Curriculum Vitae

1.	Name:	Goutam Ghosh
2.	Mailing Address: (Including Tel. No., Email etc.)	Department of Civil Engineering Motilal Nehru National Institute of Technology Allahabad – 211004 Tel. No.: (0532) 2271301 (O); 8004132416 (M) Email: goutam@mnnit.ac.in; gghoshjm@gmail.com
3.	Date of Birth:	5 th July, 1977
4.	Qualifications:	 Ph.D in Earthquake Engineering and Structural Dynamics from IIT Roorkee in 2007 Ph.D Thesis Title: Seismic Performance of a Continuous Bridge: Role of Bearings and Substructure Ph.D Thesis Supervisor: Prof. Yogendra Singh and Prof. S. K. Thakkar M.E. in Structural Engineering from IIEST, Shibpur [Formerly B.E. College (D.U.)] in 2002. B.E. (Hons.) in Civil Engineering from Jadavpur University in 2000. National Doctoral Fellowship (NDF) by AICTE during 2004-2006.

5. Date of Joining to the Institute: 27-12-2006

6. Details of experience:

S. No.	Organization	Position Held	Period
i	MNNIT, Allahabad	Assistant Professor	27-12-2006 to 27-03-2018
ii	MNNIT, Allahabad	Associate Professor	28-03-2018 to till date

7. Area of research: Earthquake Resistant Design of Structures, Seismic Vulnerability, Performance Based Design, Seismic Resilience, Base Isolation

8. Externally Sponsored R & D Projects:

S.	Title of Project	Project No.	Period	Fro	То	Sponsoring	Amount	Role	Status
No.				m		Organization	[in lakh]		
1	Response of Curved	SB/FTP/ETA	3 years	9 th	8 th	Science and	13.66258	PI	Completed
	Bridges with	-290/2012		July,	July,	Engineering			_
	Isolation Bearings	dated		2013	2016	Research Board,			
		21.05.13				DST, New Delhi			

9. Consultancy Project (s):

- Various Projects completed in the area of testing of materials, mix design of concrete, NDT, structural design, third party inspection, proof checking
- Major Projects as PI/Co-PI

S. No.	Title of Project	Sponsoring Organization	Role	Status
1	Provision of Storage Sheds And Anciliary Buildings At Saharanpur	MOU with MES	PI	Ongoing
2	Load test on temporary steel bridge near six	Ministry of Road Transport	Co-PI	Completed

	lane bridge on river ganga on nh 96 (new nh 330) at prayagraj, uttar pradesh	and Highways, Project Implementation Unit, Prayagraj		
3	Proof Checking of Structural Elements Design of Agro Metro Rail Section	Uttar Pradesh Metro Rail Corporation Ltd.	PI	Completed
4	Non-destructive Testing (NDTof the various Structural Elements of the Proposed Multipurpose Cultural Complex (Convention Centre) at Prayagraj	Prayagraj Development Authority	PI	Completed
5	Third Party Inspection & Quality Assessment	Executive Engineer, Rishikesh Central Division 20, Nirman Bhawan, Subhash Road, Dehradun	Co-PI	Completed
6	Quality Assessment of Construction of Left- over Work at JNV, Kinnaur (H.P.)	C&DS, IP Jal Nigam, Vibhuti Khand, Gomti Nagar, Lucknow	Co-PI	Ongoing
7	Quality Assessment of Construction of Phase- B includes Phase-B (Bal) & Phase-A (Bal) work at JNV, Kinnaur (HP)	C&DS, IP Jal Nigam, Vibhuti Khand, Gomti Nagar, Lucknow	Co-PI	Ongoing
8	Quality Assessment of Construction of Phase- A & Phase-B work at JNV, Srinagar (J&K)	C&DS, IP Jal Nigam, Vibhuti Khand, Gomti Nagar, Lucknow	Co-PI	Ongoing
9	Quality Assessment of Construction of Phase- B Worksat JNV, Gurdaspur (Punjab)	C&DS, IP Jal Nigam, Vibhuti Khand, Gomti Nagar, Lucknow	Co-PI	Ongoing
10	Third Party Inspection & Quality Assessment	Executive Engineer, Rishikesh Central Division 20, Nirman Bhawan, Subhash Road, Dehradun	Co-PI	Completed
11	Proof Checking of Design of a Ramp	UPSCIDCL, TC/46-V, Vibhuti Khand, Gomti Nagar, Lucknow, Uttar Pradesh, 226010	Co-PI	Completed
12	Proof Checking of Structural Drawing of a Proposed Center for Excellence Building for the Chandulata Chandrasekhar College	G.T. Design Studio, Raipur, Pin-492001	PI	Completed
113	Third Party Inspection & Quality Assessment	Executive Engineer, Rishikesh Central Division 20, Nirman Bhawan, Subhash Road, Dehradun	Co-PI	Completed
14	Testing	M/S UPPCL,Left Bank Gomti barrage, Gomti Nagar, Lucknow	Co-PI	Completed
15	Third Party Inspection & Quality Assessment	Executive Engineer, Rishikesh Central Division 20, Nirman	Co-PI	Completed
16	Technical Inspection of a Multi-storey Building exposed to fire at Prayagraj funded by EE, PWD, Prayagraj	EE, PWD, Prayagraj	Co-PI	Completed
17	Technical Inspection of a Aqueduct on	EE, Belan Canal Division,	Co-PI	Completed

	Tones River at Prayagraj	Prayagraj		
18	Third Party Quality Assurance (TPQA) of	EE, Rishikesh Central	Co-PI	Ongoing
	Construction of Super Specialty Hospital Building at Haridwar, Uttarakhand	Division, Dehradun		
19	Structural Design of NDC at Dwarkaganj,	EE, Postal Civil Division,	PI	Completed
	Sultanpur	Allahabad		
20	Technical Inspection for strength and	EE, Irrigation Construction	PI	Completed
	quality of concrete in various structures	Division, Karwi,		
	constructed in Kabrai Main Canal	Chitrakoot		
21	Vetting of Structural Design of a Bridge at	Korus Engg. Solutions,	Co-PI	Completed
	Uttarakhand	Delhi		

