

Day 1

November 14th, 2022 Monday

Time 12:30 PM - 1:30 PM

Themes Engineering Seismology and Seismotectonics

Technical session 1

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------|-------------------------|
| 1 | 632 | Understanding the Structure and Tectonic Configuration of Bengal Basin for Earthquake Magnitude Prediction | Mir Karim, Daya Shanker |

Day 1

November 14th, 2022 Monday

Time 12:30 PM - 1:30 PM

Themes Nonlinear Ground Response Analysis, Liquefaction, Earthquake Resistant Analysis and Design of Foundations

Technical session 2

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| 1 | 25 | Seismic Site Characterization and Ground Response Analysis of Railway Line on Eastern Dedicated Freight Corridor | Sandhya Joshi, Aakash Kumar |
| 2 | 362 | Seismic Analysis of Railway Track | Adesh Ghogre, Harshad Phadke, O R Jaiswal |
| 3 | 293 | A Critical Review on Soil Reliquefaction Resistance Using Physical Modelling Experiments | Gowtham Padmanabhan, B K Maheshwari |
| 4 | 319 | Development of Application Software for Lateral and Vertical Load Carrying Capacity of Piles | Aditya Patil, Shrabony Adhikary |

Day 1

November 14th, 2022 Monday

Time 12:30 PM - 1:30 PM

Themes Earthquake Response Analysis, Design and Construction

Technical session 3

Venue Jai Krishna Hall, IEI

| S. No. | Paper ID | Title | Author |
|--------|----------|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1 | 66 | Effect of Stiffness and Strength of URM Infillwalls On seismic Demands and Response of RC buildings with Open Ground Storey | Deviprasad G M, Rupen Goswami, Sunitha Palissery |
| 2 | 524 | Cyclic Performance Evaluation of Interlinked Coupler-box Confinement as a Local Retrofitting Technique | Naveen Kothapalli, R Siva Chidambaram, Pankaj Agarwal |
| 3 | 71 | Numerical Modelling of Infill Panel_Review and Application | Karabi Bharadwaj, Jayanta Pathak |
| 4 | 321 | A Strategy for Multi-hazard Response Analysis of Structures Using Real-time Hybrid Simulation | A S Yadukrishnan, Mohit Verma, C Bharathi Priya |
| 5 | 637 | Blast Resistance Capacity of Seismically Designed Building Frames | Sunita Tolani, Shiv Dayal Bharti, Mahendra Kumar Shrimali, Tushar Kanti Datta |

Day 1

November 14th, 2022 Monday

Time 2:30 PM - 4:00 PM

Themes Earthquake Hazard Assessment

Technical session 4

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1 | 28 | Statistical Analysis of Completeness Period and Seismicity Parameters of Earthquake Catalogue for Sree Padmanabhaswami Temple, Thiruvananthapuram District, Kerala | Hari Padmanabhan M P, Siddhardha R, Ramakrishna Hegde, Sreevalsa Kolathayar |
| 2 | 391 | GNU-Octave Tool for Probabilistic Seismic Hazard Assessment | Deepti Ranjan Majhi, Manish Shrikhande |
| 3 | 168 | A Comparative Study on Application of Machine Learning Algorithms in Ground Motion Prediction Equations | Ammar Ahmed, Maheshreddy Gade |
| 4 | 100 | Ground Motion Predictive Equations and Its Applicability in North-Eastern Indian Region: A Critical Appraisal | Prabhakar Kumar, Shiv Shankar Kumar |
| 5 | 161 | Spatial Distribution of the Gutenberg-Richter Parameters and Fractal Dimension and Their Correlations in Northeast India and Its Vicinity | R B S Yadav, Priyanka Chauhan, Manisha Sandhu, Rajiv Kumar, V Singh |
| 6 | 546 | Analytical Investigations on Seismic Behaviour of Open Ground Story Building Retrofitted with Shear Wall by Pushover Method | C K Madheswaran |
| 7 | 108 | Risk-targeted Seismic Design of Critical Buildings Using Force-based Method | Prakash Badal, Ravi Sinha |

Day 1

November 14th, 2022 Monday

Time 2:30 PM - 4:00 PM

Themes Seismic Evaluation and Retrofitting of Structures

Technical session 5

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 1 | 5 | Performance Analysis of a Random Rubble Stone Masonry Building with Different Configurations of Seismic Bands | Sonali Upadhyaya, Shivendra Kumar Maurya, Vaibhav Singhal, Martijn Schildkamp |
| 2 | 339 | Seismic Re-evaluation of Cable Bridge Using Modal Pushover Analysis | Bhavani Shanker Sharma, Mini K Paul, Y T Praveenchandra, N Madhusudana Rao, Raghupati Roy |
| 3 | 524 | Cyclic Performance Evaluation of Interlinked Coupler-box Confinement as a Local Retrofitting Technique | Naveen Kothapalli, R Siva Chidambaram, Pankaj Agarwal |
| 4 | 51 | Numerical Investigation of Steel Sheathed Cold Formed Steel Shear Wall Under Cyclic Loading Using Abaqus | Shashi Narayan, Boddula Koutilya |
| 5 | 52 | Structural Behaviour Assessment of Existing RC Buildings Under Earthquakes | Nagapurna Chandan Thammishetti, Gopi Krishna K |
| 6 | 110 | Comparative Performance Analysis of Post Tensioned Hybrid Concrete Shear Wall with Openings Under Monotonic and Cyclic Loading | Sneha Benoy, Asha Joseph |
| 7 | 127 | Cost-effective Strengthening Methodology for RCC Buildings by Jacketing against Failure due to Earthquake: A Study | Bajrabahu Dhananjay Narayan Deo, Alope Kumar Datta |

Day 1

November 14th, 2022 Monday

Time 2:30 PM - 4:00 PM

Themes Post-earthquake Rehabilitation / Earthquake Response Analysis, Design and Construction

Technical session 6

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1 | 81 | Response Reduction Factor of Open Ground Story Reinforced Concrete Buildings with and without Haunch | Amarendra Nath Shandilya, Mangesh Rajkumar Shendkar, Ayan Haldar, Pabitra Ranjan Maiti, Sasankasekhar Mandal |
| 2 | 485 | Heterogeneous Fusion of Sensor Data for Response Recovery During Earthquakes | S Adarsh, Samit Ray Chaudhuri |
| 3 | 97 | A Comparative Study of Seismic Performance of RC Frame-wall Structures Designed as per Various International Codes | Mansi Bhavnani, Rutvik Sheth |
| 4 | 375 | Optimum Parameters for Tuned Inerter Damper | Nachiket Khasare, Vikas Thakur, O R Jaiswal |
| 5 | 287 | Seismic Response of Multistory Building with Varying Stiffness Modifiers | Mohammed Mumtaj, Loka Venkata Krishna Reddy, Pronab Roy |
| 6 | 102 | A Fragility Analysis of Retrofitted RC Bridge Damaged Under Severe Earthquake | Alok Rathore, Rajeev Garg |
| 7 | 460 | Seismic Evaluation and Retrofitting of Reinforced Concrete Building Using Multiple Combination of FRP Wraps | Mayuri R Atal, Ratnesh Kumar, Onkar G Kumbhar, Sachin V Bakre |

