

National and International Conference:

1. **Lukesh Parida & Sumedha Moharana**, “An optimized strategy for estimating the rate of hydration of concrete using PZT sensors”, In *10th ECCOMAS Thematic Conference on Smart Structures and Materials*, Patras, Greece.
2. Mayank Kamal, **Lukesh Parida & Sauvik Banerjee**, “Application of electromechanical impedance and particle swarm optimization for probabilistic damage localization of weld cracks in portal steel frame”, In *SPIE Smart Structures + NDE 2025, Vancouver, B.C., Canada*.
3. **Lukesh Parida**, Mayank Kamal & Sauvik Banerjee, “Probabilistic Damage Localization and Uncertainty Analysis of Weld Cracks in Portal Steel Frame Based on Vibration and Electromechanical Impedance Technique”, In *15th International Workshop on Structural Health Monitoring (IWSHM 2025)*, Stanford University, USA.
4. **Lukesh Parida**, Sumedha Moharana & Sourav Kumar giri, “Machine Learning Based Optimization Techniques for Predictive Strength of High Performance Concrete: Enhancing Sustainable Development”, In *IABSE Congress 2023, New Delhi*.
5. **Lukesh Parida**, Amer Iliyas Rather & Sauvik Banerjee, “Feasibility of Monitoring Bond Integrity in GFRP-Concrete Members Using Impedance-Based Monitoring Systems: A Novel Power Spectral Based Approach”, In *34th Annual Conference and Exhibition on Nondestructive Evaluation & Enabling Technologies (NDE 2024)*, Chennai, India. (Best Presentation Award)
6. **Lukesh Parida**, Bhavini Garg, Sumedha Moharana, Sourav Kumar Giri & Sauvik Banerjee, “Application of Extreme Learning Machine (ELM) Algorithm for Predicting Life Expectancy of Concrete Structures Using Nondestructive Test Results: A Comparative Study”, In *34th Annual Conference and Exhibition on Nondestructive Evaluation & Enabling Technologies (NDE 2024)*, Chennai, India.
7. **Lukesh Parida & Sumedha Moharana**, “Electromechanical impedance techniques for novel sn-ag alloy bond layer damage detection using experimental and numerical modelling”, In *International Conference on Condition Assessment, Rehabilitation & Retrofitting of Structures (CARRS) 2023*, Indian Institute of Technology (IIT) Hyderabad. (Best Presentation Award)
8. **Lukesh Parida**, Sumedha Moharana & Sourav Kumar Giri, “Detection and Prediction of Bond Degradation for Piezo Impedance based Structural Health Monitoring (PISHM) Using Hybrid Deep Learning Model”, In *4th Structural Integrity Conference and Exhibition (SICE) 2022*, Indian Institute of Technology (IIT) Hyderabad.
9. **Lukesh Parida & Sumedha Moharana**, “Multisensing Integration of Piezoelectric Sensors for The Health Monitoring of Constructional Steel Rebar: A Baseline Approach”, In *Young Researchers Conclave 2023, CSIR-CRRI, New Delhi*. (Best Poster award).
10. **Lukesh Parida & Sumedha Moharana**, “Application of Deep Learning Approach for Predicting Electromechanical Impedance Signal of Steel- Concrete Bond Failure: Baseline Free Approach”, In *9th International Workshop of Civil Structural Health Monitoring, CSHM-9 2024*.
11. **Lukesh Parida & Sumedha Moharana**, “Monitoring and damage detection of construction steel structure using piezo transducer for electro-mechanical impedance techniques”, In *2nd International Conference on Materials, Mechanics & Structures (ICMMS 2022)*, In NIT Calicut.
12. **Lukesh Parida & Sumedha Moharana**, “Strength evaluation and prediction of cement concrete by deep learning classification using nondestructive test results”, In *NDE 2021- conf. & Exhibition*, 9-11 Dec 2021, Bengaluru, India.
13. **Lukesh Parida**, Mayank Kamal & Sauvik Banerjee, “A Robust Data Driven Framework for The Automated Identification of Weld Damage in Portal Steel Frames Using Impedance- Based Diagnostics”, In *34th Annual Conference and Exhibition on Nondestructive Evaluation & Enabling Technologies (NDE 2024)*, Chennai, India.
14. **Lukesh Parida**, Sumedha Moharana & Rajalaxmi Pati, “Comprehensive Review on Advances in Artificial Intelligence for Prediction of Bond Strength Between Reinforcement and Concrete”, In *NCINTCE 2023, Bhubaneswar*.
15. **Lukesh Parida & Sumedha Moharana**, “Machine Learning Approach for Predicting Impedance Signatures of Construction Steel Structures in Various Tensile Pull Actions”, In *2nd International Conference on “Construction Materials and Structures (ICCMS-2022)*, jointly organized by NIT Calicut, University of Bath, Purdue university.
16. **Lukesh Parida & Sumedha Moharana**, “Flexural Bond Strength Measurement of reinforced concrete structure Using Piezo Impedance-Based SHM (PISHM): A Review”, In *4th Structural Integrity Conference and Exhibition (SICE) 2022*, Indian Institute of Technology (IIT) Hyderabad.
17. Mayank Kamal, **Lukesh Parida & Sauvik Banerjee**, “A novel Bayesian-optimized Gaussian mixture model classifier for weld damage detection in steel portal frames under limited impedance- based experimental data”, In *2nd International Conference on Condition Assessment, Rehabilitation & Retrofitting of Structures (CARRS) 2023*, IIT Roorkee.