

Girijananda Chowdhury University, Guwahati, Assam

Department of Civil Engineering

Publications by the Faculties

Dr. S. Robert Ravi:

International Journals: 30

1. Evaluation of Porosity and Permeability for High Strength Concrete Using Rice Husk Ash and Metakaolin as partial replacement to cement, Paper accepted (ID:20230612), 2023, Indian Journal of Environmental Protection, ISSN: 0253-7141, Scopus Indexed
2. Evaluation of strength characteristics and identifying the optimum dosage with the impact of partial replacement of recycled fine and coarse aggregate from construction and demolition waste, Volume 66, Part 4, 2022, Pages 1699-1709 <https://doi.org/10.1016/j.matpr.2022.05.265> Scopus Indexed.
3. Structural Behavior of Experimental Retrofitted RC Beam Using Natural Fibers with Neural Network, International Journal of Engineering and Advanced Technology, ISSN:2249 8958, Vol.8, Issue 6,2019, pp 1802-1809 DOI: 10.35940/ijeat.F8458.088619 Scopus Indexed.
4. Use of rice husk ash and metakaolin as pozzolanas for concrete: A review, International journal of applied engineering and research, ISSN 0973-4562 Vol.11, No.1,2016, pp 656-664. DOI:10.37622 Scopus Indexed.
5. Experimental Investigation on Heavy Metal Contamination in Lake Water Sources of Musi Basin, International Journal of Innovative Research in Technology (IJIRT) ISSN: 2349-6002, Vol.8, Issue 11, pp 345 -349, April 2022. UGC approved journal No: 47859
6. Treatment of Dairy Wastewater using moving bed bio-film reactor sequential with integrated fixed-film sludge. International Journal of Innovative Research in Technology (IJIRT) ISSN: 2349-6002, Vol.8, Issue 10, pp 573-576, March 2022. UGC approved journal No: 47859
7. Experimental investigation on the behavior of retrofitted reinforced concrete beam-column joints with CFRP subjected to
8. Load reversal, International Journal of Applied Engineering and Research (IJAER, ISSN 0973-4562) Vol.5, No.1(2010) pp 109-120. UGC Approved Journal No. - 64529
9. Experimental investigation on the behavior of retrofitted reinforced concrete beam-column joints with GFRP subjected to Load reversal, International Journal of Earth science and Engineering (IJEE , ISSN 0974-5904) Vol.3, No.2(2010) pp 289- 300.
10. Experimental investigation on the influence of axial load and lateral ties on reinforced concrete beam-column joints, International Journal of Civil and Structures (IJCS ISSN 0973-8061)–Vol.2, No.2(2009) pp 071- 076.
11. Experimental Investigation on the behavior of retrofitted reinforced concrete beam-column joints with sisal fiber wrap subjected to Load reversal, International Journal of Applied Engineering and Research IJAER, ISSN 0973-4562 Vol.5, No.8 (2010) pp1393-1401. UGC Approved Journal No. - 64529