10. Supervision of Ph.D:

S.	Name of student	Ph.D Thesis title
No.	(Reg. No.)	(status)
1	Praveen Kumar Gupta	Response of Curved Bridges with Isolation Bearings [Sole Supervisor],
	(2013RCE51)	(Awarded in December, 2018)
2	Jitendra Awasthi	Performance Based Seismic Design of Bridges [Joint supervisor: Prof. P. K. Mehta]
	(2014RCE02)	(Awarded in October, 2022)
3	Prasanth S	Seismic Resilience of Reinforced Concrete Buildings [Sole Supervisor]
	(2018RCE03)	(Awarded in February, 2023)
4	Kshama Hemkar	Parametric Evaluation of Ductility in RCC Structure [Joint supervisor: Prof. L. K.
	(2015RCE51)	Mishra] (Awarded in March, 2024)
5	Aman Kumar	Seismic Vulnerability Assessment of RC Buildings [Sole Supervisor]
	(2020RCE03)	(Ongoing , Joined PhD in September, 2020)
6	Shashi Sekhar Singh	Performance Evaluation of Buildings with various Structural Materials [Joint
	(2021RCE13)	supervisor: Prof. L. K. Mishra] (Ongoing, Joined PhD in Aug, 2021)
7	Nitin Jain	Seismic Performance Assessment of RC Buildings Resting on Hill Slope [Sole
	(2021RCE53)	Supervisor] (Ongoing, Joined PhD in January, 2022)
8	Surabhi Saxena	Seismic Vulnerability and Resilience Assessment of Structures [Sole Supervisor]
	(2023RCE12)	(Ongoing , Joined PhD in July, 2023)

11. List of publications:

- 1. Kumar, A. and **Ghosh**, G. (2025). "Combined Effect of R-Factor and Building Height on Damage Index and Seismic Vulnerability Index of IS Code Designed T-shaped RC Buildings". Sadhana, Springer, (Accepted) (SCIE) (IF: 1.4)
- Singh, S.S., Kumar A., Mishra, L. K. and Ghosh, G. (2025). "Impact of fiber on the confinement of beam and column members towards seismic performance of RC building", Journal of Building Pathology and Rehabilitation. <u>https://doi.org/10.1007/s41024-025-00589-6</u> (Scopus)
- 3. S, P., **Ghosh, G.,** Gupta, P. K., Kumar, V., & Paramasivam, P. (2024). The effect of openings in URM infills on the seismic resilience of a reinforced concrete building. Journal of Asian Architecture and Building Engineering, 1–14. DOI: <u>https://doi.org/10.1080/13467581.2024.2378002</u> (SCIE) (IF: 1.5)
- Agrawal, S., Gupta, P.K. and Ghosh, G. (2024). A comparative assessment on the response of isolated curved bridges with varying radius of curvature. Asian Journal of Civil Engineering, 25, 1967–1977. DOI: <u>https://doi.org/10.1007/s42107-023-00888-8</u> (Scopus)

- 5. Gupta, P. K., Agrawal, S., **Ghosh, G.,** S, P., Kumar, V., and Paramasivam, P. (2023). Seismic behaviour of the curved bridge with friction pendulum system. Journal of Asian Architecture and Building Engineering, 1–14. DOI:<u>https://doi.org/10.1080/13467581.2023.2292089</u> (SCIE) (IF: 1.5)
- Prasanth, S., Ghosh, G., Gupta, P.K., Kumar, V., Paramasivam, P. and Dhanasekaran, S. (2023). "Selection of Response Reduction Factor Considering Resilience Aspect". Buildings, 13(3), 626 (1-28). DOI:<u>https://doi.org/10.3390/buildings13030626</u> (SCIE) (IF: 3.1)
- Prasanth, S., Ghosh, G., Gupta, P. K., Casapulla, C. and Giresini, L. (2023). "Accounting for Resilience in the Selection of R Factors for a RC Unsymmetrical Building". Applied Sciences. 13(3), 1316 (1-22). DOI: https://doi.org/10.3390/app13031316 (SCIE) (IF: 2.5)
- Kumar, A., Ghosh, G., Gupta, P. K., Kumar, V. and Paramasivam, P. (2023). "Seismic hazard analysis of Silchar city located in North East India". Geomatics, Natural Hazards and Risk. 14(1), 2170831(1-26). DOI: <u>https://doi.org/10.1080/19475705.2023.2170831</u> (SCIE) (IF: 4.5)
- Prasanth, S. and Ghosh, G. (2022). "Effect of Seismicity on the Seismic Resilience of a R.C. Building". Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, 93, 147-161. DOI: <u>https://doi.org/10.1007/s40010-022-00803-x.</u> (SCIE) (SCI) (IF: 1.0)
- Gupta, P. K., Ghosh, G., Kumar, V., Paramasivam, P. and Dhanasekaran, S. (2022). "Effectiveness of LRB in Curved Bridge Isolation: A Numerical Study", Applied Sciences, 12 (21), 1-23. DOI: <u>https://doi.org/10.3390/app122111289</u> (SCIE) (IF: 2.5)
- Prasanth, S. and Ghosh, G. (2022). "Role of resilience in selection of R factors for an RC building", Frontiers in Built Environment, 8, 1029209. <u>https://doi.org/10.3389/fbuil.2022.1029209</u> (ESCI) (Scopus) (IF: 2.5)
- 12. Prasanth, S. and **Ghosh, G.** (2022). "Sustainability and Resilience Consideration of a RC Building", ECS Transactions, 107 (1), 20385-20394. <u>https://doi.org/10.1149/10701.20385ecst</u> (**Scopus**)
- 13. Kumar, A. and **Ghosh, G.** (2022). "Ductility Consideration for a Sustainable RC Building", ECS Transactions, 107 (1), 15451-15462. <u>https://doi.org/10.1149/10701.15451ecst</u> (**Scopus**)
- Prasanth, S. and Ghosh, G. (2022), "Effect of reduction in column stiffness on the seismic resilience of a building", Materials Today: Proceedings Journal, 55 (2), 354-358. <u>https://doi.org/10.1016/j.matpr.2021.09.555</u> (Scopus)
- 15. Hemkar. K, Mishra, L. K and **Ghosh. G** (2022), "Performance evaluation of a RC frame structure from element level to structure level", Materials Today: Proceedings Journal, 55 (2), 370-374. https://doi.org/10.1016/j.matpr.2021.09.558 (Scopus)
- 16. Sinha, B. K. and **Ghosh, G.** (2022), "Material R-factors of Buildings with Irregularity", Materials Today: Proceedings Journal, 55 (2), 259-263. <u>https://doi.org/10.1016/j.matpr.2021.06.443</u> (Scopus)
- 17. Singh, K. and Ghosh, G. (2022), "Stress Behaviour of Concrete Pavement", Materials Today: Proceedings Journal, 55 (2), 246-249. <u>https://doi.org/10.1016/j.matpr.2021.06.424</u> (Scopus)
- Prasanth, S. and Ghosh, G. (2021). "Effect of cracked section properties on the resilience based seismic performance evaluation of a building", Structures, 34, 1021-1033. DOI: <u>https://doi.org/10.1016/j.istruc.2021.08.035</u>. (SCIE) (IF: 3.9)
- 19. Prasanth, S. and **Ghosh, G.** (2021). "Evaluation of seismic resilience of a building with and without URM infill walls", The Indian Concrete Journal, 95 (8), 1-6. <u>https://www.icjonline.com/editionabstract_detail/082021</u> (Scopus)
- 20. Awasthi, J., **Ghosh, G.** and Mehta, P. K. (2021). "Seismic Design of a Curved Bridge as per Performance-based Criteria", Materials Today: Proceedings Journal, 38, 3014-3018. <u>https://doi.org/10.1016/j.matpr.2020.09.324</u> (Scopus)
- Prasanth, S. and Ghosh, G. (2021) "Effect of Variation in Design Acceleration Spectrum on the Seismic Resilience of a Building", Asian Journal of Civil Engineering, 22, 331-339. <u>https://doi.org/10.1007/s42107-020-00316-1</u> (Scopus)

