

CURRICULUM VITAE

MOHAMMAD YEKRANGNIA

Cellphone: (+98-912) 618 23 89

Email: m.yekrangnia@gmail.com ; yekrangnia@sru.ac.ir

Google Scholar: <https://scholar.google.com/citations?user=MW-BUgkAAAAJ&hl=en>

Researchgate: https://www.researchgate.net/profile/Mohammad_Yekrangnia

Linkedin: <https://ir.linkedin.com/in/mohammad-yekrangnia-567b4a54>

PROFESSIONAL BIOGRAPHY

- 2022-Present: Associate Professor, Shahid Rajaei Teacher Training University, Tehran, Iran
- 2018-2022: Assistant Professor, Shahid Rajaei Teacher Training University, Tehran, Iran
- 2014-2015: Visiting Scholar, The Pacific Earthquake Engineering Research Center (PEER), U.C. Berkeley, CA, USA

SERVICES

- 2022- Present: Director of Structural and Earthquake Engineering Group, Department of Civil Engineering, Shahid Rajaei Teacher Training University, Tehran, Iran

EDUCATION

- 2009-2017: Ph.D. in Structural Engineering, Sharif University of Technology, Tehran, Iran; GPA:4.0; Thesis Title: "Development of Fragility Curves for Confined Masonry Buildings"
- 2006-2009: M.Sc. in Earthquake Engineering, Sharif University of Technology, Tehran, Iran; GPA:3.5; Thesis Title: "Evaluation of Seismic Performance of Adobe Dome-roof Structures Retrofitted by Steel Rods and Mesh Using Shaking Table Facility"
- 2002-2006: B.Sc. in Civil Engineering, Amirkabir University of Technology (Polytechnic of Tehran), Tehran, Iran; GPA:3.2

HONORS and AWARDS

- Entrepreneurship and Relation with Society Excellence Award, (University's acknowledged faculty member with the best performance in cooperation with industry), Shahid Rajaei Teacher Training University, 2021.
- Research Excellence Award (University's acknowledged researcher), Shahid Rajaei Teacher Training University, 2021.
- Teaching Excellence Award (Best university teacher), Shahid Rajaei Teacher Training University, 2020.

FIELDS OF STUDY and RESEARCH INTERESTS

- Seismic Risk Analysis
- Seismic Rehabilitation and Retrofit
- Confined Masonry Buildings, Reinforced Masonry Buildings
- Masonry Infill Walls
- Large-scale Experiments, Field Testing of Structures
- Numerical Simulation
- Historic Structures
- Steel Shear Walls

LANGUAGES

- TOEFL PBT score: 618/670 (=108 in iBT); Listening: 620/670, Structure:560/670, Reading: 670/670
- TOLIMO score: 627/670
- Persian: Native
- Arabic: Intermediate in reading and listening

PUBLICATIONS

A) Books

- 5) "Industrializing School Buildings", 2020, Kalam-e Mandegar Publication, (ISBN: 9786008446354, 230 Pages).

- 4) "Wire Rope and Its Application in Structures" (Co-authored by Dr. N. Fanaie, and Mr. M. Keshmiri), 2020, K.N. Toosi University of Technology Publication, (ISBN: 9789647136686, 368 Pages)
- 3) "Advanced Design Examples of Seismic Retrofit of Structures", 2018, Elsevier Publication, (ISBN: 9780081025345, 511 Pages)
- 2) "Abaqus Applied Manual with Examples for Civil Engineering; Structural and Geotechnics" (Co-authored by Mr. R. Shahbazi), 3rd Edition, Elme-Omran Publication, 2013, Tehran, Iran (ISBN: 978-600-5176-17-9, 532 Pages in Persian)
- 1) "Seismic Behavior of Domed-roof Adobe Buildings" (Co-authored by Dr. A. Bakhshi, Prof. M.A. Ghannad, and Dr. H. Masaeli), Research Report (Grant D/07/1/747), Deputy of Reconstruction and Rural Housing Affairs, Rural Housing Studies and Research Office, Housing Foundation, 2011, Tehran, Iran (ISBN: 978-964-6672-31-4, 302 Pages in Persian)

B) Book Chapters

- 1) "Determining of Suitability of Existing Schools and Site Selection of New School Buildings Using GIS And Metaheuristic Algorithm", 2019, Elsevier Publications, in Book "Spatial Modeling in GIS and R for Earth and Environmental Sciences", Edited by H.R. Pourghasemi and C. Gokceoglu.

