

## Faculty Profile

**Dr. J. A. Amin**

**Designation:** - Professor & Head

**Experience:** - 24 Year

**Education Qualification:** - Ph.D. (Structural Engineering)

**Specialization:** Structural Engineering

**E-Mail id:** - [jigneshamin@gperi.ac.in](mailto:jigneshamin@gperi.ac.in)

## Research

1. **Amin J. A.** and Ahuja, A. K. (2009) Mean interference effects between two buildings: effects of close proximity, *The Structural Design of Tall and Special Buildings*, Wiley. Vol .20 (7), pp. 832-852. (ISSN: 1541-7808). doi- 10.1002/tal.564
2. **Amin J. A.** (2009) Along-wind load effects on tall buildings: Comparative study of IS: 875(Part-3) 1987 Vs Draft code, *Journal of Science and Engineering*, Vol. 1(1), pp. 21-25.( ISSN: 0973-3660)
3. **Amin J. A.** and Ahuja, A. K. (2010) Aerodynamic modifications to the shape of the buildings: A Review of the State-of-the-Art, *Asian Journal of Civil Engineering*, Vol.11, No.4, pp. 433-450. (ISSN: 1563-0854)
4. **Amin J. A.** and Ahuja, A. K. (2011), Experimental study of wind-induced pressures on buildings of various geometries, Special issue on “Recent Developments and Key issues in Wind Science, Engineering and Technology” of the *International Journal of Engineering, Science and Technology*, Multicraft, Vol. 3, No. 5, 2011, pp. 1-19. (ISSN:2141-2839)
5. **Jignesh. A. Amin** and Ahuja, A. K. (2012) Mean interference effects between two closely spaced buildings, *KSCE Journal of Civil Engineering*, South Korea, Vol. 3, No. 16(1), 2012, pp. 119-131. (ISSN: 1226-7988)
6. Patel Ruchi, **Amin J. A.**, Shah N. D. and Sheth K.N. (2012) A parametric study on effects of opening in shear walls of multi storey buildings, *ADIT Journal of Engineering*, India, Vol.9(1), pp.53-60. (ISSN : 0973-3663)
7. **J. A. Amin** and A. K. Ahuja (2013) Effects of side ratio on wind induced pressure distribution on rectangular buildings, *Journal of Structures*, Vol. 2013 <http://dx.doi.org/10.1155/2013/176739> (ISSN : 2314-6494)
8. **J. A. Amin** and Chintan Patel (2013) Comparisons of across-wind load effects on tall buildings IS: 875(Part-3) 1987, Draft code Vs International codes, *ADIT Journal of Engineering*, India, Vol.10 (1) pp.16-22. (ISSN : 0973-3663)
9. Patel Tejash, **Amin Jignesh**, Patel Bhavin (2014) Effect of seismic zones on response reduction factor of RC framed staging elevated water tank, *International Journal of Earth Science and Engineering*, Vol.7(2), pp. 675-683 (ISSN : 0974-5904)
10. **J. A Amin**, and A. K. Ahuja (2014) Characteristics of wind forces acting on tall buildings, *International Journal of Advanced Structural Engineering*, vol. 6, 66 doi-10.1007/40091-014-0066-1, 2014. (ISSN: 2008-6695).
11. Patel Tejash, **Amin Jignesh**, Patel Bhavin (2014) Evaluation response reduction factor of RC framed staging elevated water tank using static pushover analysis, *International Journal of Civil and Structural Engineering*, Vol. 4, No.3, pp.215-226 (ISSN: 0976-4399)
12. Shastri Visva, **Amin, J. A.**, (2014) Evaluation of response reduction factor of elevated RC water tank considering soil flexibility, *ADIT Journal of Engineering*, India, Vol.11(1), pp.69-74 (ISSN : 0973-3663)
13. Ruchi Sharma, **Jignesh Amin** (2015) Effects of opening in shear walls of 30- storey building, *Journal of Materials and Engineering Structures*, Vol. 2, pp.44-55 (ISSN: 2170- 127X)
14. Dipali Patel, **Jignesh Amin** (2015) Evaluation of shear wall-RC frame interaction of high- rise buildings using 2-D model approach, *Journal of Materials and Engineering Structures*, Vol. 2, pp.111-119 (ISSN: 2170- 127X)