Day 1

November 14th, 2022 Monday

Time 2:30 PM - 4:00 PM

Themes Liquefaction, Ground Improvement Techniques for Seismic Hazards

Technical session 7

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1 | 117 | Study of Liquefaction Potential at Jaigarh Port Using Standard Penetration Test Data and Consequences: A Case Study | Neeraj Kumar, Supratim Chanda, Manoj Kumar, Rajesh Prasad Shukla |
| 2 | 222 | Assessment of Liquefaction Potential of Allahabad, India: A Future Smart City | Keshav Kumar Sharma, Pallav Kumar, Manjari Singh, Ashhad Imam, Alvin Harrison |
| 3 | 481 | Liquefaction Susceptibility of Bottom Ash Under Cyclic Loading | L Abhijith, Rangaswamy K, Renjitha Varghese |
| 4 | 639 | Calibration of UBC3D-PLM Constitutive Model to Simulate the Dynamic Response of Earthen Embankment Resting on Liquefiable Soil | Abhijit Chakraborty, Vishwas Sawant |
| 5 | 144 | Investigations on Rubber-sand Mixture Reinforced with Geogrid as a Low-cost Geotechnical Seismic Base Isolation Technique | Tapan Suyal, Renjitha Varghese |
| 6 | 278 | Experimental Investigations on Pervious Concrete Piles in Saturated Ground Under Repeated Shaking Conditions | Yogesh R V, Ganesh Kumar S, Santha Kumar G |

Day 1

November 14th, 2022 Monday

Time 2:30 PM - 4:00 PM

Themes Seismic Instrumentation, Strong Ground Motion, Site Characterization and its Effects

Technical session 8

Venue Seismological Observatory

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1 | 38 | Influence of Source Offset on the Resolution of Dispersion Image | Ashhad Imam, Virendra Kumar, Keshav Kumar Sharma, Alvin Harison |
| 2 | 116 | Influence of Site-city Interaction on the Response of Buildings on Trapezoidal Basin | Neeraj Kumar, J P Narayan, Pooja Lohchab, Sanjay Kumar |
| 3 | 254 | Development of Soil Amplification Factors Using 1D and 2D Ground Response Analysis | Aakash Sharma, Shrabony Adhikary |
| 4 | 352 | Role of SH Wave in the Mapping of Shallow Subsurface | Jyoti Singh, A Joshi, Saurabh Sharma, Mohit Pandey |
| 5 | 399 | Site Amplification Study Using Strong Motion Data Recorded at Various Stations in India from Far-field Earthquakes | Sireesha Jaladi, Babita Sharma, Himanshu Mittal, O P Mishra |
| 6 | 136 | Risk Targeted Seismic Hazard Assessment In Uttarakhand Himalayas | Ravi Shastri, Yogendra Singh, Josodhir Das |
| 7 | 655 | Variation of Teleseismic P-Wave Spectra of the 2008 Wenchuan Earthquake Observed at Hi-net Seismic Array in Japan | Simanchal Padhy |

Day 1

November 14th, 2022 Monday

Time 4:30 PM - 5:30 PM

Themes Dynamic Properties of Soils and Ground Response

Technical session 9

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|
| 1 | 69 | Estimation of Shear Strain Magnitude Due to Impact Z Section Sheet Pile Driving | Vinoth B, Ambarish Ghosh |
| 2 | 279 | Small-strain Shear Stiffness and Strain-dependent Dynamic Properties of Gravel-rubber Mixtures | Gabriele Chiaro, Ali Tasalloti, Alessandro Palermo, Laura Banasiak |
| 3 | 373 | Importance of Multiple Geophysical Tests for Effective Subsurface Profiling | Ravinesh Kumar, Anbazhagan Panjamani, Ayush Kumar |
| 4 | 289 | Numerical Evaluation of the Seismic Performance of GSI Foundation Systems for Buildings Using Gravel-rubber Mixtures | Davide Forcellini, Gabriele Chiaro, Alessandro Palermo, Laura Banasiak |
| 5 | 417 | Dynamic Characterisation and Ground Response Analysis of Clay Soil Profiles | Rangaswamy K |

Day 1

November 14th, 2022 Monday

Time 4:30 PM - 5:30 PM

Themes Seismic Evaluation and Retrofitting of Structures

Technical session 10

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1 | 133 | Seismic Analysis of Vertical Asymmetric RC Building | Madhuri Seeram, Pramod Kumar |
| 2 | 163 | Seismic Evaluation Of RC Frame Designed by Forced Based Design & Direct Displacement Based Design | Bapugouda Biradar, Sitara Guled, Anoop Shirkol |
| 3 | 493 | In-plane Behavior of Un-reinforced Brick Masonry Walls Retrofitted with Partially Confined Reinforced-concrete Bands: Shake Table Experiments | Lakshmi Latha, Samit Ray Chaudhuri |
| 4 | 215 | Comparative Study of Fibre Based Frame Elements to Analyse Shear-critical RC Frames | Saroj Kumar Sahu, Arbind Kumar Singh |
| 5 | 250 | Seismic Evaluation of Eccentric Brace Frame Designed by Force Based Design and Performance Based Plastic Design Methods | Bapugouda Biradar, Anoop Shirkol, Basanagouda Patil |

Day 1

November 14th, 2022 Monday

Time 4:30 PM - 5:30 PM

Themes Damage Detection and System Identification

Technical session 11

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1 | 17 | Bayesian Model Updating in Time Domain by an Iterated Model Reduction Technique | Partha Sengupta, Subrata Chakraborty |
| 2 | 60 | Experimental Investigation for Quantifying Damage Considering Soil-structure Interaction Effect on a Small-scale Model | Saranika Das, Amitesh Baghel, Divya Grover, Koushik Roy |
| 3 | 214 | Experimental Verification of Improved SSI-COV Method for Health Monitoring of Base-excited RC structures | Arpita Ghosh, Arunasis Chakraborty, Anjan Dutta |
| 4 | 311 | A Novel Damage Indicator Evolved from Poincare Map for Detection and Localization of Seismic Damage in Structures with Nonlinear Breathing Crack | Sayandip Ganguly, Koushik Roy |
| 5 | 357 | Damage Identification of Bridge Under Vehicle Induced Vibration Using Empirical Mode Decomposition | Pankaj Kirthwan, Smita Kaloni |

Day 1

November 14th, 2022 Monday

Time 4:30 PM - 5:30 PM

Technical session 12

Venue Conference Room

Themes Dynamic Properties of Soils and Ground Response, Seismic Analysis and Design of Earth Retaining Structures, Offshore Foundations

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1 | 525 | Geotechnical Characterisation of Natural Sub-base and Subgrade Material for Pavements | Ashok Kumar, Shubham Kumar Kumawat, Mohit Jain, Sanyam Dangayach, Dhiraj Raj, Hari Krishan Sharma |
| 2 | 120 | Effect of Reinforced Soil Interaction with Other Components on Static and Dynamic Performance of MSE Wall | Sajan Malviya, Prishati Raychowdhury |
| 3 | 259 | Suitability of Foam Concrete and Confined Masonry for Retaining Walls Application in Seismically Active Regions: A Review | Abhishek Kamisetty, Abhishek Kumar, Indu Siva Ranjani Gandhi |
| 4 | 354 | Numerical Analysis of a Rigid Wall Retaining Soil Reinforced With C&D Waste | A R Prajapati, Hasan Rangwala |
| 5 | 304 | Behavior of Monopiles for Offshore Wind Turbines in Clayey Soil for Gulf of Khambhat Region | Rituraj Singh Sujawat, Ritesh Kumar |