C) Peer-reviewed Journal Papers

- 41) Kazemi H., **Yekrangnia M.**, Shakiba M., Bazli M., Vatani Oskouei A., (2022), "Bond durability between anchored GFRP bar and seawater concrete under offshore environmental conditions", *Composite Structures*, (Under review)..
- 40) Hassanli R., Vafaei D., **Yekrangnia M.**, Manalo A., (2022), "Cyclic Behavior of GFRP Reinforced Concrete Slabs with Synthetic Fibers", *ASCE Journal of Composites for Construction*, (Revision under review).
- 39) Alizadeh S.M.M., Rasoolan I., Rezaeian A., **Yekrangnia M.**, (2022), "Effects of Elevated Temperatures on Properties of Self-compacting Concrete with Recycled Industrial Ceramic Wastes as a Substitute for Aggregates", *Structural Concrete*, (Under review).
- 38) Kazemi H., **Yekrangnia M.**, Shakiba M., Bazli M., Vatani Oskouei A., (2022), "Bond-slip behaviour between GFRP/steel bars and seawater concrete after exposure to environmental conditions", *Engineering Structures*, 268, 114796.
- 37) Hoseinzade M., Esfahani M., Arbab F., Shakiba M., **Yekrangnia M.**, (2022), "Experimental Investigation of Residual Flexural Capacity of Damaged Reinforced Concrete Beams Exposed to Elevated Temperatures", *Construction and Building Materials*, 240, 112388.
- 36) Hosseini S.M., **Yekrangnia M.**, Vatani Oskouei A., (2022), "Effect of spiral transverse bars on structural behavior of concrete shear walls reinforced with GFRP bars", *Journal of Building Engineering*, 104706.
- 35) Ghodratabadi M., **Yekrangnia M.**, (2022), "A risk-based Prioritization and optimization of pavement maintenance and repair", *Journal of Transportation Research*, (in Persian), (Under review).
- 34) Ghodratabadi M., **Yekrangnia M.**, (2021), "Reliability analysis of designing overlay thickness according to Iran highway asphalt pavement code", *Modares Journal of Civil Engineering*, (in Persian), (To Appear).
- 33) **Yekrangnia M.**, Abedifar M., (2022), "Numerical study on the seismic performance of realigned steel moment frames", *Journal of Structure and Steel*, 33 (in Persian).
- 32) Shekarchi M., Shakiba M., **Yekrangnia M.**, and Tannert T., (2021), "Performance of Glued-in Rod Timber Joints Under Seawater and UV Exposure Cycles", *Construction and Building Materials*, 322, 126418.
- 31) Ehteshami Moeini M., Razavi S.A., **Yekrangnia M.**, Pourasgari P., and Abbasian N., (2021), "Cyclic Performance Assessment of Damaged Unreinforced Masonry Walls Repaired with Steel Mesh Reinforced Shotcrete", *Engineering Structures*, 253, 113747.
- 30) Jafarieh A.H., **Yekrangnia M.**, (2021), "Assessment of the Seismic Performance of Structures Designed Based on Uniform Ductility Pattern", *Numerical Methods in Civil Engineering*, 6(2), 25-35.
- 29) **Yekrangnia M.**, Adresi M., (2021), "Study on The Effects of Polypropylene Fibers on The Splitting Strength, Strain Capacity and Energy Absorption of Rolled Compacted Semi-Lightweight Concrete with Applicability in Concrete Blocks", *Journal of Structural and Construction Engineering*, DOI: 10.24200/J30.2021.56548.2836, (in Persian).
- 28) Rezaeian H., Roy K., **Yekrangnia M.**, Chen B., Lim J.B., (2021), "Tests, Numerical Modelling and Design of a Novel Cold-Formed Steel Tab Connection", *Journal of Constructional Steel Research*, 185, 106846.
- 27) **Yekrangnia M.**, Torabizadeh A., Brzev S., (2021), "Post-Earthquake Damage Assessment of Buildings: Comprehensive Experimentally-based Maximum Drift Ratio Predictive Model based on Residual Drift Ratio", *Journal of Earthquake Engineering*, DOI: 10.1080/13632469.2021.1961934.
- 26) Shekarchi M., **Yekrangnia M.**, Biniiaz A., Raftery G.M., (2021), "Effect of Elevated Temperatures on the Compressive Behavior of Timber Filled Steel and Pultruded GFRP Tubes", *Composite Structures*, 271, 114135.