12. Experimental Investigation on the behavior of retrofitted reinforced concrete beam-column joints with GFRP-CFRP hybrid fiber wrap subjected to Load reversal, International Journal of Mechanics and Solids (IJMS, ISSN 0973-1881) Vol.5, No.1(2010), pp. 61-69.
13. Experimental Investigation on the behavior of retrofitted reinforced concrete beam-column joints with AFRP wrap subjected to Load reversal, International Journal of Emerging Technology and Applications in Engineering Technology and science. (I-ETA-ETS, ISSN 0974-3588) July'10-December'10, Vol.3, Issue 2, pp. 52-57.
14. Experimental Investigation on the behavior of retrofitted reinforced concrete beam-column joints with GFRP-AFRP hybridwrapping. International Journal Civil and Structural Engineering (IJCSE, ISSN 0976-4399) Vol.1, No.2 (2010), pp.245- 253.
15. Finite element modeling on behavior of retrofitted reinforced concrete beam-column joints with CFRP wrapping International Journal Civil and Structural Engineering (IJCSE, ISSN 0976-4399) Vol.1,No.3 (2010), pp.576-582.
16. Finite element modeling of reinforced concrete beam column joints retrofitted with carbon fiber reinforced polymer wrap., International Journal of Res Engineering, 2011, Vol. 1, Issue 1, pp 27-30.
17. Finite element modeling of reinforced concrete beam column joints retrofitted with GFRP wrapping, International Journal of Civil Engineering and Technology (IJCIET, ISSN 0976 - 6308) 2011, Vol.2, No.1, pp 36-40.
18. Experimental investigation on the behavior of reinforced concrete beam retrofitted with sisal fiber sheet, International Journal of Innovative research, engineering and technology (IJIRSET, ISSN 2319-8753), Vol.2, Issue 7, pp 3159-3162 July 2013.
19. Effects Of Water Quality On Hydration and Compressive Strength of Plain Cement Concrete, International Journal of Applied Engineering Research (IJAER) ISSN 0973-4562 Volume 9, Number 22 (2014) pp. 16895-16908. UGC Approved Journal No. – 64529
20. Experimental study on flexural behavior of reinforced concrete hollow core sandwich beams. International journal of advanced research in science and engineering. IJARSE, ISSN-2319-8354(E) Vol. No.4, Special Issue (01), March 2015, pp 937-946. 20.Experimental study on flexural and shear behavior of fiber reinforced concrete beams, International Journal of Advances in Natural and Applied sciences ISSN 1995-0772,2016 Jan 10 (1) pages 57-64
21. Study on strengthening of RC beam column joint using Hybrid FRP composites, Circuits and systems , ISSN Print: 2153- 1285 ISSN Online: 2153-1293 Scientific research publishing 2016,Vol.7, pp 2846-2856. Circuits and Systems, 2016, 7, 2846-2856 Published Online August 2016 <http://dx.doi.org/10.4236/cs.2016.710243>
22. Indian rice husk ash – improving the mechanical properties of concrete, International journal of Engineering research and application, (IJERA) ISSN 2248-9622, Vol.7, Issue 1 (Part 1), Jan.2017, pp 76-79. UGC Approved Journal No. – 47088
23. Treatment of tannery wastewater by activated sludge process, International journal of elixir renewable energy, ISSN 2229- 712X, 102(2017), pp 44280-44285
24. Durability Response of High-Performance Concrete with Metakaolin and Rice Husk Ash, International Journal of Scientific Research and Review, ISSN: 2279-543X, Dynamic Publisher, Vol.7, Issue 2,2018, pp 122- 130. UGC Approved Journal

25. Cost and Time overrun analysis in Construction Industry using Questionnaire survey, International Journal of Innovative Research in Technology (IJIRT), ISSN:2349-6002, Vol.9, Issue 1, pp 1468-1472, UGC approved journal No.47859
26. Study on Ground improvement Technique using Bamboo stick and coir fiber as reinforcement. Positif Journal, ISSN 0048-4911. Vol.22. Issue 8, Aug.2022, pp199-207. <https://doi.org/10.37896/psj30.8/1320>, Scopus Indexed.
27. Study on Behaviour of Coconut Fiber Reinforced Concrete. Positif Journal, ISSN 0048-4911. Vol.22. Issue 9, Sep.2022, pp 16-20. <https://doi.org/10.37896/psj30.9/1402>, Scopus Indexed.
28. Performance Of C.L.C Bricks With Coir Fibers And Plastic Fibers, Dizhen Dizhi Journal (ISSN:0253-4967), Volume XIV, Issue IX, pp 1-5,Sep'2022, [doi.org/10.37896/Dizhen Dizhi 14.09/10514](https://doi.org/10.37896/Dizhen%20Dizhi%2014.09/10514), Scopus indexed & UGC CARE II journal.
29. Influences of Effluent water in Concrete, Journal of Xidian University (ISSN:1001-2400),Vol.16,Issue.12, pp 7-12 Dec'2022, <https://doi.org/10.37896/jxu16.12/002>, Scopus indexed & UGC CARE II journal.
30. Experimental Study on Influence of Metakaolin & M-Sand in Concrete with Glass Fibres, High Technology Letters (ISSN NO : 1006-6748), Volume 29, Issue 12, Dec.2023, pp 267-274. <https://doi.org/10.37896/HTL29.12/9825> UGC CARE II journal.