Day 1

November 14th, 2022 Monday

Time 4:30 PM - 5:30 PM

Themes Earthquake Prediction and Early warning System

Technical session 13

Venue Seismological Observatory

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1 | 175 | Study of Anomalous Behavior of Atmospheric Parameters- As an Earthquake Precursors for Himalayan Region Earthquakes | Senthil Kumar M, Venkatanathan Natarajan |
| 2 | 401 | ROSERS - A Deep Learning Framework for Earthquake Early Warning and its Interpretation | Jawad Fayaz |
| 3 | 565 | Fragility Curves for Structures Using Energy Criterion | Prahlad Prasad, Gopinath C |
| 4 | 418 | Early Warning System: An Efficient Earthquake Disaster Mitigation Tool | Pankaj Kumar, Govind Rathore, Kamal, M L Sharma, Ravi Jakka, Pratibha, Ashok Kumar |

Day 2

November 15th, 2022 Tuesday

Time 9:45 AM - 11:00 AM

Themes Strong Ground Motion/Site Characterization

Technical session 14

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 156 | Assessment of Double Resonance from Microtremor Observations for Jammu Region in India | Abdullah Ansari, Falak Zahoor, K S Rao, A K Jain, Aashi Pal, Neeraj Kumar, Sakib Majid Hajam, Pallavi Shukla, Krishna Sharma, Faizan Fayaz, Mir Akhtar Yousuf, Shakir Riyaz, Umer Altaf Khan |
| 2 | 327 | Quantification of Ridge-weathering Effects on the Simulated Ground Motion Characteristics Across 2D and 3D Topography Models | Vishal, J P Narayan |
| 3 | 608 | A Fast Staggered Grid Finite Difference Modelling of Rayleigh Wave | Mrinal Bhaumik, Tarun Naskar |
| 4 | 564 | Characteristics of Strong Ground Motions for Delhi National Capital Region (NCR) Using Small to Moderate Size Earthquakes | Abhishek, Manisha Sandhu, Babita Sharma |
| 5 | 191 | 1D Velocity Model for NW India in and Around Delhi | Deepak Kumar, G Suresh, S C Gupta, M L Sharma, Hasbi Ash Shiddiqi |
| 6 | 604 | Estimation of Site Amplification Factor and Predominant Frequency in and Around Panchkula City, Haryana, India | Manisha Sandhu, R B S Yadav, Dinesh Kumar, Abhishek Kumar |

Day 2

November 15th, 2022 Tuesday

Time 9:45 AM - 11:00 AM

Themes Dynamic Soil-Structure Interaction, Seismic Safety of underground and Buried Structures and Pipelines

Technical session 15

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1 | 306 | Linear Spring Constants of Soil for Pile Groups for the Nuclear Power Plants | Mohd Firoj, B K Maheshwari |
| 2 | 483 | Soil-structure Interaction Effect on a Multi-storied Building with Pile Foundation Considering Linear Approach | Sayanti Banerjee, K Bhattacharya |
| 3 | 541 | Response of a Nuclear Containment with Soil Underneath Under Earthquake Excitation | Charity Marbaniang, Kamal Bhattacharya |
| 4 | 118 | Seismic Assessment of Deep Tunnel in Near Fault Ground Motion | Bhavesh Banjare, Swetha Veeraraghavan |
| 5 | 198 | Inelastic Seismic Behaviour of RC Buildings with floating Columns Considering Soil Structure Interaction | Jagan P, Josephantony Visuvasam |

Day 2

November 15th, 2022 Tuesday

Time 9:45 AM - 11:00 AM

Themes Earthquake Response Analysis, Design and Construction/Damage Detection and System Identification

Technical session 16

Venue Jai Krishna Hall, IEI

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1 | 186 | Seismic Performance Assessment of Reinforced Concrete Moment Resisting Frame Designed by Force Based Design Method and the Performance Based Plastic Design Method | Rohit Vyas, Anoop Shirkol |
| 2 | 479 | Structural Performance of Retrofitting Strategies for Dry Stone Masonry Arch Structures | Hina Gupta, Mahua Mukherjee, Pankaj Agarwal, N Gopalakrishnan |
| 3 | 467 | Effectiveness of DDBD Procedure for RC Frame Buildings | Yash Deshpande, Ratnesh Kumar, Onkar G Kumbhar |
| 4 | 480 | Seismic Behaviour of Dry Stack Stone Masonry - A Numerical Study | Hina Gupta, N Gopalakrishnan, Pankaj Agarwal, Mahua Mukherjee |
| 5 | 178 | Experimental Investigation of Seismic Response of Hybrid Shear Wall with External Energy Dissipating Reinforcement | Ankiparna Guha, Suresh R Dash, Goutam Mondal |
| 6 | 206 | Non-linear Dynamic Behaviour of the Multi-arch Gallery Masonry Bridge of Kalka Shimla Mountain Railway | Vinay Shimpi, Madappa Vr Sivasubramanian |

Day 2

November 15th, 2022 Tuesday

Time 12:30 PM - 1:30 PM

Themes Strong Ground Motion/Site Characterization

Technical session 17

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1 | 204 | Influence of Ground Motion Characteristics on the Seismic Vulnerability of Bridges | Vivek Singh, Shivang Shekhar, Needhi Kotoky, Govind Gaurav |
| 2 | 48 | Seismic Fragility Assessment of Aging Highway Bridge Considering Climate Change Effects | Chirdeep N R, Shivang Shekhar, Bahurudeen A |
| 3 | 62 | Seismic Risk Assessment of Base-isolated Liquid Storage Tanks with Friction-pendulum System Using Vector-valued Intensity Measures | Ketan Sengar, Mahesh Reddy Gade, Sandip Saha |
| 4 | 429 | Modelling of Empirical Accelerograms of 1999 Chamoli Earthquake (Himalaya) Using a Modified Hybrid Approach | Anjali Sharma, Dinesh Kumar, Ajay Paul |
| 5 | 369 | Seismic Risk Assessment of Nagpur City Using Google Maps | Mann Mehta, Anusha Pandey, Ratnesh Kumar, Rajashree Kotharkar |

Day 2

November 15th, 2022 Tuesday

Time 12:30 PM - 1:30 PM

Themes Computational Soil Dynamics

Technical session 18

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| 1 | 36 | Preliminary Studies on Developing a Physics-Based Smoothed Particle Hydrodynamics Model for Landslides | Nadia Mubarak, Ritesh Kumar |
| 2 | 54 | Effect of Saturated Porous Soil Medium on Seismic Wave Propagation | Arun M George, Swetha Veeraraghavan |
| 3 | 123 | Numerical Solution for 1-D Consolidation of Partially Saturated Soil Under Cyclic Loading | Deepak Singh, Siddharth Mehndiratta, Rameshwar Vishwakarma |
| 4 | 172 | Performance Evaluation of Saturated Slope Subjected to Repeated Shaking Events Using 1-G Shaking Table Experiments | Jeeva S K, Godson M D, Ganesh Kumar S |

