “Structural Optimization using genetic algorithm”, in Handbook of AI based Metaheuristics, CRC Press. Sept. 2021 <a href="https://www.taylorfrancis.com/chapters/edit/10.1201/9781003162841-5/structural-optimization-using-genetic-algorithm-ravindra-desai">https://www.taylorfrancis.com/chapters/edit/10.1201/9781003162841-5/structural-optimization-using-genetic-algorithm-ravindra-desai</a>
26	Ajay Madake, Ravindra Desai, “Failure load of new type of concrete composite structural member: experimental & simulation study”, 5th International Conference on Advanced Technologies for Societal Applications 2024. Technosocietal 20204, 13-14 Dec. 2024. ( <a href="https://www.techno.sveri.ac.in/">https://www.techno.sveri.ac.in/</a> )
27	Harshvardhan Khatavkar, Ravindra Desai, “Performance of High-Performance Concrete Railway Sleeper for Dynamic Loading”, 5th International Conference on Advanced Technologies for Societal Applications 2024. 13-14 Dec. 2024. ( <a href="https://www.techno.sveri.ac.in/">https://www.techno.sveri.ac.in/</a> )

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### Communication

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