International Conference: 16

1. Microstructure and Strength Evaluation of Blended Concrete with Partial Replacement of Rice Husk Ash and Fly Ash ICMPC – E3S web of conferences - Paper accepted. Scopus Indexed
2. Landslide modeling and susceptibility assessment by soil moisture sensors at Katteri watershed in Southern India, E3S Web of Conferences 391, 01209 (2023) ICMED-ICMPC 2023, @ GRIT, Hyderabad , May 2023, <https://doi.org/10.1051/e3sconf/202339101209> Scopus Indexed
3. Evaluation of strength and durability assessment for the impact of rice husk ash and metakaolin at high performance concrete mixes, International Conference on Futuristic Research in Engineering Smart Materials, GRIT ,Hyderabad, Materials today Proceedings, ISSN: 2214-7853 Vol.47, Part 14, pp 4584-4591 , 2021 <https://doi.org/10.1016/j.matpr.2021.05.449>, Scopus Indexed , WoS indexed.
4. Experimental investigation on the behavior of reinforced concrete beam retrofitted with Jute fiber sheet-Proceedings of the International Conference on Current trends in Engineering and Technology, 3rd July 2013, Akshaya college of Engg. & Technology, Coimbatore. ICCTET , 2013 pp 3-15,0667 5902 . Scopus Indexed, WoS indexed.
5. Effect of anchorage length on performance of reinforced concrete beam-column joints-Proceedings of the International conference on advances in materials and technology , 7th -9th Jan 2010 V.L.B. Janakiammal College of Engg & Tech. , Coimbatore.
6. Finite Element Modeling of Reinforced Concrete Beam Column Joints Retrofitted with Aramid Fiber Reinforced Polymer Sheets. Proceedings of International Conference on Adaptive Technologies for Sustainable Growth (ICATS-2011) pp 7-10 , 16th-18th July 2011@ Paavai Engineering College, Nammakal.
7. Correlation Based Damage Detection for Structural Health Assessment,13th &14th March, ICCIM'14, S.R.M University,. Chennai.

8. Behavior of RCC Flexural member Under Shock Loading, 13th & 14th March, ICCIM'14, S.R.M University, Chennai. 8. Experimental Investigation on behavior of Self Healing Concrete, International conference on 'Science, Engineering & Technology @ VIT on 6th & 7th May 2014.
9. Vibration based damage detection for Structural Health Assessment, International conference on 'Science, Engineering & Technology @ VIT on 6th & 7th May 2014.
10. Numerical Investigations on Blast protection system with metallic tube core sandwich panels, International conference on sustainable energy and built environment, VIT, Vellore on 12th & 13th March 29, 2015.
11. Experimental study on flexural and shear behavior of fiber reinforced concrete beams, International Conference on recent trends in mechanical and civil engineering – ICRTMCE'16 @ Christian college of Engineering & Technology, Dindigul 17th -19th March 2016.
12. Treatment of combined waste water by activated sludge process, International conference on Recent trends in structural and Environmental engineering – ICRTCEE – 16 @ University college of Engineering, Dindigul on 23rd May 2016.
13. Prediction based performance evaluation in beam column joint with the aid of artificial neural network. ICRTCEE – 16 @ University college of Engineering, Dindigul on 23rd May 2016.
14. Scheduling of Multistoried Buildings using MS Project , Proceedings of Int. Virtual Conference on Innovations in Concrete and Constructions - ICON 2021, 10th & 11th June 2021 @ Sona College of Tech, Salem.
15. Study on recent advances in Soil liquefaction, Abstract accepted for Int. Conference on Recent Advances in Geotechnical, Earthquake Engineering and Soil dynamics, Scopus Indexed Springer proceeding: Submission ID:219, IIT-Guwahati, Assam.
16. Seismic reconnaissance survey of assam earthquake (2021), Abstract accepted for Int. Conference on Recent Advances in Geotechnical, Earthquake Engineering and Soil dynamics, Scopus Indexed Springer proceeding: Submission ID:214, IIT-Guwahati, Assam.

National Journals: 11

1. Use of Plastic for Sustainable Concrete, Journal of Engineering Analysis and Design, Volume 5 Issue 2, pp 19-23, 2023 HBRP publications. <https://doi.org/10.5281/zenodo.8157890>
2. Effects of Heavy Metal Contamination in Groundwater at Cherlapally Industrial Area, Hyderabad, Telangana, NOVYI MIR Research Journal ISSN NO: 0130-7673, pp 96-105, VOLUME 8 ISSUE 6 2023. UGC approved journal.
3. Experimental Study on the Improvement of Subgrade Properties by Jute Fiber, Gis Science Journal ISSN No: 1869-9391, pp 365-372, Volume 10, Issue 6, 2023. UGC approved journal.
4. Analysis and Design of Building using ETABS, JAC : A Journal Of Composition Theory ISSN : 0731-6755, pp 12-21, Volume XVI, Issue VI, JUNE 2023. UGC approved journal.
5. Analysis & Design of G+3 Residential Building, INFOKARA RESEARCH, ISSN NO: 1021-9056, pp 27-32, Volume 12, Issue 6, 2023. UGC approved journal.
6. Assessment of Surface Water Quality in Machanpally (V), Mahabubnagar (Dist.) Telangana State, Surajpunj Journal for multidisciplinary research (ISSN: 2394-2886), Vol.12, Issue 7, pp 26-32, July 2022 , UGC approved journal No:64786.