Day 2

November 15th, 2022 Tuesday

Time 12:30 PM - 1:30 PM

Themes Seismic Safety of Bridges and Dams

Technical session 19

Venue Jai Krishna Hall, IEI

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1 | 107 | Vibration Characteristics of Gravity Dams for Varying Reservoir and Tailwater Heights, and Interaction Effects | Aniket Tidke, Shrabony Adhikary |
| 2 | 130 | Seismic Response Analysis of Concrete Gravity Dam Using Response Spectrum Analysis and Response History Analysis | Shiyam Sundar K P, M K Shrimali, S D Bharti, Aditi Vibhute |
| 3 | 134 | Effect of Earthquake Directivity on Behaviour of PSC I-Girder Bridge | Arbab Adil, Md Imteyaz Ansari |
| 4 | 181 | Lateral Capacity of Concrete Bridge Piers with Steel Rebar Reinforcement and Glass Fibre Reinforced Polymer Rebar Reinforcement | Prateek Maheshwari, Hema Malini Periyasamy, Kamatchi Palaniyandi, Sreekala R |
| 5 | 217 | A Parametric Study of Seismic Behavior of Concrete Gravity Dam Using Abaqus | Rahul Chaudhary, Vishisht Bhaiya, Param Gajbhiye |
| 6 | 296 | Effectiveness of Seismic Isolation of Highway Bridge on Design of Well Foundation | Suhasini Madhekar |

Day 2

November 15th, 2022 Tuesday

Time 5:15 PM - 6:15 PM

Themes Earthquake Hazard Assessment

Technical session 20

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 342 | Seismically Induced Landslide Hazard Analyses for a Road Corridor in the Lower Himalayas | Arun Tyagi, Ritu Raj Nath, Josodhir Das, M L Sharma |
| 2 | 654 | Local Seismicity around Tehri Dam, Garhwal Himalaya | M L Sharma, Subhash Chandra Gupta, J P Narayan, Josodhir Das, Arup Sen, Sanjay Kr Jain, A K Jindal, Subhash Patel, Prajawal Tandekar, Avichal Rastogi, Rajeev Vishnoi, Atul Jain, Virendra Singh, S K Saxena |
| 3 | 167 | Seismic Hazard Analysis Considering the Effect of the Shape, Size and EQ Distribution of Seismic Sources for Different Locations in Sikkim, NE India | Niranjan Borah, Joy Kumar Mondal, Abhishek Kumar |
| 4 | 341 | Developing a Comprehensive Historical Tsunami Database for the Indian Ocean | Nazeel Sabah, Daya Shanker |
| 5 | 348 | Ground Motion Prediction Equation for NW Himalaya and Its Surrounding Region | Vandana, Harendra K Dadhich, Himanshu Mittal, O P Mishra |

Day 2

November 15th, 2022 Tuesday

Time 5:15 PM - 6:15 PM

Themes Special Materials, Structures and Systems

Technical session 21

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 1 | 351 | Effect of Corrosion of RC Pier on Seismic Performance of Bridges | Nagaraju A S V, Ratnesh Kumar |
| 2 | 21 | Structural Behaviour of Precast Concrete Sandwich Panel: A Review | Abhinav Anand, Vaibhav Singhal |
| 3 | 436 | A Promising Alternative for Low Rise Buildings in Seismic Regions: EPS Core Sandwich Panel Structural System | Adil Ahmad, Yogendra Singh |
| 4 | 497 | Experimental Investigation on Flexural Behavior of Precast Beam-beam Connections Using Mechanical Connectors | Moka Vijay Tarun Kumar, R Siva Chidambaram |
| 5 | 77 | Influence of Biaxial Interaction in Bouc-Wen Hysteresis Model Used for Modeling High Damping Rubber Bearing Under Bi-directional Excitation | Shivam Ojha, Amit Shelke |

Day 2

November 15th, 2022 Tuesday

Time 4:30 PM - 5:30 PM

Themes Seismic Evaluation and Retrofitting of Structures

Technical session 22

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1 | 276 | Evaluation and Prediction of Tensile Strength of Steel Fiber Concrete | Srilakshmi Lolla, Romanbabu Meetei Oinam |
| 2 | 314 | Strengthening of Reinforced Concrete Beams for Shear Using Concrete Jackets | Vishnu T Unni, Amlan K Sengupta |
| 3 | 404 | Seismic Performance of Different Typologies of Stone Masonry Houses in India | Rohan Vashisht, Pravin Kumar Venkat Rao Padalu, Mitesh Surana |
| 4 | 169 | State of the Art Review on Performance Based Retrofitting of Structures | J Prakashvel, C Umarani, K Sathiskumar |
| 5 | 447 | Seismic Strengthening of Precast Beam Column Connection Using Stainless Steel Wire Mesh (SSWM) | Rinkesh Makawana, Digesh Joshi, Paresh Patel |

Day 2

November 15th, 2022 Tuesday

Time 4:30 PM - 5:30 PM

Themes Seismic Safety of non-structural Components, Equipment and Services in Buildings

Technical session 23

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1 | 397 | Seismic Safety of Post Installed Anchors | Kamalika Kundu, Shounak Mitra |
| 2 | 347 | Challenges in Seismic Qualification of Substation Equipment | Yamini Gupta, Panneer Selvam, Nagesh Babu |
| 3 | 376 | Nonlinear Seismic Analysis of Nuclear Containment with Soil-structure Interaction: Study on Stresses and Damage Criteria | Sourav Bhattacharjee, Kamal Bhattacharya |
| 4 | 526 | Seismic Margin Assessment of Elevated RCC Water Tank Supported on RCC Circular Shaft | Vipin Kumar Sharma, Paresh Kothari, Praveen Kumar, Leni Ranjith, Girish V Shenai |
| 5 | 236 | Seismic Behaviour of Freestanding Radioactive Waste Overpacks Using Multi Body Dynamics Approach | Kumar Binu, Brar Sunny, Pimparkar, H R |
| 6 | 656 | Enhancing the Seismic Performance of Buildings using Steel Spring Elements as Base Control and Wall Damper as Supplementary Damping Devices | Pratik Bagaria, Randip Ghosh |

Day 2

November 15th, 2022 Tuesday

Time 4:30 PM - 5:30 PM

Themes Engineering Seismology and Seismotectonics/Site Characterization

Technical session 24

Venue Seismological Observatory

| S. No. | Paper ID | Title | Author |
|--------|----------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1 | 209 | Spatial Distribution of Stress Orientation by Inversion of Focal Mechanism Solutions Using MSATSI: A Case Study Across Japan Trench | Sucheta Das, Sandeep, Sonia Devi, Himanshu Mittal, Parveen Kumar, Monika |
| 2 | 80 | Correlation Between Cone Tip Resistance and Shear Wave Velocity at Quaternary Alluvium | Priyam Mishra, Abhik Paul, Pradipta Chakraborty |
| 3 | 345 | Assessment Of Proxy-Based Vs30 Estimation in Roorkee, Uttarakhand | Mudit Srivastava, M L Sharma |
| 4 | 57 | Three Dimensional Crustal Velocity Structure of Tehri, Garhwal Himalaya | Rajni Modi, S Mukhopadhyay, M L Sharma |