- 22. Gupta, P. K. and **Ghosh, G.** (2021). "Effect of Bi-directional Excitation on a Curved Bridge with Lead Rubber Bearing", Materials Today: Proceedings Journal, 44 (1), 2239-2244. https://doi.org/10.1016/j.matpr.2020.12.362 (Scopus)
- 23. Sinha, B. K. and Ghosh, G. (2021), "Efficacy of R-factors in the Performance Based Evaluation of RCC Buildings", Materials Today: Proceedings Journal, 38 (5), 3372-3377. https://doi.org/10.1016/j.matpr.2020.10.378 (Scopus)
- 24. Prasanth, S., Ghosh, G. and Kulshrestha, A. (2021) "Assessment of Seismic Vulnerability of RCC Buildings with URM Infills", Materials Today: Proceedings Journal, 38 (5), 3053-3065. <u>https://doi.org/10.1016/j.matpr.2020.09.474</u> (Scopus)
- 25. Gupta, P. K. and **Ghosh, G.** (2020). "Effect of Various Aspects on the Seismic Performance of a Curved Bridge with HDR Bearings", Earthquakes and Structures, 19(6), 427-444. DOI: <u>https://doi.org/10.12989/eas.2020.19.6.427</u> (SCIE) (IF: 1.5, Q3)
- 26. Prasanth, S. and Ghosh G. (2019) "Seismic Vulnerability Assessment of a Reinforced Concrete Building Located in India" International Journal of Innovative Technology and Exploring Engineering, 8(11S), pp. 310-314. DOI: <u>https://doi.org/10.35940/ijitee.K1059.09811S19</u> (Scopus)
- Gupta, P. K., Ghosh G. and Pandey, D. K. (2018) "Parametric Study of Effects of Vertical Ground Motions on Base Isolated Structures" Journal of Earthquake Engineering, pp.1-21. DOI:<u>10.1080/13632469.2018.1520758</u>. (SCIE) (IF: 2.5)
- Gupta, P. K. and Ghosh, G. (2017) "Seismic Response of an Isolated Curved Bridge considering Bidirectional Effects" International Journal of Advances in Mechanical and Civil Engineering, 4 (5), pp. 70-72. <u>https://iraj.doionline.org/dx/IJAMCE-IRAJ-DOIONLINE-9573</u>
- 29. Awasthi, J., **Ghosh G.** and Mehta, P. K. (2016) "Performance Based Seismic Design of a Building" International Journal of Advanced Technology in Engineering and Science, 4 (4), pp. 74-83. http://www.ijstm.com/images/short_pdf/1459874988_p15-24.pdf
- 30. Gupta, P. K. and **Ghosh, G.** (2014) "Seismic performance of a curved bridge with High Damping Rubber Bearing and Friction Pendulum System" International Journal of Earth Sciences and Engineering (IJEE), 4, pp. 1012-1016. (**Scopus**)
- 31. Gupta, P. K. and Ghosh, G. (2014) "Response of a Curved Bridge with Elastomer-based and Frictionbased Bearings" International Journal of Civil and Structural Engineering IJCSE, 1 (3), pp. 36-40. <u>https://www.semanticscholar.org/paper/Response-of-a-curved-bridge-with-elastomer-based-Gupta-Ghosh/f377d2ed31166030704b37c3c2788aedf7c7cb01</u>
- 32. Gupta, P. K. and **Ghosh, G.** (2014) "Effect of Radius of Curvature on the Seismic Response of an Isolated Curved Bridge" International Journal of Advance Research In Science and Engineering, 3 (1), pp. 227-236. <u>http://www.ijarse.com</u>
- 33. Ghosh, G., Singh, Y. and Thakkar, S. K. (2011) "Seismic Response of a Continuous Bridge with Bearing Protection Devices" Engineering Structures, 33, pp. 1149-1156. DOI: <u>https://doi.org/10.1016/j.engstruct.2010.12.033</u> (SCIE) (IF: 5.6)
- 34. Ghosh, G., Singh, Y. and Thakkar, S. K. (2011) "Seismic Response of Continuous Bridge with Isolation Bearings" Institution of Civil Engineers, ICE, Bridge Engineering, 164 (BE4), pp. 221-225. <u>https://doi.org/10.1680/bren.2011.164.4.211</u> (Scopus)
- 35. **Ghosh, G.** and Singh, Y. (2009) "Bi-directional Effects on the Response of an Isolated Bridge" ACEE Int. J. on Recent Trends in Engineering, 1 (6), pp. 6-10.
- 36. Ghosh, G., Singh, Y. and Thakkar, S. K. (2008) "Performance-based Seismic Design of a Continuous Bridge" Institution of Civil Engineers, ICE, Bridge Engineering, 161 (BE4), pp. 177-182. <u>https://doi.org/10.1680/bren.2008.161.4.177</u> (Scopus)

