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6. Area of Interest : Seismic Risk Assessment of Buildings, Vulnerability Assessment of unreinforced and confined masonry buildings, Hazard assessment (performing, SPT and MASW tests), Development of fragility curves for different types of buildings and risk assessment of existing buildings. Experimental investigation (Shake table and Quasi static tests) of different types of buildings. Seismic capacity assessment and retrofitting of existing damaged buildings. Slopes Stability, Role of Bentonite in Controlling Autogenous Shrinkage of High Strength Concrete, Evaluation of Self-Sensing Behaviour of Concrete, Effect of mineral substitution on the properties of mass concrete.
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10. List of Publications :
  1. Syed Mustafa Ali Shah, Khan Shahzada, Gencturk Bora, Shazim Ali Memon (2017) "Retrofitting of Full-Scale Confined Masonry Building Using Ferro-Cement Overlay" Journal of Performance of Constructed Facilities (DOI.org/10.1061/(ASCE)CF.1943-5509.0001060) Vol. 31, Issue 5.
  2. Fazl-e-Jalal, Khan Shahzada, Salman Saeed, Irshad Ahmad and Kaffayat Ullah (2017) "Stabalization of Medium Expansive Soils in Pakistan using Marble Industrial Waste and Bagasse Ash" International Journal of Earth Sciences and Engineering 10(4) August 2017.

3. Muhammad Tufail, Khan Shahzada, Gencturk Bora, Jianqiang Wei (2016) "Effect of Elevated Temperature on Mechanical Properties of Limestone, Quartzite and Granite Concrete" *International Journal of Concrete Structures and Materials* · (DOI: 10.1007/s40069-016-0175-2).
4. Muhammad Ejaz Shabab, Khan Shahzada, Bora Gencturk, Muhammad Ashraf Tanoli, and Muhammad Fahad (2015), "Synergistic Effect of Fly Ash and Bentonite as Partial Replacement of Cement in Mass Concrete" *Korean Society of Civil Engineers* DOI 10.1007/s12205-015-0166-x.
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6. Salman Afzal, **Khan Shahzada**, Muhammad Fahad, Salman Saeed, Muhammad Ashraf, "Assessment of early-age autogenous shrinkage strains in concrete using bentonite clay as internal curing technique" *Construction & Building Materials* Vol. 66, 2014, pp. 403-409.
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10. **Khan Shahzada**, Akhtar Naeem Khan, Amr S. Elnashai, Amjad Naseer, Muhammad Javed, and Mohammad Ashraf, "*Shake Table Test of Confined Brick Masonry Building*" Advanced Materials Research Vol. 255-260 pp 689-693 (2011).
11. Mohammad Ashraf, Akhtar Naeem Khan, Qaisar Ali, **Khan Shahzada**, and Amjad Naseer "Experimental Behavior of Full Scale URM Building Retrofitted with Ferrocement Overlay", Advanced Materials Research Vol. 255-260 pp 319-323 (2011).
12. Mohammad Shoaib, Amjad Naseer, **Khan Shahzada**, Akhtar Naeem Khan, and Mohammad Ashraf "Earthquake Disaster Mitigation Through Retrofitting of Unreinforced Concrete Block Masonry Buildings", Advanced Materials Research Vol. 255-260 pp 2627-2631 (2011).
13. **Khan Shahzada**, Tetsuro Goto, Akhtar Naeem Khan, Amjad Naseer, Muhammad Fahad, "Improvement of Mechanical Properties and Lateral Resistance of Brick Masonry Walls by Using Indigenous Materials", Advanced Materials Research Vol. 255-260 pp 684-688 (2011).
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