Day 3

November 16th, 2022 Wednesday

Time 9:45 AM - 11:00 AM

Themes Earthquake studies using GIS/GPS/SAR/Remote Sensing

Technical session 25

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 1 | 39 | Co-seismic Deformation Of Iran, 2021 Earthquake Using DInSAR Technique | Hardeep Panchal, Ashish Bahuguna, Arun Kumar Saraf, Josodhir Das |
| 2 | 426 | A Cluster-based Seismic Risk Assessment: Economic Loss Using GIS for Jaipur Sub-urban Area | Vijay Anand, Md Mahatab, Ashu Sharma, Dhiraj Raj, Mahesh Kumar Jat, Rajib Sarkar, Shilpa Pal |
| 3 | 584 | Detection of Liquefaction Phenomenon from the 2015 Nuweiba Earthquake Using Remote Sensing Data | Hrik Chaudhury, Abhishek Kumar, Rishikesh Bharti |
| 4 | 620 | Use of GIS for Hypsometric Analysis for Determining Erosion Proneness of Mandakini Watershed, Lesser Himalaya, Uttarakhand, North India | James Xavier Paul, Daya Shanker |
| 5 | 374 | Geo-factor Inference Modelling with Empirical Susceptibility Weights Approach for GIS-based Seismic Hazard Mapping of Thiruvananthapuram City | Madhu Mohan Velapgy, Suresh E S M |

Day 3

November 16th, 2022 Wednesday

Time 9:45 AM - 11:00 AM

Themes Seismic Slope Stability Analysis, Computational Soil Dynamics

Technical session 26

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1 | 30 | Earthquake Induced Damage Assessment of Coal Mine Overburden Dump Slope Using Extended Finite Element Method Coupled With Voronoi Tessellation Scheme | Madhumita Mohanty, Rajib Sarkar, Sarat Kumar Das |
| 2 | 137 | 13Th August 2021 Chenab River Coalescent Disaster: A Geo-Informatics Based Investigation | Deepti Dwivedi, Arun Kumar Saraf, Josodhir Das |
| 3 | 140 | Seismic Stability Analysis of Saturated Slope Reinforced with Pervious Anti-slide Piles Subjected to Repeated Shaking Using Shaking Table Tests | Ram Kumar R, Jeeva S K, Madhiyarasu P, Ganesh Kumar S |
| 4 | 555 | Numerical Studies of a Laminar Soil Box for Seismic SSI Effects of Nuclear Facilities | Raj Banerjee, Srijit Bandyopadhyay, Yogita M Parulekar, Jayanta Chattopadhyay |

Day 3

November 16th, 2022 Wednesday

Time 9:45 AM - 11:00 AM

Themes Structural Response Control

Technical session 27

Venue Jai Krishna Hall, IEI

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1 | 31 | Deep Tuned Sloshing Damper with Multiple Horizontal Baffles for Structural Vibration Control | Tanmoy Konar, Aparna Dey Ghosh |
| 2 | 33 | Experimental Investigation of Direct and Mitigated Pounding in Base-Isolated Frames with Adjacent Rigid Walls | Siddalingappa S, R S Jangid |
| 3 | 37 | Whither EBFs Instead Of CBFs For EQRD | Prateek Narayan Panda, Vipul Prakash, Anupam Chakrabarti |
| 4 | 61 | A Comparative Study of the Performances of FPS And LRB Isolators Installed in Building | Aditi Vibhute, Shiv Dayal Bharti, Mahendra Kumar Shrimali, Shiyam Sundar K P |
| 5 | 65 | Seismic Vibration Control of Jacket Platform with the Aid of Tuned Liquid Dampers | Rajib Sardar, Subrata Chakraborty |
| 6 | 516 | Mechanical Properties of Friction Damper Using Different Layer of Interface | Kushal Chauhan, Amit Goyal, R Siva Chidambaram |

Day 3

November 16th, 2022 Wednesday

Time 12:30 PM - 1:30 PM

Themes Seismic Vulnerability, Risk and Resilience Assessment

Technical session 28

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1 | 142 | Probabilistic Seismic Vulnerability Assessment of RC Frame Building Considering Time-dependent Deterioration | Athul Nath, Needhi Kotoky, Shivang Shekhar |
| 2 | 646 | Modified Framework of Selection of Input Ground Motion for Fragility Analysis of the Structure | Srijit Bandyopadhyay, Yogita M Parulekar, Aniruddha Sengupta |
| 3 | 463 | ML-based Surrogate Model for RC Bridge Pier Collapse Fragility Prediction | Narinder, Kundan Goswami, Supratik Bose, Arnab Banerjee, Souvik Chakraborty |
| 4 | 32 | Effects of Open Stories on Expected Seismic Losses in Hilly Buildings | Yati Aggarwal, Sandip Saha |
| 5 | 159 | Influence of Epistemic Uncertainty on the Seismic Vulnerability of Indian Code-compliant RC Frame Building | Kaushik Gondaliya, Vishisht Bhaiya, Sandip Vasnwala, Atul Desai, Jignesh Amin |

Day 3

November 16th, 2022 Wednesday

Time 12:30 PM - 1:30 PM

Themes Seismic Slope Stability Analysis, Code Provisions on Earthquake Resistant Design

Technical session 29

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1 | 260 | Role of Hydrodynamic Forces on the Seismic Response of a Dam | Dhananjay Vyas, Jithin Zachariah, Alla Kranthikumar, Ravi Jakka |
| 2 | 307 | Three-dimensional Slope Stability Under Bidirectional Pseudo-static Seismic Load | Vaibhav Sharma, Dhiraj Raj, Rajesh Gupta |
| 3 | 370 | Time Series Analyses of Bhatwari Landslide Triggered by 1991 Uttarkashi Earthquake | Neha Gupta, Josodhir Das, Debi Kanungo |
| 4 | 59 | Formulation of Response Reduction Factor for Wall Type Bridge Piers | Debaraj Bailung Sonowal, Jayanta Pathak |
| 5 | 530 | Microseismic Analysis Using Event Count and Potency Displacement for Stability Evaluation of an Underground Cavern | Vikalp Kumar, Balasubramaniam V R, Divyalakshmi K S |

Day 3

November 16th, 2022 Wednesday

Time 2:30 PM - 4:00 PM

Themes Earthquake Response Analysis, Design and Construction

Technical session 30

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------|-----------------------------------|
| 1 | 499 | Connection Design Between Steel Brace and RC Frame Using Post-installed Anchors | Devyani Tewatia, Ashwin Kumar P C |
| 2 | 383 | Seismic Response of RC Buildings with Shear Wall Incorporating Soil-structure Interaction | Yash Verma, Rama Debbarma |
| 3 | 414 | Nonlinear Static and Dynamic Behaviour of RC Wall-frames Using Fiber Inelasticity in Structural Elements | Arpan Singh, Sunitha Palissery |
| 4 | 310 | Strength of Masonry Infill RC Frame Influenced by Weak and Strong Type RC Frames | Kaushal Patel, R N Dubey |
| 5 | 368 | A Variational Mode Decomposition Approach for Modal Identification of Structures | Shivam Gupta, Smita Kaloni |
| 6 | 98 | Seismic Design of Periphery RC Beams in Buildings with Large Plan Aspect Ratio | Prashant Bansode, Rupen Goswami |
| 7 | 532 | Performance Based Seismic Design of Structures by Considering Local Site Effects | Sahil Talankar, Nisha Naik |