Conferences

- 1. Kumar, A. and **Ghosh, G.** (2024), "Effect of R-factor on the Seismic Vulnerability of a L-shaped RC Frame Building", 11th International Conference on Geological and Civil Engineering, March 15-17, Matsue, Japan.
- Kumar, A., Ghosh, G. and Jain, N. (2023), "The Effects of Height on the Seismic Vulnerability of RC Frame Buildings", 13th Structural Engineering Convention (SEC), IIT Roorkee, December 7-9, NIT Nagpur.
- 3. Gupta, P. K. and **Ghosh, G.** (2022), "Seismic Response of an Isolated Curved Bridge with Lead Rubber Bearing by Considering Design Aspect", 12th Structural Engineering Convention -An International Event (SEC-2022), MNIT Jaipur, 19-22 December, 2022.
- 4. Nitin, J. and **Ghosh, G.** (2022), "Pushover Analysis of a RC Building Resting on Sloping Ground", International Conference on Advancements in Interdisciplinary Research towards Smart and Sustainable Society (AIR-2022), MNNIT Allahabad, May 6-7, 2022.
- 5. Kumar, A. and **Ghosh, G.** (2022), "Seismic Consideration of a RC Frame Building from the Sustainability Aspect", 17th Symposium on Earthquake Engineering, IIT Roorkee, November 14-17, 2022.
- Prasanth, S. and Ghosh, G. (2020), "Implementation of framework for seismic resilience assessment of a R.C. Building", 7th International conference on "Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics", IISC Bangalore, India.(July)
- 7. Prasanth, S. and **Ghosh, G.** (2020), "Effect of Various Parameters of Design Acceleration Spectrum on Seismic Resilience of a Structure", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies- 2020", Kolkata-India.
- 8. Sinha, B. and **Ghosh, G.** (2020), "Estimation of R-factor for Buildings with Plan Irregularities", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 9. Singh, K. and Ghosh, G. (2020), "Stress of Concrete Pavement using Finite Element Method", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 10. Hemkar. K, Mishra. L. K and **Ghosh. G.**, (2020), "Ductility Assessment of an RC Beam Section with Variation of Engineering Properties of Material", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 11. Awasthi, J., **Ghosh, G.** and Mehta, P. K., (2020), "Seismic Performance of a Curved Bridge with Soil Amplification Effect", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 12. Gupta, P. K. and **Ghosh, G.** (2020), "Response Sensitivity of an Isolated Curved Bridge with High Damping Rubber Bearing", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 13. Sinha, B. K. and **Ghosh, G.** (2020), "Estimation of Response Reduction Factor for RCC Buildings based on Performance Based Seismic Design", Second ASCE India Conference on "Challenges of Resilient and Sustainable Infrastructure Development in Emerging Economies", Kolkata, India.
- 14. Prasanth, S. and **Ghosh, G.** (2020) "Effect of reduction in column stiffness on the seismic resilience of a building", International Conference on Integration of Advanced Technologies–Industry 4.0,KCG College of Technology, 13-14 June, Chennai,.
- 15. Hemkar. K, Mishra. L. K and **Ghosh. G.**, (2020), "Performance evaluation of a RC frame structure from element level to structure level", International Conference on Integration of Advanced Technologies for Industry 4.0 : Materials Science, ICIATI 2020, KCG College of Technology, 13-14 June, Chennai.

