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List of Publications:

International Journal Articles (SCI Indexed):

1. **Sengupta, P.** and Li, B. “Modified Bouc-Wen Model for Hysteresis Behavior of RC Beam-Column Joints with Limited Transverse Reinforcement”, *Engineering Structures*, Vol. 46, 2013, pp. 392-406. **(Impact Factor: 3.548)**
2. Huang, Z., Li, B. and **Sengupta, P.** “Reliability Assessment of Damaged RC Moment-Resisting Frame against Progressive Collapse under Static Loading Conditions”, *ASCE Journal of Engineering Mechanics*, Vol. 139 (1), 2013, pp. 1-17. **(Impact Factor: 2.003)**
3. Huang, Z., Li, B. and **Sengupta, P.** “Reliability Assessment of Damaged RC Moment-Resisting Frame against Progressive Collapse under Dynamic Loading Conditions”, *Advances in Structural Engineering*, Vol. 17 (2), 2014, pp. 211-232. **(Impact Factor: 1.416)**
4. **Sengupta, P.** and Li, B. “Hysteresis Behavior of Reinforced Concrete Walls”, *ASCE Journal of Structural Engineering*, Vol. 140 (7), 2014, pp. 1-18. **(Impact Factor: 2.454)**

5. **Sengupta, P.** and Li, B. “Seismic Fragility Evaluation of Lightly Reinforced Concrete Beam-Column Joints”, *Journal of Earthquake Engineering*, Vol. 18 (7), 2014, pp. 1102-1128. **(Impact Factor: 2.779)**
6. **Sengupta, P.** and Li, B. “Seismic Fragility Assessment of Reinforced Concrete Structural Walls”, *Journal of Earthquake Engineering*. Vol. 20 (5), 2016, pp. 809-840. **(Impact Factor: 2.779)**
7. **Sengupta, P.** and Li, B. “Hysteresis Modeling of Reinforced Concrete Structures: State of the Art”, *ACI Structural Journal*. Vol. 114 (1), 2017, pp. 25-38. **(Impact Factor: 1.566)**
8. Dutta, S.C., Das, P.K. and **Sengupta, P.** “Seismic Behaviour of Irregular Structures”, *Structural Engineering International*. Vol. 27 (4), 2017, pp. 526-545. **(Impact Factor: 0.672)**
9. Dey, M., **Sengupta, P.** and Chakraborty, S. “Fundamental periods of reinforced concrete building frames resting on sloping ground”, *Earthquakes and Structures*. Vol. 14 (4), 2018, pp. 305-312. **(Impact Factor: 1.714)**
10. Das, P.K., Dutta, S.C. and **Sengupta, P.** “Damage Assessment of Recent Indian Earthquakes: Reviewing Existing RVS Schemes”, *Current Science*. **(Accepted for Publication)**. **(Impact Factor: 0.725)**

International Conference Proceedings:

11. **Sengupta, P.** and Li, B. “Hysteresis Behaviour of Reinforced Concrete Non-ductile Beam-Column Joints”, *9th Pacific Conference on Earthquake Engineering*, Auckland, New Zealand, April 14-16, 2011.
12. **Sengupta, P.** and Li, B. “A Hysteresis Model for Seismic Performance Assessment of Reinforced Concrete Walls”, *4th International Conference on Protection of Structures against Hazards*, Singapore, November 15-16, 2012.

13. **Sengupta, P.**, Low, Y.M., Zhang, X, Bernad, P.F.A. and Koh, C.G. “Reliability Assessment of Marine Drilling Risers with Correlated Random Variables”, *Proceedings of the ASME 2016 35th International Conference on Ocean, Offshore and Arctic Engineering OMAE2016*, Busan, Korea, June 19-24, 2016.
14. Krishna, A. and **Sengupta, P.** “Effect of Reinforcement Corrosion on Seismic Performance of Reinforced Concrete Structures,” *World Research Forum for Engineers and Researchers International Conference*, New Delhi, India, November 5, 2017.
15. Krishna, A. and **Sengupta, P.** “Recent Research Advances on Railway Bridges,” *World Research Forum for Engineers and Researchers International Conference*, New Delhi, India, November 5, 2017.
16. Kulsi, S., Jaiswal, U. and **Sengupta, P.** “Fundamental Period of Vertically Irregular Reinforced Concrete Buildings,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.
17. Krishna, A. and **Sengupta, P.** “Performance Evaluation of Railway Bridges under Wheel Loading,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.
18. Jaiswal, U. and **Sengupta, P.** “Seismic Performance of Reinforced Concrete Buildings with Plan Asymmetry,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.
19. Krishna, A. and **Sengupta, P.** “Seismic Vulnerability Assessment of Railway Bridges,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.
20. Bhardwaj, P., Krishna, A. and **Sengupta, P.** “Effect of Soil-Structure Interaction on Seismic Vulnerability of Buildings,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.