Day 3

November 16th, 2022 Wednesday

Time 2:30 PM - 4:00 PM

Themes Structural Response Control

Technical session 31

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1 | 95 | Experimental Investigation on Small-scale MR Damper with Frequency Variation for Seismic Resistant Structure | S Vivekananda Sharma, G Hemalatha |
| 2 | 141 | Seismic Protection of Reinforced Concrete Structure Using Combined Passive Vibration Controlling Device | Nitin Kataria, Rupal Shriwas, Pranay Rathi |
| 3 | 151 | Analysis of flexural Vibrations and Control of a Periodic Rail-track System | Mohd Iqbal, Anil Kumar, Mahesh Murugan Jaya |
| 4 | 164 | Passive Vibration Control of Bridges: A State-of-the-art Review | Diptarka Ghosh, Tathagata Banerjee, Diptesh Das |
| 5 | 232 | Development of Variable Frequency Damper for Controlling Vibration and Seismic Response of Piping System | Kumar Sarvajit, Kumar Binu, Reddy G R |
| 6 | 633 | Numerical Analysis of Steel Beam Column Connection Assembled with Replaceable Fuse Under Cyclic Loading | Gaurang Vesmawala, Monedra Pratap, Rudradatta Mehta |
| 7 | 253 | Seismic Response of Idealized Three Storey Frame Equipped with Magnetorheological-shape Memory Alloy hybrid Damper | Jay Gohel, Anant Parghi |

Day 3

November 16th, 2022 Wednesday

Time 2:30 PM - 4:00 PM

Themes Earthquake Response Analysis, Design and Construction

Technical session 32

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| 1 | 511 | Effect of URM Infills on Seismic Behaviour of RC Frame Building: Part-1 | Shivam Gupta, R N Dubey |
| 2 | 89 | Site Specific Response Spectrum Analysis of Various Wall-frame Composite Tall Buildings | Jenish Patel, Paresh Patel |
| 3 | 444 | A State-of-the-art Review on Metallic Dampers based on Different Yielding Mechanism | Mohan Bajaj, Pankaj Agarwal |
| 4 | 47 | Dynamic Response Characteristics of RC Buildings with Irregularities | Sakshi Sonawane, Pratibha Pansare, Renuka Bhapkar, Supriya Yewale, Suhasini Madhekar |
| 5 | 6 | Experimental Study on Radius-Cut RBS And CFT Connection with Bidirectional Bolts Under Cyclic Loadings | Subhra Paul, Sajal K Deb |
| 6 | 15 | Design Methodology for Cold-Formed Steel Wall Framed Buildings Under Lateral Loadings | Chanchal Sonkar, Abhinav Dewangan, Achal Kumar Mittal, Ashok Kumar |

Day 3

November 16th, 2022 Wednesday

Time 2:30 PM - 4:00 PM

Technical session 33

Venue Seismological Observatory

Themes Seismic Vulnerability, Risk and Resilience Assessment

| S. No. | Paper ID | Title | Author |
|--------|----------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1 | 83 | Recovery-based Seismic Resilience Assessment of IS Code-conforming RC Buildings | Mohammad Rafiq Joo, Prakash Badal, Ravi Sinha |
| 2 | 360 | Seismic Life Cycle Cost Analysis of Indian RC Building Considering Hazard Uncertainty | Satwik Rayjada, Jayadipta Ghosh, Meera Raghunandan |
| 3 | 458 | Importance of Epistemic Uncertainty on Seismic Analysis of RC Wall-frame Buildings | Nabajit Sarkar, Kaustubh Dasgupta |
| 4 | 192 | Anomalous Deviations in Atmospheric Parameters as Pre-earthquake Signals - A Case Study on Sumatra Region Earthquakes (M-6.0) | Ramya Jeyaraman, Venkatanathan Natarajan |
| 5 | 475 | A Critical Review of Existing Building Regulations and Bye-laws in Hilly Regions Of India | Paulami Das Choudhury, Dhiraj Raj |
| 6 | 461 | Development and Implementation of a Regional Earthquake Early Warning System in Northern India | Govind Rathore, Pankaj Kumar, M L Sharma, Kamal, Ravi Jakka, Ashok Kumar |

Day 3

November 16th, 2022 Wednesday

Time 2:30 PM - 4:00 PM

Themes Code Provisions on Earthquake Resistant Design, Experimental Soil Dynamics

Technical session 34

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| 1 | 302 | Inclusion of Fatigue Checks in Current IS Codes for Monopole and Stack Structures | Krishna Sahakari, Sahil Talankar, Yogita Gaude |
| 2 | 24 | Evaluation of Dynamic Properties of MICP Treated Ennore Sand Through Bender Element Test | Nilanjana Banik, Rajib Sarkar |
| 3 | 424 | Effect of Vibration Induced by Dynamic Tests on an Adjacent Building - Finite Element Investigations | Bharathi M, Dhiraj Raj, R N Dubey |
| 4 | 312 | Drained and Undrained Response of Fully Saturated Specimen in Resonant Column Tests Subjected to Large Number of Torsional Vibrations | Ninad Sanjeev Shinde, Jyant Kumar |
| 5 | 657 | Correlation between Shear Wave Velocity (V_s) and Corrected SPT Resistance (N) for Bharuch Region using MASW Technique | Prabhakar Vishwakarma, Amit Prashant |

Day 3

November 16th, 2022 Wednesday

Time 4:30 PM - 5:30 PM

Themes Seismic Evaluation and Retrofitting of Structures

Technical session 35

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 86 | Parametric Finite Element Analysis of Confined Masonry Walls Strengthened with Fabric Reinforced Cementitious Matrix | Akshay Gupta, Vaibhav Singhal |
| 2 | 619 | A Review of Seismic Safety Measures for the Construction of New Stone Masonry Houses | Rohan Vashisht, Pravin Kumar Venkat Rao Padalu, Mitesh Surana |
| 3 | 651 | Machine Learning Based Seismic Drift Response Estimation of Buckling-restrained Braced Frames | Nalajala Jagruthi, Komuravelli Sharathchandran, Muhamed Safeer Pandikkadavath, Sujith Mangalathu, Kaitha Manasa Reddy, Ashwin Nair, Dipti Ranjan Sahoo |
| 4 | 405 | Seismic Retrofitting of Existing Stone Masonry Houses: An Overview | Rohan Vashisht, Pravin Kumar Venkat Rao Padalu, Mitesh Surana |
| 5 | 91 | A Comparative Study of Computational Modelling Frameworks for Structural Assessment of Reinforced Concrete Beam | Onkar Mishra, Putul Halidar, Amar Nath Roy Chowdhury |