- Sinha, B. K. and Ghosh, G. (2020), "Material R-factors of Buildings with Irregularity", International Conference on Integration of Advanced Technologies for Industry 4.0 : Materials Science, ICIATI 2020, KCG College of Technology, 13-14 June, Chennai.
- 17. Singh, K. and **Ghosh, G.** (2020), "Stress Behaviour of Concrete Pavement", International Conference on Integration of Advanced Technologies for Industry 4.0 : Materials Science, ICIATI 2020, KCG College of Technology, 13-14 June, Chennai.
- 18. Awasthi, J., Ghosh, G. and Mehta, P. K., (2020), "Seismic Design of a Curved Bridge as per Performance based Criteria", 1st International Conference and Exposition on Mechanical, Material and Manufacturing Technology, ICE3MT 2020, 9-10 October, Hyderabad.
- 19. Gupta, P. K. and **Ghosh, G.** (2020), "Effect of Bidirectional excitation on a curved bridge with lead rubber bearing", 11th International Conference on Materials Processing and Characterization, Indore.
- 20. Prasanth, S. and Ghosh, G. (2019) "Seismic Vulnerability Assessment of a Reinforced Concrete Building Located in India", Proc. International Conference INFRACON 2019, Pune, India, pp.13.
- 21. Hemkar, K., Mishra, L. K. and **Ghosh, G.** (2019) "Ductility Assessment of an RC Section", International Conference on Advanced Research and Innovations in Civil Engineering (ARICE), Kochi, pp. 69.
- 22. Gupta, P. K. and **Ghosh, G.** (2017) "Seismic Response of Isolated Curved Bridge Considering Bidirectional Effects", IASTEM International Conference, Madrid Spain, 1-3.
- 23. Saxena, S., Singh, S. S., Singh, S., Kumar, A., Gupta, P. K. and **Ghosh, G.** (2017) "Effect of Soil Flexibility on the Seismic Performance of RCC Buildings", 3rd Indian Conference on Applied Mechanics (INAM 2017), MNNIT Allahabad, pp. 271.
- 24. Hemkar, K., Mishra, L. K. and **Ghosh, G.** (2017) "Ductility Evaluation for an RCC Section with Variation in Engineering Properties of Materials", 3rd Indian Conference on Applied Mechanics (INAM 2017), MNNIT Allahabad, pp. 467.
- 25. Singh, T., Ghosh, G. and Pallav, K. (2017) "Determination of Stress Behavior of Masonry Wall due to Variation in Elastic Properties of Material", 3rd Indian Conference on Applied Mechanics (INAM 2017), MNNIT Allahabad, pp. 457.
- 26. Gupta, P. K. and **Ghosh, G.** (2016) "Effects of Bidirectional Loading on High Damping Rubber Bearing of a Curved Bridge" National Conference on Technical advancements in Civil Engineering", Lovely Professional University, Punjab, India, 76-82.
- 27. Hemkar, K, Mishra, L. K. and **Ghosh, G.** (2016) "A Review: Retrofitting Techniques for RC building" National Conference on Technical advancements in Civil Engineering", Lovely Professional University, Punjab, India.
- 28. Awasthi, J., Ghosh, G. and Mehta, P. K. (2016), "Pushover Analysis of a RC Bridge", International Journal of Innovative Research in Science and Engineering, Volume 2, Issue 5, pp.480-488, May 2016. ISSN: 2454-9665.
- 29. Awasthi, J., **Ghosh, G.** and Mehta, P. K. (2016), "Performance- Based Seismic Design of a Building", International Journal of Advanced Technology in Engineering and Science, Volume 4, Issue 4, pp.74-83, April 2016. ISSN: 2348-7550.
- 30. Gupta, P. K. and **Ghosh, G.** (2015) "Relative Performance of High Damping Rubber Bearing and Friction Pendulum System for a Curved Bridge", All India Seminar on 'Innovative Building Materials and Technology for Sustainable Construction', Lucknow, India, 79-83.
- 31. Gupta, P. K. and **Ghosh, G.** (2014) "Choice of Isolation System for a Curved Bridge", Proc. International Conference on Recent Trends and Challenges in Civil Engineering, MNNIT Allahabad, India, pp.413-417.
- 32. Gupta, P. K. and **Ghosh, G.** (2014) "Efficacy of High Damping Rubber Bearing of a Curved Bridge", 15th Symposium on Earthquake Engineering- 15thSEE- 2014, I.I.T. Roorkee, India, pp.704-709.
- 33. Gupta, P. K. and **Ghosh, G.** (2014) "Efficacy of Friction Pendulum System for a Curved Bridge", Structural Engineering Convention (SEC), I.I.T. Delhi, India, pp. 3690-3701.

- 34. Gupta, P. K. and **Ghosh, G.** (2014) "Response of a Curved Bridge with Elastomer-Based and Friction-Based Bearings", Proc. International Conference on Advances in Engineering and Technology, Roorkee, India, 450-454.
- 35. Gupta, P. K. and **Ghosh, G.** (2014) "Seismic Performance of Curved Bridge with High Damping Rubber Bearing and Friction Pendulum System", Proc. International Conference on Ingenious Technologies and Sustainable Developments in Civil Engineering- Kanyakumari, India, 137-140.
- 36. **Ghosh, G.** (2014) "Seismic Design of Bridge Considering Performance Based Philosophy", Proc. International Conference on Civil Engineering, (VVIT Bangalore), 21-23 August, pp. 195-201.
- 37. Meena, N. K., **Ghosh, G.** and Pal, P. (2014) "Performance-based Seismic Design of Buildings with Shear Wall", Proc. International Conference on Recent Trends and Challenges in Civil Engineering, (MNNIT Allahabad), 12-14 December, pp. 32.
- 38. **Ghosh, G.**, Kumar, A., Verma N. K. and Rai, H. (2012) "Seismic Response of a Curved Bridge with Isolation Bearings", 15th World Conference on Earthquake Engineering, September 24-28, Lisbon, Portugal.
- 39. Kiran, A., **Ghosh, G.** and Gupta, Y. (2012) "Application of Pushover Analysis Methods for Building Structures", ISET Golden Jubilee Symposium, October 20-21, IIT Roorkee, India.
- 40. **Ghosh, G.** and Gupta, Y. (2010) "Force Based Design and Performance Based Design of A Bridge", Proc. International Conference on Design & Construction of Urban Transport Structures, April 23-25, Auditorium of Rail Nilayam, Secunderabad, India.
- 41. **Ghosh, G.** and Gupta, Y. (2009) "Seismic Response of Building Structure with Various Pushover Methods", International Conference on Advances in Concrete, Structural and Geotechnical Engineering, October 25-27, BITs Pilani, Rajasthan, India.
- 42. **Ghosh, G.** and Singh, Y. (2009) "Seismic Behaviour of An Isolated Bridge with Directional Effects", ASCE Technical Council on Lifeline Earthquake Engineering (TCLEE) 2009, June 28- July 1, Oakland, California, P. 13.
- 43. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2009) "Effect of Soil Amplification on the Seismic Response of Bridge Structures", 9th International Conference on Vibration Problems, January 19- 22, IIT Kharagpur.
- 44. **Ghosh, G.** and Gupta, Y. K. (2009) "Seismic Response of Building Structure with Various Pushover Methods", International Conference on Advances in Concrete, Structural and Geotechnical Engineering (ACSGE-2009), October 25-27, 2009, Birla Institute of Technology and Science, Pilani, Rajasthan.
- 45. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2008) "A Comparative Study of Thermal and Seismic Behaviour of a Bridge with Traditional and Isolation Bearings", 14th World Conference on Earthquake Engineering, October 12-17, 2008, Beijing, China.
- 46. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2008) "Thermal and Seismic Behaviour of a Bridge with Traditional and Isolation Bearings", Structural Engineering Convention, 18-20 December, SERC, Chennai.
- 47. Ghosh, G., Singh, Y. and Thakkar, S. K. (2008) "A Review of Different Methods for Health Monitoring of Structures", Challenges and Applications of Mathematical Modeling Techniques in Building Science and Technology (CAM2TBST), 7-8 February, Central Building Research Institute, Roorkee, pp. 160-170.
- 48. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2007) "Seismic Response of a Pier-well System", International Conference on Civil Engineering in the New Millennium (CENeM), 11-14 January, Bengal Engineering and Science University, Howrah, India.
- 49. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2006) "Thermal and Seismic Response of a Continuous Bridge with Different Types of Bearings", 13th Symposium on Earthquake Engineering (13SEE), 18-20 December, IIT Roorkee, India.