7. Scheduling of multistory building using Microsoft Project, Surajpunj Journal for multidisciplinary research (ISSN: 2394-2886), Vol.12, Issue 2, pp 42-55, Feb'2022, UGC approved journal No:64786.
8. Rapid chloride penetration resistance of blended cements containing metakaolin and rice husk ash., SurajPunj Journal for multidisciplinary research, ISSN 2394-2886, Vol.8, Issue 8, 2018.UGC approved journal No:64786.
9. Strength characteristics of concrete with Indian metakolin and rice hush ash, Journal of Advances in chemistry, ISSN 2321-807X, Vol.13, No.3, pp 6140-6150, Jan. 2017.
10. Experimental investigation on influence of development length in retrofitted reinforced beam-column joints – NBM &CW, April 2009 pp 148-158
11. Experimental Investigation on behavior of reinforced Beam-Column Joint retrofitted with FRP wrap subjected to static load – NBM&CW, Oct 2009 pp 204-218.

National Conferences: 8

1. Studies on the behavior of retrofitted reinforced concrete beam-column joint using CFRP wrapping – Proceedings of the national conference on recent developments in concrete technology, 21st&22nd December. 2006, Govt. College of Tech., Coimbatore.
2. Experimental Investigation on the retrofitted reinforced concrete beam-column joint using CFRP wrapping- Proceedings of the national conference on frontline areas in civil engineering, 20th -21st April.2007., V.L.B.Janakiammmal College of Engg & Tech., Coimbatore
3. Finite element modeling on the behavior of reinforced concrete beam-column joint retrofitted with GFRP wrapping - Proceedings of the national conference on innovations in civil engineering, 20th April, 2010., Kumaraguru College of Tech., Coimbatore.
4. Finite element modeling on the behavior of retrofitted reinforced concrete beam column joints Proceedings of the National conference on Advancements in concrete Technology, 23rd &24th September,2010., K.S.R College of Tech., Tiruchengode.
5. Finite element modeling on the reinforced concrete beam column joints retrofitted with Aramid FRP sheets, Proceedings of the National conference on Recent Advances in Civil Engineering Research, 26th January 2011., Karpagam University, Coimbatore.
6. Finite element modeling on the reinforced concrete beam column joints retrofitted with Aramid FRP sheets, Proceedings of the National conference on Earthquake and Structural Engineering, NCESE - 2011, on 15th & 16th Sep' 2011., V.L.B. Janakiammmal College of Engg & Tech, Coimbatore.
7. Influence of self-healing agent on Concrete, National conference on LACE'14 on 10th April 2014@ SNS college of Technology, Coimbatore.
8. Treatment of tunnary waste by combined process, National conference on Green Engineering & Technologies for sustainable future, Anna University, Trichy on 16.09.16.

Patent Filed & Published: 10

1. Resistive Imbibed Mesh Sensor Based Concrete Wall And Ceiling Strength Monitoring System Employing IoT. Application no: 202341026499 filed on 10.04.2023, published on 05.05.2023, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.

2. Integration of IoT and Deep Learning approaches for Air Pollution Monitoring in Smart Cities. Application no: 202341007283 filed on 05.02.2023, published on 10.02.2023, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
3. Designing a framework of construction techniques with smart devices integrated with Internet of things, application no. 202241056474 filed on 01.10.22. Published on 21.10.2022, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India
4. Crack detection and testing of buildings strength through image processing to predict the condition of building. application no: 202241034671, filled on 17/06/22, Published on 22.07.2022, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
5. Advanced robotic application to supervise the construction site and check for dimensional deformities. wide application no: 202221012858, filled on 12/03/22, published on 29/04/22/, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
6. Experimental Studies on Banana fiber with Concrete composites, wide application no: 202141053716, filled on 23/11/21, Published on 10/12/21, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
7. "5G Technology enabled Smart e-healthcare system". wide Application no: 202141036911, Filed on 14/08/2021, Published on 24/09/2021, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
8. The influence of different treatment applied to flax fibers on different properties of mortar reinforcement, Ref. no. 202141028760, Filed on 26.06.21, Published in Journal no.28/2021 dt: 09.07.21, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
9. Door Mounted Door Handle Sanitizer Dispenser, Ref. No: 202041026845, Filed on 25.06.20, Published on Journal no: 28/2020 dt:10.07.2020, Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.
10. High Performance Eco-friendly Construction Materials for Sustainable Infrastructure Development Ref. No: 202441009054, Filed on 10.02.24, Published in Journal no: 10/2024, Part 1, dt: 08.03.2024 Intellectual Property India, Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India.