Day 3

November 16th, 2022 Wednesday

Time 4:30 PM - 5:30 PM

Themes Structural Response Control

Technical session 36

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1 | 280 | Parametric Study on the Self-centering Buckling-restrained Braces Based on Post-tensioned Composite Cables | Subhrajyoti Jena, Dipti Ranjan Sahoo |
| 2 | 283 | Effect of Semi Active Tuned Mass Damper on Seismic Response of Structure with Soil Structure Interaction | Shuvadeep Panchanan, Praveen Kumar, Leni Ranjith, Girish Shenai |
| 3 | 298 | Seismic Pounding Mitigation of Two Adjacent Reinforced Concrete Buildings with Bracing System | Rama Debbarma, Nupur Saxena |
| 4 | 308 | Parametric Study of Base Isolation System for Nuclear Power Plant | Vatsal Joshi, Devesh Soni |
| 5 | 323 | Effect of Optimum Control Input in Seismically Excited Structure Considering Modal Control Spillover | Abhishek S, Sanjukta Chakraborty |

Day 3

November 16th, 2022 Wednesday

Time 4:30 PM - 5:30 PM

Themes Seismic Testing of Structures and Equipment

Technical session 37

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| 1 | 101 | Damping Characteristics of Next-gen Masonry Infilled RC Panels: Experimental Investigations | Tushar Bhoraniya, Sharadkumar Purohit |
| 2 | 218 | Influence of Bearing Plate on Stiffened Cleat Angle J-Bolt Precast Beam Column Connections Under Cyclic Loading | Vidjeapriya R, Saranya V S, Jaya K P |
| 3 | 241 | Understanding the Effect of Localized Impacts in Seismic Response of Electrical Cabinets and Control Panels | Sugandha Singh, Abhinav Gupta |
| 4 | 502 | Improving the Lateral Response in Infilled Frames Through Energy Dissipating Hysteretic Infill System Based on Friction and Elastomeric Resistance | Nidhin Pachappoyil, Pankaj Agarwal |
| 5 | 648 | Dynamic Behaviour of Railway-bridges: A Review of Code Provisions for Passengers' Comfort and Operational Safety | Mohit Khajuria, Yogendra Singh |

Day 3

November 16th, 2022 Wednesday

Time 4:30 PM - 5:30 PM

Themes Earthquake Hazard Assessment

Technical session 38

Venue Seismological Observatory

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------|-------------------------------------------------------------------|
| 1 | 177 | Probabilistic Seismic Hazard Assessment of North East India | C Lallawmawma, M L Sharma, J Das |
| 2 | 216 | Seismic Landslide Hazard Assessment of Mandi Town, Himachal Pradesh | Akriti Kothiala, Partha Sarathi Nayek, Maheshreddy Gade, K V Uday |
| 3 | 305 | Probabilistic Seismic Hazard Assessment for Assam, North-East India | Mayuri Borah, R N Dubey, M L Sharma |
| 4 | 103 | Probabilistic Mapping of Ground Displacement Hazard | Phibe Khalkho, Ishwer Dutt Gupta |

Day 3

November 16th, 2022 Wednesday

Time 4:30 PM - 5:30 PM

Themes Seismic Resilience Life Line and Urban Systems, Others

Technical session 39

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1 | 174 | Numerical Study on One-dimensional Aperiodic Foundations for Seismic Isolation of Structures | Sanjay Kumawat, Sumiran Pujari, Manish Kumar, Arghadeep Laskar |
| 2 | 50 | Optimization of Single-track PSC I-Girder for Metro Viaduct | Ahmed Saeed Kidwai, Ibadur Rahman, Md Imteyaz Ansari |
| 3 | 243 | Geotechnical Seismic Base Isolation Using Rubber Sand Mixtures - Review | Divyasree S L, Jithin K M, Renjitha Varghese |

Day 3

November 16th, 2022 Thursday

Time 7:30 PM – 8:15 PM

Themes Structural Response Control

Technical session 40

Venue Jai Krishna Hall, IEI

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 1 | 332 | Comparative Performance Evaluation of Conventional and Base Isolated Building Including Life Cycle and Cost Analysis | Mayur J Patel, Devesh P Soni |
| 2 | 358 | Understanding the Torsional Response of Unbonded Fiber Reinforced Elastomeric Isolators: A Finite Element Study | Ambili P, Mohan S C, Sistla Sai Teja |
| 3 | 119 | Comparison of Base Isolation and Concentric Braced Frame Systems for EQRD: A Case Study | Rakshit Selot, Prateek Narayan Panda, Vipul Prakash |
| 4 | 396 | Comparative Analysis of Base Isolation and Fixed Base Irregular Structures | Bush R C, Anoop Shirkol, Sruthi J S |
| 5 | 419 | Effectiveness of Friction Pendulum System in Controlling Structural and Non-structural Responses of Short-period Reinforced-concrete Buildings at Near-fault Sites | Iqra Latif, Arnab Banerjee, Mitesh Surana |
| 6 | 545 | Seismic Response of Reinforced Concrete Frames Resting on Hill Slopes | Saurav Verma, Hrishikesh Dubey |

Day 4

November 17th, 2022 Thursday

Time 9:00 AM - 11:00 AM

Themes Seismic Vulnerability, Risk and Resilience Assessment

Technical session 41

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1 | 326 | Effect of Randomness of Slip and Source Time Function on Pseudo-dynamically Simulated Ground Motion Characteristics | Vishal, Lav Joshi, J P Narayan |
| 2 | 601 | Chaos Game Representation of Indian Plate Seismicity | Cyril Shaju, Kamal |
| 3 | 653 | December 01, 2020, Haridwar, Earthquake: Fault Plane Solution and Tectonic Implications | Pooja Mahto, Subhash Chandra Gupta |
| 4 | 271 | 2020 Tuipuiral Earthquake Review | Rebecca Ramhmachhuani, C Lallawmawma, H Laldintluanga, M L Sharma, K Seshagiri Rao, A K Jain, Laldin Puia |
| 5 | 422 | Application of Regression Techniques for Preparing a Homogenous Earthquake Catalog - An Overview | Ranjit Das, Hans Wason, Claudio Meneses |
| 6 | 542 | Influence of Building Occupancy on Seismic Life Cycle Cost | Radhika Pajgade, Meera Raghunandan, Siddhartha Ghosh |
| 7 | 300 | Seismic Risk Assessment of a Himalayan Town: A Case Study of Queen of Hills, Mussoorie, Uttarakhand, India | Kavan Modha, Mitesh Surana, Kalyan Nath, Ravi Shastri, Putul Haldar, Dhiraj Raj, Shikhar Prakash, Alok Bhardwaj, Yogendra Singh |
| 8 | 438 | Fatigue Life Evaluation of Corroded Steel Truss Bridge Girder | Sidhesh Sakore, Diptarka Ghosh, Ashwin Kumar P C, Saurabh Shiradhonkar |
| 9 | 522 | Seismic Vulnerability of Projects Constructed Under Turnkey System | Dukhi Sah |