- 50. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2006) "Behaviour of Well Foundation under Earthquake Generated Forces", Workshop on Deep Foundations (Well/Pile) for Bridges-Optimal Solutions, 29-30 November, Central Road Research Institute (CRRI), New Delhi, India.
- 51. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2006) "Structural Damage Identification and Health Monitoring of Bridges", National Conference on Advances in Bridge Engineering, 24-25 March, Department of Civil Engineering, IIT Roorkee, pp. 11-30.
- 52. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2005) "Application of Shape Memory Alloys in Controlling Earthquake Damage to Bridges", Structural Engineering Convention-2005, 14-16 December, IISC Bangalore, pp. 405.
- 53. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2005) "Techniques for Health Monitoring of Bridges: A Review", National Symposium on Structural Dynamics, Random Vibrations and Earthquake Engineering, 21-22 July, IISC Bangalore, pp. 115-123.
- 54. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2004) "Effect of Scour Depth on the Seismic Response of a Hammer-Head Bridge", Third International Conference on Theoretical, Applied, Computational and Experimental Mechanics, 28-30 December, Kharagpur, paper no. 104.
- 55. **Ghosh, G.**, Singh, Y. and Thakkar, S. K. (2004) "Effect of Soil Springs Characteristics on Seismic Response of Bridges", 9th International Conference on Current Trends in Aqueducts, Road, Rail and Marine Bridges, 20-22 December, Hyderabad, Vol.1, pp. 109-123.

12. Book/Proceedings:

• Edited the Proceedings of RTCCE-2014, an International Conference on Recent Trends and Challenges in Civil Engineering held at MNNIT Allahabad, Prayagraj, India, pp. 1-41, Published by Harileela Publication, Stanley Road, Allahabad, ISBN: 978-938-0-63516-3.

13. Book Chapter:

- Jain, N., Ghosh, G., & Kumar, A. (2025). Pushover analysis of a RC building resting on different sloping angles. Recent Developments in Structural Engineering, Volume 1. SEC 2023. Lecture Notes in Civil Engineering (pp. 203–215). https://doi.org/10.1007/978-981-97-9885-8_20.
- Kumar, A., Ghosh, G. (2024). Seismic Vulnerability of Building considering material characteristics of different countries. Recent Developments in Civil Engineering. BFC publications. (ISBN: 978-93-5764-275-0)
- Kumar, A., Ghosh, G. (2024). Effect of R factor on the Seismic Vulnerability of a L-Shaped RC Frame Building. Proceedings of the 2024 11th International Conference on Geological and Civil Engineering. ICGCE 2024. Springer Series in Geomechanics and Geoengineering. Springer, Cham. https://doi.org/10.1007/978-3-031-68624-5_7
- Kumar, A., Ghosh, G., Jain, N. (2024). "The Effects of Height on the Seismic Vulnerability of RC Frame Buildings", Recent Developments in Structural Engineering, Lecture Notes in Civil Engineering, Vol. 52. Springer, Singapore.
- 5. Kumar A. and Ghosh G. (2023). "Seismic Consideration of a RC Frame Building from the Sustainability Aspect", Lecture Notes in Civil Engineering, Vol. 330. Springer, Singapore.
- 6. Hemkar K., Mishra L.K., Ghosh G. (2021). "Ductility Assessment of an RC Section", Advances in Civil Engineering, Lecture Notes in Civil Engineering, Vol. 83. Springer, Singapore.
- Prasanth S and Ghosh G. (2021). "Implementation of Framework for Seismic Resilience Assessment of a R.C. Building", In: Sitharam T.G., Kolathayar S., Sharma M.L. (eds) Seismic Hazards and Risk, Lecture Notes in Civil Engineering, Vol 116. Springer, Singapore.
- 8. S. Prasanth and Goutam Ghosh (2021). "Resilience-Based Design of Buildings", Reliability-Based Analysis and Design of Structures and Infrastructure (1st edition),CRC Press,Taylor & Francis, pp.79-88.
- 9. Prasanth S and Goutam Ghosh (2020). "Assessment of Seismic Vulnerability of a Reinforced Concrete Building Located in India", Emerging Trends in Engineering Research and Technology, Book Publisher

International, India, Vol. 5(12).

 Praveen Kumar Gupta and Goutam Ghosh (2015). "Efficacy of Friction Pendulum System for a Curved Bridge", Bloomsbury Publishing India Pvt Ltd., V. Matsagar (ed.), Modeling, Simulation and Analysis, pp. 3690-3701.