Book published/Book Chapter - 2

1. Stainless Steel in Civil Engineering, Scientific International Publishing House, Sep'2022, <https://www.flipkart.com/stainless-steel-civil-construction/p/itm7cdc70ef4a855?pid=9789356254701>
2. Environmental Impact Assessment - Processes & Attributes" with Chapter ID "DPS2G33-31AUPP1" Book Series "IIPV3EBS02_G33 Futuristic Trends in Social Sciences" under Volume 3, 2023, IIP Proceedings is accepted for publication.

Dr. Snehal Kaushik

Refereed International Journals: 4

1. Kaushik, S. and Dasgupta, K. (2024) "Evaluation of plastic hinge length in RC shear wall connected with floor slabs" Discover Civil Engineering, (2024) 1:10 <https://doi.org/10.1007/s44290-024-00010-0>
2. Kaushik, S. (2021) "Seismic Response of RCC Building Under Column Removal Scenario" Discover International Research Journal of Engineering and Technology (IRJET). Volume 9, Issue 3, March 2022, S. No: 356.
3. Kaushik, S. and Dasgupta, K. (2021) "A drift-based design procedure for RC buildings considering the effect of shear wall - floor slabs junction" Earthquakes and Structures, Vol. 21, No. 3 (2021) 313-326. <https://doi.org/10.12989/eas.2021.21.3.303>
4. Kaushik, S. and Dasgupta, K. (2019) "Seismic behaviour of slab-structural wall junction of RC building" Earthquake Engineering and Engineering Vibration, Springer Publication, Vol 18 (2), 331-349. <https://doi.org/10.1007/s11803-019-0507-8>

Research Articles in International Conferences: 7

1. Kaushik, S. (2023). "Comparative Study of Vertically Irregular RC Shear Wall Building Frames." 13th Structural Engineering Convention, VNIT Nagpur, India, 7-9 December 2023. Paper No. 369.
2. Kaushik, S., Nath, S. S., and Das, T. (2022). "Impact Assessment of Plastic Strips on Compressive Strength of Concrete" North-East Research Conclave, Sustainable Science and Technology (NERC 2022), Indian Institute of Technology Guwahati, Guwahati, India, 20-22 May 2022, (Track 6-Disaster Management).
3. Snehal Kaushik, (2022). "Seismic Response of RCC Building under Column Removal Scenario" International Conference on Material, Mechanics and Structures (ICMMS 2022), NIT Calicut, Kerala, India, 10-12 March 2022
4. Kaushik, S. and Dasgupta, K. (2021). "Analytical Study on Seismic Behavior of Rectangular Shear Wall Connected to Floor Slabs" 12th Structural Engineering Convection (SEC2020+1), NCDMM and MNIT Jaipur, Rajasthan, India, 17-19 December 2020 (rescheduled to 17-19 December 2021)
5. Snehal Kaushik, Tabassum Nahar Saikia, Syed Maroof Hassan Syed, Suhail Jafri and Banashree Baruah (2021)"Response of Multistoried Building Considering Soil-Structural Interaction under Lateral Loading" '7th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (ICRAGEE 2020)', Indian Institute of Science Bangalore, Bangalore, India. Paper No. 187.
6. Kaushik, S. and Dasgupta, K. (2018). "Design drift requirements for buildings with RC shear walls" 16th Symposium on Earthquake Engineering, Indian Institute of Technology Roorkee, Roorkee, India Paper No. 269
7. Kaushik, S. and Dasgupta, K. (2018). "Plastic hinge length at RC shear wall and floor slab junction" 2nd International Conference on Civil Engineering for Sustainable Development – Opportunities and Challenges (CESDOC), Assam Engineering College, Guwahati, India, Paper No. SINO306