Day 4

November 17th, 2022 Thursday

Time 9:45 AM - 11:00 AM

Themes Dynamic Soil-Structure Interaction

Technical session 42

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1 | 14 | Investigation on Influence of Embedment Depth of Shallow Foundation on Seismic Response of Building Considering Soil-Structure Interaction | Vaibhav Mittal, Manojit Samanta |
| 2 | 179 | Fluid-soil-structure Interaction of Offshore Wind Turbine: An Analytical Approach for Natural Frequency Estimation | Somya Ranjan Patro, Arnab Banerjee, Gunturi Venkata Ramana |
| 3 | 188 | Influence of Existing Tunnel-surface Structure Interaction Under Repeated Dynamic Loading Conditions | Godson M D, Ganesh Kumar S, Josephantony Visuvasam |
| 4 | 194 | Similitude Characteristics Between Small-scale Model and Full-scale Piles Under Dynamic Excitations | Shiva Shankar Choudhary, Sanjit Biswas, Bappaditya Manna |
| 5 | 200 | Numerical Simulations and Validation of a Rocking Foundation Model for Seismic Loading | Sujitha Soundararajan, Sivapalan Gajan, Prishati Raychowdhury |
| 6 | 205 | Experimental Studies on Tunnel-soil Interaction in Partially Saturated Ground Subjected to Repeated Shaking Events Using 1-G Shaking Table Experiments | Amith K S, Ganesh Kumar S, Godson M D |

Day 4

November 17th, 2022 Thursday

Time 9:45 AM - 11:00 AM

Technical session 43

Venue Jai Krishna Hall, IEI

Themes Codal Provisions on Earthquake Resistant Design/Earthquake Response Analysis, Design and Construction

| S. No. | Paper ID | Title | Author |
|--------|----------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 1 | 231 | Infill Wall Effect on Seismic Analysis of Reinforced Concrete Buildings | C H Sirajudheen, Behera Dibyadarshi |
| 2 | 649 | Exploring an Alternate Perspective of the Importance Factor for Seismic Design of Structures | Narsiram Gurjar, Dhiman Basu |
| 3 | 650 | Simplified Damping Modification Factor for Vertical Response Spectra | Ravi Kanth Sriwastav, Dhiman Basu |
| 4 | 521 | Mechanical Properties of Hybrid Friction-viscoelastic Damping | Abdul Nashith, Amit Goyal, R Siva Chidambaram |
| 5 | 316 | Structural Performance of Hill Buildings During Earthquakes | Prateek Roshan, Shilpa Pal |
| 6 | 270 | Evaluation of Governing Design Conditions for Tall RC Chimneys under Various Seismic and Wind Loads | Ganesh Kumar Ramancharla, Srinivasa Rao P, Praveen Khandelwal |

Day 4

November 17th, 2022 Thursday

Time 3:15 PM - 4:00 PM

Themes Structural Response Control

Technical session 44

Venue Conference Room

| S. No. | Paper ID | Title | Author |
|--------|----------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 1 | 490 | Seismic Response Control of Elevated Liquid Storage Tank Using Negative Stiffness and Inerter Based Dampers | Naqeeb Ul Islam, Shiv Prakash, R S Jangid |
| 2 | 504 | Failure Mechanism of Energy Dissipating Hysteretic Infill System: An Assessment | Nidhin Pachappoyil, Pankaj Agarwal |
| 3 | 505 | Parameter Study on ADAS Metallic Damper | Abhishek Patel, Utsav Koshti, Sharad Purohit |
| 4 | 548 | Unbonded Fiber-reinforced Elastomeric Isolators Coupled with Negative Stiffness-based Dampers | Shiv Prakash, Naqeeb Ul Islam, R S Jangid |
| 5 | 610 | Experimental Investigation of VFPI and FPS Under Harmonic Loading | Harshal Admane, Pranesh Murnal |

Day 4

November 17th, 2022 Thursday

Time 3:15 PM - 4:00 PM

Themes Mixed themes

Technical session 45

Venue Committee Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 1 | 11 | Probabilistic Arias Intensity Maps of Uttarakhand State (India) | Kunal Gupta, Neelima Satyam |
| 2 | 465 | Seismic Consideration of a RC Frame Building from the Sustainability Aspect | Aman Kumar, Goutam Ghosh |
| 3 | 462 | Seismic Behaviour of Regular and Vertically Irregular Reinforced Concrete Building for 3D and MDOF Model | Sonal Chavan, Nilesh Mate, Atulkumar Manchalwar |
| 4 | 640 | Comparative Study on Seismic Performance of RC Frame with Different Types of Steel Bracing System | Parth Akbari, Abdul Miya, Pankaj Agarwal |
| 5 | 350 | Identification of Strong Motion Generation Area of the 2019 Hualien Earthquake | Saurabh Sharma, A Joshi, S Singh, C M Lin, C H Kuo, K L Wen |

Day 4

November 17th, 2022 Thursday

Time 3:15 PM - 4:00 PM

Themes Seismic Testing of Structures and Equipment

Technical session 46

Venue PsD Test Facility

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 510 | Numerical Study on Post-earthquake Fire Behavior of Hollow Tubular Sections Filled with Concrete Under Non-uniform Heating | Smita Singh, Anil Agarwal |
| 2 | 430 | Effect of High-stress Triaxiality on Yield and Ultimate Tensile Strength of E250 Structural Steel | Tamilselvan Nambirajan, Abhishek G, Sahil Aggarwal, Ashwin Kumar P C |
| 3 | 239 | Simplified Computational Model for Post-tensioned Shear Walls | Shubham Tiwari, Suresh Dash, Goutam Mondal |
| 4 | 635 | Seismic Response of Coupled Structure, Equipment and Piping System with and without Base Isolation - An Experiment | G R Reddy, S D Sajish, A Ravikiran, R Preetha, Tarvinder Singh, P Mohanraj, R K Verma, K V Mohanraj, R M Parmar, S K Rajesh, R Mahesh Kumar, N Suresh, S K Deb |
| 5 | 587 | Seismic Evaluation of Building Having Steel-concrete Composite Columns and RC Beams | Rishikesh Mukhedkar, A P Khatri |

Day 4

November 17th, 2022 Thursday

Time 3:15 PM - 4:00 PM

Themes Seismic Evaluation and Retrofitting of Structures

Technical session 47

Venue Reading Room

| S. No. | Paper ID | Title | Author |
|--------|----------|----------------------------------------------------------------------------------------------------|------------------------------------------------------|
| 1 | 85 | Simulation of Interaction Properties in Confined Masonry Walls at Wall-to-tie-column Interface | Vaibhav Singhal, Amit Singh, Khaja Kamal Fayaz Ahmed |
| 2 | 139 | Numerical Simulation of Special Moment Resisting Frame with Reduced Beam Section Under Cyclic Load | Abhay Rangoonwala, Subhra Paul, Sajal Deb |
| 3 | 248 | Seismic Evaluation of Assam Type Building Using Abaqus® | Parikhyana Boruah, Atanu Kumar Dutta |
| 4 | 579 | Numerical Derivation of Pressure-impulse Diagrams for a Fixed-end RC Beam Subjected to Blast Loads | Ravi Mudragada, Ankit Agrawal, Pradeep Bhargava |