14. Departmental Activities:

- Member, B.Tech., Project Allotment and Evaluation Committee (w.e.f. July, 2024))
- Convener, DDPC (w.e.f. Aug 02, 2023)
- Member, DDSC (w.e.f. Aug 02, 2023)
- Member, DMPC (w.e.f. Aug, 2023)
- Convener, DMPC (2021-2023)
- Convener, B.Tech. Project Allotment and Evaluation Committee (2018-2019)
- Officer-in-Charge (Structural Engg Lab) (2018-2021)
- Officer-in-Charge (CAD Lab) (2016-2018)
- Officer-in-Charge (Departmental Library) (2008-2014)
- Officer-in-Charge (Conference Hall) (2008-2014)
- Officer-in-Charge (Time Table) (2011-2014)
- Officer-in-Charge (M.Tech. Structural Engineering) (2016-2019)
- Member, DDPC (2016-2021)
- Member, DDSC (2016-2021)
- Member, DUGC (2008-2017)
- Member, Departmental NBA Committee for PG Programme (2019-2020)
- Member, Departmental NEP Committee (2022 to till date)
- Member, B.Tech. Project Allotment and Evaluation Committee (2021-2022)

15. Institute Activities:

- Faculty-in-Charge (Construction & Land) (22-10-2022 to 21-10-2023)
- Faculty-in-Charge [(Civil Maintenance) Residential Campus] (22-10-2021 to 21-10-2022)
- Faculty-In-Charge (Civil) (2014-2015)
- Warden-II, Mega Boys' Hostel (2012-2013)
- Warden-I, B. G. Tilak Hostel (2013-2015)
- Member, LLRC Committee (2009-2014)

16. PG Dissertation Guided:

S. No.	Title of Dissertation	Name of Student	Co-Supervisor (s), if any	Year
1	Seismic Response of RC Buildings to Near-fault and Far-fault Earthquakes	Aman Jaiswal	No	2024
2	Seismic Performance Assessment of a L- Shaped RC Building using Various Retrofitting Materials	Anshul Kumar Singh	No	2023
3	Seismic Performance Assessment of a Setback RC Building using Various Retrofitting Materials	Aman	No	2023
4	Parametric Study on PSC Skewed Box girder Bridges	Beant Singh Ashok	Dr. P. R.Pal	2022
5	Parametric Study on Prestressed Concrete Curved Box Girder Bridges	Hritik Badal	Dr. P. R.Pal	2022
6	Performance of Self Compacting Concrete using PPC	Sridhar	Dr. P. R.Pal	2022

7	Parametric Studies of RC Buildings in Hilly Region	Praveen Singh	Dr. P. R. Pal	2022
8	Evaluation of the Effect of using Waste Glass Powder in Pavements	Vipin Kumar Singh	Dr. Shalinee Shukla	2020
9	Effect of Irregularity on Seismic Vulnerability of Buildings	Shubhanshu Pratap Singh Yadav	No	2019
10	Road Safety Auditing of Indian Roads	Ram Achal Yadav	Dr. Shalinee Shukla	2019
11	Effectiveness of Recycled Aggregate on the Strength Properties of Rigid Pavement	Abhinav Kumar Yadav	Dr. Shalinee Shukla	2018
12	Comparative Study of Infill Frame and Structural Wall RCC Residential Building	Lovneesh Modi	Prof. L. K. Mishra	2018
13	Finite Element Analysis of Unreinforced Masonry Wall	Tripti Singh	Dr. Kumar Pallav	2017
14	Ductility Assessment of RC Elements	Manish Kumar Choudhary	Prof. L. K. Mishra	2016
15	Assessment of Cracking in Reinforced Concrete Beams	Palapati Rahul	Prof. L. K. Mishra	2016
16	Pushover Analysis of a Curved Bridge	Anuja B	Prof. Y. K. Gupta	2015
17	Comparative Analysis of Various International Codes of Practices for Buildings & Bridges	Govardhan	Prof. L. K Mishra	2015
18	Design of a RC Frame Building using Force Based Method and Displacement Based Methods	Lekhraj Meena	Prof. Y. K. Gupta	2015
19	Seismic Vulnerability of R.C.C. Buildings	Aswani Kulshrestha	No	2014
20	Performance Based Seismic Design of Buildings	Naveen Kumar Meena	Dr. P. R. Pal	2014
21	Performance Based Design of Infilled Frame Structure	Mohit Kr. Sharma	No	2013
22	Effect of Response Reduction Factor on the Seismic Performance of a Simply Supported Bridge	Sheo Bachan Kumar	No	2012
23	Parametric Study of the Rigid Pavement	Anupam Rawat	Dr. L. K. Mishra	2011
24	Analysis of Laminated Composite Beams using Finite Element Method	Chandramani Mishra	Dr. R. R. Pal	2011
25	Relation Between Strength Properties and Abrasion Resistance of Steel Fiber Reinforced Metakaoline Concrete	Sandeep Sharma	Prof. Rakesh Kumar	2010
26	Application of Pushover Analysis Methods for Building Structures	Asha Kiran	Prof. Y. K. Gupta	2009
27	Performance Based Design of Simply Supported Bridge	Mahendra Singh	No	2008
28	Seismic Response of Isolated Bridge	Prashanth S	Prof. P. K. Mehta	2008

17. UG Dissertation Guided:

S. No.	Title of Dissertation	
1	Seismic Response of an Unsymmetrical Building with Varying Ground Motion Properties (Shivansh Jangid, Prince Sharma, Samay Singh Meena and Vishal Kumar)	2024
2	Seismic performance of base isolated buildings considering directional effects (Priyanshi Dixit, Aman Kumar Jaiswal, Ajeet Verma, Saurabh Kumar Meena, Ashish Pal)	2023
3	Effect of Ground Motion Characteristics and Soil Structure Interaction (SSI) on the Seismic Performance of Buildings (Abhishek Gupta, Pranay Shukla, Manish Verma, Ashutosh Nirala	2022