Book Chapter: 6

1. Kaushik, S. (2024). Comparative Study of Vertically Irregular RC Shear Wall Building Frames. (Springer)
2. Kaushik, S., Nath, S.S., Das, T. (2023). Impact Assessment of Plastic Strips on Compressive Strength of Concrete. In: Mitra, S., Dasgupta, K., Dey, A., Bedamatta, R. (eds) Disaster Management and Risk Reduction: Multidisciplinary Perspectives and Approaches in the Indian Context. NERC 2022. Springer, Singapore. https://doi.org/10.1007/978-981-99-6395-9_14
3. Kaushik S., Dasgupta K. (2022), "Analytical Study on Seismic Behavior of Rectangular Shear Wall Connected to Floor Slabs". ASPS Conference Proceedings Vol. 1 No. 3 (2022): Proceedings of the 12th Structural Engineering Convention, SEC 2022: Theme 6 | Editors: M K Shrimali, S D Bharti, M Abdeddaim, A Benchabane. DOI: 10.38208/acp.v1.553
4. Kaushik S, Tabassum Nahar Saikia, Syed Maroof Hassan Syed, Suhail Jafri and Banashree Baruah (2021) "Response of Multistoried Building Considering Soil-Structural Interaction Under Lateral Loading", Seismic Design and Performance. Sitharam T.G., Palapati, R.R. Kolathayar, S. (Eds.), Springer Nature, PP. 219-231. DOI: <http://doi.org/10.1007/978-981-33-4005-3> , ISBN: 978-981-334-004-6
5. Kaushik S., Dasgupta K. (2021), "Seismic Response of Shear Wall–Floor Slab Assemblage". In: Dutta S., Inan E., Dwivedy S.K. (eds) Advances in Structural Vibration. Lecture Notes in Mechanical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-15-5862-7_10
6. Kaushik, S., and Dasgupta, K. (2018), "Seismic Behaviour of RC Slab-Shear Wall Assemblage Using Nonlinear Static and Dynamic Analysis", In Recent Advances in Structural Engineering, Volume 2, Lecture Notes in Civil Engineering Volume 12, Rama Mohan Rao, A., and Ramanjaneyulu, K. (eds.), Springer Nature, PP. 219-231. DOI: http://doi.org/10.1007/978-981-13-0365-4_19, ISBN: 978-981-13-0364-7.

Dr. Kasturi Bhuyan

Journal: 5

1. Gangolu, J., Kumar, A., Bhuyan, K., & Sharma, H. (June 2022). Performance-based probabilistic capacity models for reinforced concrete and prestressed concrete protective structures subjected to missile impact. *International Journal of Impact Engineering*, 164, 104207.

[Impact Factor: 5.1. Online ISSN: 1879-3509 <https://doi.org/10.1016/j.ijimpeng.2022.104207>]

2. Gangolu, J., Kumar, A., Bhuyan, K., & Sharma, H. (July 2022). Probabilistic demand models and performance-based fragility estimates for concrete protective structures subjected to missile impact. *Reliability Engineering & System Safety*, 223, 108497.

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3. Kishore, K. B., Gangolu, J., Ramancha, M. K., Bhuyan, K., & Sharma, H. (November 2022). Performance-Based Probabilistic Deflection Capacity Models and Fragility Estimation for Reinforced Concrete Column and Beam Subjected to Blast Loading. *Reliability Engineering & System Safety*, 227, 108729.

[Impact Factor: 8.1. Online ISSN: 1879-0836 <https://doi.org/10.1016/j.ress.2022.108729>]

4. Bhuyan, K., & Sharma, H. (December 2022). Reliability analysis & performance-based code calibration for slabs/walls of protective structures subject to air blast loading. *Reliability Engineering & System Safety*, 228, 108751.

[Impact Factor: 8.1. Online ISSN: 1879-0836. <http://doi.org/10.1016/j.ress.2022.108751>]

5. Bhuyan, K., & Sharma, H. (February 2024). Probabilistic capacity models and fragility estimate for NRC and UHSC panels subjected to contact blast. *Reliability Engineering & System Safety*, 242, 109683.