21. Singh, A., Krishna, A. and **Sengupta, P.** “Seismic Fragility Evaluation of Reinforced Concrete Buildings,” *International Conference on Innovations in Structural Engineering*, Osmania University, Hyderabad, India, December 29-31, 2017.
22. Mondal, P., **Sengupta, P.** and Adhikary, S.D. “Vulnerability Assessment of Reinforced Concrete Beams under Impact Loading”, *2nd International Conference On Advances in Concrete, Structural & Geotechnical Engineering*, BITS Pilani, Pilani Campus, India, February 26-28, 2018.
23. Anand, S., **Sengupta, P.** and Adhikary, S.D. “Wind Loading Effects on Tall Reinforced Concrete Buildings”, *2nd International Conference On Advances in Concrete, Structural & Geotechnical Engineering*, BITS Pilani, Pilani Campus, India, February 26-28, 2018.
24. Pranav, A., Shekhar, S., Singh, S., Agarwal, K., Kumawat, C. and **Sengupta, P.** “Structural Applications of Autoclaved Aerated Concrete,” *International Conference on Advances in Construction Materials and Structures*, IIT Roorkee, India, March 7-8, 2018.
25. Shekhar, S., Pranav, A., Singh, S., Agarwal, K., Kumawat, C. and **Sengupta, P.** “Seismic Vulnerability of Autoclaved Aerated Concrete Buildings,” *International Conference on Advances in Construction Materials and Structures*, IIT Roorkee, India, March 7-8, 2018.
26. Kumar, S. and **Sengupta, P.** “Seismic Fragility Assessment of Reinforced Concrete Columns,” *International Conference on Advances in Construction Materials and Structures*, IIT Roorkee, India, March 7-8, 2018.
27. Krishna, A., Kumar, S. and **Sengupta, P.** “Hysteresis Behavior of Reinforced Concrete Columns,” *International Conference on Advances in Construction Materials and Structures*, IIT Roorkee, India, March 7-8, 2018.
28. Krishna, A. and **Sengupta, P.** “Seismic Vulnerability of Corroded Reinforced Concrete Buildings,” *3rd R.N. Raikar Memorial International Conference and Gettu-Kodur International Symposium*, Mumbai, India, December 14-15, 2018.

29. Acharya, V., Krishna, A. and **Sengupta, P.** “Seismic Vulnerability Assessment of Reinforced Concrete Buildings in Hilly Regions,” *16th Symposium on Earthquake Engineering*, IIT Roorkee, India, December 20-22, 2018.
30. Hussain, M.A., Nandy, A. and **Sengupta, P.** “Numerical Investigation of Reinforced Concrete Bridge Piers under Blast Loading,” *7th International Conference on Design and Analysis of Protective Structures*, Seoul, Korea, December 04-06, 2019.
31. Nandy, A., Hussain, M.A. and **Sengupta, P.** “Fragility Functions for Reinforced Concrete Bridge Decks against Explosion,” *7th International Conference on Design and Analysis of Protective Structures*, Seoul, Korea, December 04-06, 2019.
32. Acharya, V. and **Sengupta, P.** “Seismic Fragility of Buildings resting on Hill Slopes under Mainshock-Aftershock Sequences,” *17th World Conference on Earthquake Engineering*, Sendai, Japan, 2021.

Book Chapters:

33. Mondal, P., **Sengupta, P.** and Adhikary, S.D. (2018) "Vulnerability Assessment of Reinforced Concrete Beams under Impact Loading", Bloomsbury Publishing India Pvt. Ltd., pp. 521-527, ISBN: 978-93-87471-69-6.
34. Anand, S., **Sengupta, P.** and Adhikary, S.D. (2018) "Wind Loading Effects on High-Rise Reinforced Concrete Buildings", Bloomsbury Publishing India Pvt. Ltd., pp. 676-682, ISBN:978-93-87471-69-6.

Thesis/ Project Reports:

35. **Sengupta, P.**, Koh, C.G. and Low, Y.M. “Reliability-based Downtime Estimation of Ultra Deep-Water Marine Drilling Risers”, NUS-Keppel Joint Report submitted to *National Research Foundation*, Singapore, 2016.

36. **Sengupta, P.**, Koh, C.G. and Low, Y.M. “Comparison Study between Reliability-based and Deterministic Analyses of Marine Drilling Risers”, NUS-Keppel Joint Report submitted to *National Research Foundation*, Singapore, 2015.
37. **Sengupta, P.**, Koh, C.G. and Low, Y.M. “Introduction to Reliability-based Design of Ultra Deep Water Drilling Risers”, NUS-Keppel Joint Report submitted to *National Research Foundation*, Singapore, 2015.
38. **Sengupta, P.**, Koh, C.G. and Low, Y.M. “Identification and Quantification of Geometric and Environmental Uncertainties in Ultra Deep Water Drilling Risers”, NUS-Keppel Joint Report submitted to *National Research Foundation*, Singapore, 2014.
39. **Sengupta, P.**, Nguyen, H., Koh, C.G. and Low, Y.M. “A State-of-art Review of existing technologies for Deep Water Drilling Risers”, NUS-Keppel Joint Report submitted to *National Research Foundation*, Singapore, 2014.
40. **Sengupta, P.**, Vu, K.K. and Lee, T.G. “Calculation of Most Probable Maxima of Vessel Response using Rayleigh Distribution”, *Project Report*, EMAS Group, Singapore, 2014.
41. **Sengupta, P.** and Diddams, J. “Finite Element Analysis of Chain Stopper and Chain Installation Chute under Mooring Line Loads”, *Project Report*, EMAS Group, Singapore, 2014.
42. **Sengupta, P.** “Hysteresis Models and Fragility Assessments of Reinforced Concrete Structural Components”, *Doctor of Philosophy Thesis*, Nanyang Technological University, Singapore, 2014.
43. Wijaya, H., **Sengupta, P.** and Agung, R.S. “Analysis and Design of a 30 Storey Building with Butterfly-shaped Cross-Section under Wind and Seismic Loadings”, *Project Report*, Nanyang Technological University, Singapore, 2010.
44. **Sengupta, P.**, Zhang, Y., Lu, J., Sun, B. and Liang, X. “Generation of Occurrence Loss Exceeding Probability Curve of Building Class II in San Francisco Bay, California affected

by 18 Possible Seismic Events”, *Independent Study Report*, Nanyang Technological University, Singapore, 2009.

45. **Sengupta, P.** “Planning and Design of an Industrial Complex”, *Final Year Project Report*, Bengal Engineering and Science University Shibpur, India, 2007.