15. Kruti Tamboli and **Jignesh Amin** (2015) Evaluation of response reduction factor and ductility factor of RC braced frame, *Journal of Materials and Engineering Structures*, Vol. 2, pp.120-129 (ISSN: 2170- 127X)
16. Darpan Doshi, **J.A. Amin**, (2015) Effects of strengthening options in improving the lateral responses of RC frame building, *Journal Modern civil and Structural Engineering*, Vol.1 (1), pp. 44-57. (ISSN: 2253-0689)
17. Harshil Jani and **Jignesh Amin**, (2017) Analysis of cable stayed bridge under cable loss, *Int. Journal of Bridge Engineering*, Vol.5 (1), pp. 61-78, (ISSN: 2241-7443).
18. Kashyap Patel and Jignesh A. Amin (2018) Performance based assessment of response reduction factor of RC elevated water tank considering soil flexibility: A case study, *International Journal of Advanced Structural Engineering*, doi-10.1007/40091-018-0194-0, 10(3) pp 233-247 (ISSN: 2008-6695).
19. Santosh Gurjar, and **Jignesh Amin** (2017) Numerical simulation of wind induced interference between two tall buildings' *Journal of Materials and Engineering Structures*, Vol. 4, pp.181-192. (ISSN: 2170- 127X)
20. Kaushik M. Gondaliya and **Jignesh A. Amin** (2019) Seismic vulnerability of RC frame buildings design with gross & cracked section as per Indian provisions, *International Journal of Research and Analytical Reviews*, Vol. 6 (1), pp. 822-832, (ISSN 2348–1269, Print ISSN 2349-5138)
21. Ravat Lulva H and **Jignesh A. Amin** (2019) Effect of strong column-weak beam (SCWB) ratio on seismic vulnerability of 2-story RC frame and its fragility analysis. , *International Journal of Research and Analytical Reviews*, Vol. 6 (1), PP. 946-952 (ISSN 2348-1269)
22. Falgun M. Ranpura, and **Jignesh A. Amin** (2019) Seismic strengthening of deficient RC frame using FRP laminates, *International Journal of Research and Analytical Reviews*, Vol. 6 (1), PP. 100-104 (ISSN 2348 –1269)
23. Kunjan D. Gamit and **Jignesh A. Amin** (2019) Comparative assessment of RC wall-frame buildings designed with DDBD and FBD method, *Journal of Structural Engineering*, vol. 45 (5) PP.419-431, SERC Madras (ISSN: 0970-0137)
24. Samir Prajapati and **Jignesh Amin** (2019) Seismic assessment of RC frame building designed using gross and cracked section as per Indian standards, *Asian Journal of Civil Engineering*, vol. 20(6) pp 821-836, Doi-10.1007/s42107-019-00147-9 (ISSN 1563 0854)
25. **Jignesh Amin** and Kashyap Patel (2019) Assessment of seismic response reduction factor of RC staging elevated water tanks of different staging height, *Indian Concrete Journal*, Nov., PP. 37-48 (ISSN: 00194565)
26. Chirag Mulchandani, **Jignesh A Amin** (2020) Assessment of seismic response reduction factor for RC shaft supported tank, *Journal of The Institution of Engineers (India): Series A*, 102, 75–89 , DOI : 10.1007/s40030-020-00487-9 (ISSN: 2250 2157)
27. Kunjan D. Gamit, **Jignesh A. Amin** (2021) Drift and seismic response reduction factor of RC frame buildings designed with DDBD and FBD Approach, *Journal of The Institution of Engineers (India): Series A*, 102, pp.137-151, DOI: 10.1007/s40030-020-00488-8 (ISSN: 2250 2157)
28. **Jignesh Amin**, Kaushik Gondaliya, Chirag Mulchandani (2021) Assessment of seismic collapse probability of RC shaft supported tank, *Structures*, Elsevier, 33 (2), pp-2639-2658, DOI: [10.1016/j.istruc.2021.06.002](https://doi.org/10.1016/j.istruc.2021.06.002), ISSN: 2352-0124.

29. Harshad Gajera and **Jignesh Amin** (2021) Seismic evaluation of RC frame designed with effective and gross section using FBD and DDBD approach, Indian Concrete Journal, Vol. 95 (9) , ISSN: 00194565