		1
4	Effect of frame-infill interaction on seismic performance of Buildings	2021
	(Abhijay Shukla, Premsukh Godara, Prashant Giri and Ashish Rana)	
5	Irregularity Effects on the Performance Based Seismic Design of Building	2020
5	(Shivangi Prerna, Anshika Singh, K. Surya Chakravarthi and Harinath Singh)	2020
6	Response of Buildings with Irregularities	2019
0	(Ashutosh Verma, Mayank Katiyar, Ayush Nigam, Ahmed Samih Shareef and Mayank Jha)	2019
7	Seismic Vulnerability of RCC Buildings with Soil-structure Interaction Effects	2018
/	(Deepak, Chandan Kumar and Ajit Kumar)	2018
8	Selection of Isolation Bearings for Buildings with Asymmetry	2017
0	(Rajesh Pathak, Shubham Pandey, Shankar Sah, Sanjay Singh)	2017
9	Analysis and design of Buildings	2017
9	(Dinita Leimapokpam)	2017
10	Design of a Simply Supported RCC Bridge under Seismic Considerations	2016
10	(Rahul Verma, Nitish Kumar, Bibek Pokhrael)	2016
11	Effect of Soil Flexibility & Amplification on the Seismic Performance of RCC Buildings	2015
11	(Shashank Saxena, Shashank Shekher Singh, Shailendra Kumar, Anurag Kumar)	2015
12	Performance Based Seismic Design of a Curved Bridge	2014
12	(Nitin Jaiswal, Pallavi Goswami, Sabita Giri)	2014
12	Analysis and Design of a Multistoreyed Building	2014
13	(Shivam Kasana)	2014
14	Effect of Bi-directional Ground Motion on Response of Integral & Isolated Curved Bridge Structures	2012
14	(Akshay Kumar, Rohit Chaturvedi, Sanket Neema)	2013
1.7	Seismic Response of a Curved Bridge with Isolation Bearings	2012
15	(Anuj Kumar, Nitin Kumar Verma, Himanshi Rai)	2012
16	Seismic Response of Isolated and Non-isolated Bridge with Directional Effects	2011
16	(Gaurav Khandelwal, Manuj Taneja, Vijay Kumar Soni)	2011
17	Performance Based Design of Building Structures	2000
17	(Shiva Kant Mishra, Sourav Dey, Sushmita Singh)	2009
10	Design and Analysis of Simply Supported Bridge	2000
18	(Swati Gulati, Ramesh Prasad, Kumar Anurag)	2008
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18. International Conference Organized (as Secretary):

• An International Conference on "Recent Trends & Challenges in Civil Engineering (RTCCE-2014)" during December 12-14, 2014 at MNNIT, Allahabad.

18. Short-term Courses Organized (as Coordinator):

- Self-Financed Short Term Internship Programme on "Evolving Concepts in Design of Reinforced Concrete Buildings (Design-2019) from 03.06.2019 to 28.06.2019 at Department of Civil Engineering, MNNIT Allahabad
- Online Summer Training cum Internship Programme in Civil Engineering (Online STIPCE-2020) from 06.07.2020 to 31.07.2020 at Department of Civil Engineering, MNNIT Allahabad
- Summer Training cum Internship Programme in Civil Engineering (STIPCE-2019) from 10.06.2019 to 05.07.2019 at Department of Civil Engineering, MNNIT Allahabad
- Short Term Course on "Seismic Design and Retrofit of Bridges (SADRB-2015)" from February 02-06, 2015.
- Short Term Course on "Earthquake Resistant Design & Detailing of Structures (ERDDS-2014)" from November 24-28, 2014.

19. Significant Outreach Institute Activities (Expert Lecture/Reviewer/Examiner):

- Delivered an Expert Lecture on "Bricks and Steel for Construction" in the training program on "Quality Standards, Material Testing and Third Party Inspections with Focus on Pipe Quality Testing", sponsored by National Jal Jeevan Mession at MNNIT Allahabad from October 5-7, 2023.
- An Expert Lecture Delivered on "Earthquake Resistant Design of Structures" on June 22, 2022 being organized by Department of Civil Engineering, Dr. B. C. Roy Engineering College, Durgapur.
- Delivered an Expert Lecture on "Analysis and Design of Structures using SAP 2000" in the Short Term Course on "Software Application for Analysis and Design of Structures (SAADS-2021)" at MNNIT Allahabad from July 26-30, 2021.
- An Expert Lecture Delivered on "Earthquake Resistant Design of Structures" on July 01, 2020 for the TEQIP-III Sponsored "Online Expert Lecture Series in Civil Engineering" being organised by Department of Civil Engineering, Lok Nayak Jai Prakash Institute of Technology, Chapra.
- Delivered Invited Lecture on "Loads" in Limit State Design of Steel Structures (LSDSS-2015) at MNNIT Allahabad
- Acted as reviewer for International Journal of Civil Engineering, Springer; Cogent Engineering; The Institution of Engineers (India): Series A (IEIA); Journal of Advances in Science and Engineering; 3rd Indian Conference on Applied Mechanics (INCAM 2017)
- Acted as External Examiner for M. Tech. Viva-Voce Examination at GLA University, Mathura in June, 2022.

20. Awards and Honours:

- Received Best paper Award for Presentation of a paper in the International Conference on Civil Engineering (ICCE-2014), held at VVIT, Bangalore during Aug 21-23, 2014.
- Awarded National Doctoral Fellowship by AICTE From 2004 to 2006 during Ph.D. at IIT Roorkee
- Awarded MHRD Fellowship from 2003-2004 during Ph.D. at IIT Rookee

21. Foreign Exposure:

- Attended and presented paper in the International Conference at Matsue, Japan during Mar 15-17, 2024.
- Attended and presented paper in the International Conference at Madrid, Spain during Aug 23-24, 2017.
- Study Tour Programme at AIT Bangkok, Thailand during Sep 28, 2013 to Oct 4, 2013.
- Attended and presented paper in the 15th World Conference on Earthquake Engineering during Sep 24-28, 2012 at Lisbon, Portugal.
- Course on Seismic Design and Retrofit of Bridges at ROSE School, Pavia, Italy during May 23, 2011 to June 15, 2011.