[Impact Factor: 8.1. Online ISSN: 1879-0836. <https://doi.org/10.1016/j.ress.2023.109683>]

Book Chapter: 1

1. Bhuyan, K., Jujjavarapu, K. K., & Sharma, H. (2021). Performance Evaluation of Two-Way RC Slab Subjected to Blast Loading Using Finite Element Analysis. *Advances in Structural Technologies*, 57.

Conference: 3

1. Bhuyan, K., & Bhuyan, K. (2015). Ground Response Analysis of Rukni Irrigation Project Site Location in Assam, India. *In proceedings of International Conference on Sustainable Energy and Built Environment*. VIT University, Vellore.

2. Bhuyan, K., Jujjavarapu, K. K., & Sharma, H. (2021). Performance Evaluation of Two-Way RC Slab Subjected to Blast Loading Using Finite Element Analysis. *In Advances in Structural Technologies: Select Proceedings of CoAST 2019* (pp. 57-70). Springer Singapore.

3. Bhuyan, K., Sah, A. K., & Sharma, H. (2019). PRACTICAL APPLICATION OF HIGH STRENGTH CONCRETE MATRIX FOR USE IN DEFENCE ESTABLISHMENTS. *In proceedings of UKIERI Concrete Congress* (pp. 90)

Dr. Pallab Jyoti Das

Patent: 1

1. Deb, S. K., Das, P. J., (2021). Hybrid buckling restrained brace with high damping capacity and manufacturing method thereof, Patent No. 508542, Date of Grant - 08 Feb, 2024

Internation Journals: 4

1. Das, P. J. & Deb, S.K., (2023). Experimental Study of Newly Developed Hybrid Buckling-Restrained Brace with Different Infill-Layer Geometries under Cyclic Loading. *Practice Periodical on Structural Design and Construction*, ASCE [Impact factor = 0.5, h-index = 37]. 28(4), 04023040, DOI: <https://doi.org/10.1061/PPSCFX/SCENG-1316>

2. Das, G., Das, P.J. & Deb, S.K., (2023). Seismic retrofit of torsionally coupled RC soft-storey building using short yielding core BRBs. *Journal of Building Engineering*, Elsevier [Impact factor = 1.64, h-index = 114], 65, 105742, DOI: <https://doi.org/10.1016/j.jobbe.2022.105742>

3. Das, P. J. & Deb, S. K., (2022), Seismic performance evaluation of a new hybrid buckling restrained brace (HyBRB) under cyclic loading, *Journal of Structural Engineering*, ASCE [Impact factor = 1.35, h-index = 189], 148(6), 04022069, DOI: [https://doi.org/10.1061/\(ASCE\)ST.1943541X.0003372](https://doi.org/10.1061/(ASCE)ST.1943541X.0003372)
4. Basar, T., Deb, S. K., Das, P. J., & Sarmah, M., (2021). Seismic response control of low-rise unreinforced masonry building test model using low-cost and sustainable un-bonded scrap tyre isolator (U-STI). *Soil Dynamics and Earthquake Engineering*, Elsevier [Impact factor = 1.33, h-index = 139], 142, 106561, DOI: <https://doi.org/10.1016/j.soildyn.2020.106561>

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1. Das, P. J. & Deb, S. K., (2023). Experimental study on open core hybrid buckling restrained braces with different debonding layer geometries, *ce/papers (Proceedings in Civil Engineering)*, Wiley, 6(3-4), 2344-2349, ISSN: 2509-7075, DOI: <https://doi.org/10.1002/cepa.2656>

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Ms. Nitisha Majumdar

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2. R.C.C Construction Vs Traditional Housing, "Comparative study with respect to Earthquake Vulnerability", ISBN:978-81-923052-5-7, EWMI- 2017. National Conference at Maniram-Dewan Trade Centre, ISBN:978-81-923052-5-7, EWMI- 2017.
3. 2nd International Conference on Civil Engineering for Sustainable Development Opportunities and challenges, CESDOC, Assam Engineering 2018. "Marshall stability test by replacing aggregates with over burnt bricks and marble stones, CESDOC, Assam Engineering 2018.
4. International Conference on Infrastructure Development, ICID, Jorhat Engineering College, 21-22 Dec, 2018 "Green building technology, ICID, Jorhat Engineering College, 21-22 Dec, 2018.
5. Research published in Indian institute of technology, Research and Industrial conclave Integration, 2024. "Developing the cost effective Natural Defluorination method from study of the nature of the source rocks that causes different degree of fluoride – concentration in ground water". (best poster Presentation award achieved)

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Mr. Rashidul Alam

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