### Conferences

1. Amin, J. A. and Ahuja, A. K. (2007) Experimental study of wind loads on L-shape buildings, Proc. of 12<sup>th</sup> International Conference on Wind Engineering, Queensland, Australia, pp.1663-1670.
2. Amin, J. A. and Ahuja, A. K. (2008) Experimental study of wind pressures on irregular-plan shape buildings, BBAA VI International Colloquium on: Bluff Bodies Aerodynamics & Applications, Milano, Italy, pp.1-8 (eb01).
3. Amin, J. A. and Ahuja, A. K. (2008) Comparative study of wind Pressures on L and T-plan shape buildings, Proc. of International Conference on Innovations in building materials, Structural Designs and Construction Practices, Benari, India, pp.1-8.
4. Amin, J. A. and Ahuja, A. K. (2009) Wind pressure distribution and mean responses of elongated rectangular tall building, Proc. of International Conference on Advances in Concrete Structural and Geotechnical Engineering, BITS-Pillani, India, pp.1-8 (S\_209).
5. Amin, J. A. and Ahuja, A. K. (2010) Characteristics of wind forces on rectangular tall building: Effects of wind orientation, Proc. of International Conference on Emerging Advances in Concrete Structural and Geotechnical Engineering", Bangalore, India, (ICSE-CV-05).
6. Dipali Patel and Amin, J. A. (2011), Effectiveness of shear-wall in reducing the drift of tall buildings: A Parametric study, Proc. of International Conference on Advances in Civil Engineering", Sep 28-29, NIT- Calicut, India.
7. Darpan Doshi, J.A. Amin, G.M. Tank, (2014), Evaluation of strengthening scheme in improving the seismic response of RC frame buildings, Proceedings of 1<sup>st</sup> International Conference on Contemporary Issue in Engineering and Technology ICCIET-2014, 19-21 March, MEC, Basna, India
8. Kashyap N. Patel, Jignesh A. Amin (2017) Performance based assessment of seismic response factor for SMRF staging elevated water tank, International Conference on "Research and Innovations in Science, Engineering & Technology, B.V.M.,V.V.Nagar (Paper ID-114) ISBN- 978-93-84339-38-8
9. Kunjan D. Gamit, Jignesh A. Amin (2017) Application of DDBD and FBD methodology for 8-Storey RC Frame using IS 1893 spectra, International Conference on "Research and Innovations in Science, Engineering & Technology, B.V.M., V.V.Nagar (Paper ID-88) ISBN- 978-93-84339-38-8
10. Shah Anuj Kaushik , Vijay R. Panchal, Jignesh A. Amin (2017) Evaluation of response reduction factor for elevated water tank having steel container and RCC staging', Proceeding of International Conference on Technology & Management Visnagar, (Paper No. 25),ISBN : 978-93-5267-370-4.
11. Pathan Shahrukhan and J A Amin (2017) Effects of lateral loading pattern on inelastic demand of 8 storey RC frame, International Conference on Emerging Trends in Engineering, Technology, Science and Management, Greater Noida 12<sup>th</sup> April 2017, ISBN. 970-93-86171-38-2
12. J.A.Amin and D.P. Soni (2018) Assessment response reduction factor of elevated tanks with alternate RC frame staging configurations 9<sup>th</sup> International Conference on Engineering

Technology, Science and Management Innovation (ICETSMI-2017), Pune, ISBN: 978-93-87433-07-6, Paper Id:2V0Y0C

13. Chirag Mulchandani and Jignesh Amin (2018) Assessment of seismic response reduction factor for shaft supported water tank, Parul University International conference on Engineering and Technology: Smart Engineering, pp. 15-20, ISBN:13:978-93-87572-66-9
14. Nisarg Patel and Jignesh Amin (2018) Assessment of seismic vulnerability Index of RC frame building having soft storey, Parul University International conference on Engineering and Technology: Smart Engineering, pp. 21-26, ISBN:13:978-93-87572-66-9
15. Jignesh Panseriya and Jignesh Amin (2018) Progressive collapse analysis of cable stayed bridge, Parul University International conference on Engineering and Technology: Smart Engineering, pp. 87-92, ISBN:13:978-93-87572-66-9
16. Samir Prajapati and Jignesh Amin (2018) Seismic analysis of RC frame designed using Cracked and uncracked section, Parul University International conference on Engineering and Technology: Smart Engineering, pp. 105-110, ISBN:13:978-93-87572-66-9
17. Parth Patel and Jignesh Amin (2018) Performance based evaluation of response reduction factor of steel staging water tank, 2<sup>nd</sup> International conference on current research trends in Engineering and Technology (SIEICON-2018) pp.150-158, ISSN:2395-1990
18. Hardil Gohil and Jignesh Amin (2018) Assessment of seismic damage indices for RC frame building using nonlinear static pushover analysis, 2<sup>nd</sup> International conference on current research trends in Engineering and Technology (SIEICON-2018) pp.142-148, ISSN:2395-1990
19. Kaushik Gondaliya, Jignesh Amin, Sandip Vasanwala, Atul Desai, (2020) Seismic vulnerability of RC frame design using gross and cracked section properties as per Indian provisions, Proceeding of the International Conference on Architecture and Civil Engineering Conference, Kuala Lumpur, Malaysia, Vo.,1 (2), PP 75-86, April 2020 DOI: DOI: <https://doi.org/10.17501/26731029.2020.120>, ISBN 978-955-3605-44-2
20. Kaushik Gondaliya, Jignesh Amin, Sandip Vasanwala, Atul Desai, (2021) Capacity-spectrum method: Seismic Vulnerability of RC Frame Buildings designed as per Indian provisions. 1<sup>st</sup> Virtual International Conference on “Emerging Research and Innovations in Civil Engineering, Dr. S & S.S. Ghandhy Government Engineering College, Surat, India
21. Sagar Prajapati and Jignesh Amin (2021) Seismic fragility assessment of code conforming RC frame staging elevated water tank International Halich Congress, August 15-16, 2021, Istanbul ISBN: 978-625-7464-04-8

## RESEARCH PROJECT

- **Principal Investigator:** Minor research project ‘Assessment of response reduction factor considering soil-structure interaction for elevated RC frame water tank ‘Sponsored by Gujarat Council on Science and Technology, Department of Science and Technology, Government of Gujarat. (January-2016 to January 2018).

## Membership of Professional bodies

- Indian Society for Construction Materials and Structures, Roorkee, India.