- 25) Esfahani M., Hoseinzade M., Shakiba M., Arbab F., **Yekrangnia M.**, Pachideh G., (2021), “Experimental Investigation of Residual Flexural Capacity of Damaged Reinforced Concrete Beams Exposed to Elevated Temperatures”, *Engineering Structures*, 240, 112388.
- 24) **Yekrangnia M.**, (2021), “Application of Endurance Time Method in Evaluation of Seismic Performance of a Typical Sandwich Panel Building”, *Numerical Methods in Civil Engineering*, 5(2), 45-52.
- 23) Kordzanganeh G., Rezaeian A., Showkati H., **Yekrangnia M.**, (2021), “Effect of Square Opening Size and Location on the Cyclic Response of Steel Plate Shear Walls”, *Structures*, 33, 4655-4669.
- 22) Adresi M., **Yekrangnia M.**, (2020), “Properties and Mechanisms of The Self-sensing Piezoelectric Concrete Sensor for Structural Health Monitoring”, *Journal of Structural and Construction Engineering*, DOI: 10.22065/jsce.2020.232648.2150, (in Persian).
- 21) **Yekrangnia M.**, Bakhshi A., Ghannad M.A., Panahi M., (2020), “Risk Assessment of Confined Unreinforced Masonry Buildings Based on FEMA P-58 Methodology: A Case Study—School Buildings in Tehran”, *Bulletin of Earthquake Engineering and Seismology*, 19(2), 1079-1120.
- 20) Kordzanganeh G., Showkati H., Rezaeian A., **Yekrangnia M.**, (2020), “Experimental Cyclic Performance of Steel Shear Walls with Single Rectangular Opening”, *The Structural Design of Tall and Special Buildings*, e1821.
- 19) Bypour M., Kioumars M., **Yekrangnia M.**, (2020), “Shear Capacity Prediction of Steel Plate Shear Walls with Openings Using RSM”, *Engineering Structures* 226, 111340.
- 18) Farahani E.M., **Yekrangnia M.**, Rezaie M., Bento R., (2020), “Seismic Behavior of Masonry Walls Retrofitted by Centercore Technique: A Numerical Study”, *Construction and Building Materials*, 120382.
- 17) Ghezlbash A., Beyer K., Dolatshahi K.M., **Yekrangnia M.**, (2020), “Shake Table Test of a Masonry Building Retrofitted with Shotcrete”, *Engineering Structures*, 219, 110912.
- 16) **Yekrangnia M.**, Asteris P.G., (2020), “Multi-strut Macro-Model for Masonry Infilled Frames with Openings”, *Journal of Building Engineering*, 101683.
- 15) Shekarchi M., Farahani E.M., **Yekrangnia M.**, Ozbakkaloglu T., (2020), “Mechanical Strength of CFRP And GFRP Composites Filled with APP Fire Retardant Powder Exposed to Elevated Temperature”, *Fire Safety Journal*, 115, 103178.
- 14) Lee S., Panahi M., Pourghasemi H.R., Shahabi H., Alizadeh M., Shirzadi A., Khosravi K., Melesse A.M., **Yekrangnia M.**, Rezaie F., Moeini H., Pham B.T., Ahmad B.B., (2019), “Sevucas: A Novel GisIS-based Machine Learning Software for Seismic Vulnerability Assessment”, *Applied Sciences*, 9(17), 3495.
- 13) Khaloo A., Khoshnevis A., **Yekrangnia M.**, (2019), “On the Vulnerability of The Shrine of Prophet Daniel Through Field Observation and Numerical Simulation”, *Engineering Failure Analysis*, 102, 237-259.
- 12) Moghadam A., Estekanchi H., **Yekrangnia M.**, (2018), “Evaluation of Proposed Semi-Rigid Steel Frame Connection with Torsional Plate and Its Optimal Placement”, *Scientia Iranica*, 25(3), 1025-1038.
- 11) **Yekrangnia M.**, Bakhshi A., Ghannad M.A., (2017), “Force-displacement Model for Solid Confined Masonry Walls with Shear-dominated Failure Mode”, *Earthquake Engineering and Structural Dynamics*, DOI: 10.1002/eqe.2902
- 10) Ebrahimiyani M., Golabchi M., **Yekrangnia M.**, (2017), “Field Observation and Vulnerability Assessment of Gonbad-e Qābus”, *Journal of Architectural Engineering*, 23, no. 4 (2017): 05017008.
- 9) **Yekrangnia M.**, Mohammadi M., (2017), “A New Strut Model for Solid Infilled Frames”, *Engineering Structures*, DOI: 10.1016/j.engstruct.2016.10.048
- 8) Bakhshi A., Ghannad M.A., **Yekrangnia M.**, Masaeli H., (2016), “Shaking Table Tests on Dome-roof Adobe Houses”, *Earthquake Engineering and Structural Dynamics*, DOI: 10.1002/eqe.2800
- 7) **Yekrangnia M.**, Taheri A., Zahrai S.M., (2016), “Experimental and Numerical Evaluation of Proposed Precast Concrete Connections”, *Structural Concrete*, DOI: 10.1002/suco.201500168
- 6) Hosseini M., Fekri M., **Yekrangnia M.**, (2016), “Seismic Performance of an Innovative Structural System Having Seesaw Motion and Columns Equipped with Friction Dampers at Base Level”, *The Structural Design of Tall and Special Buildings*, DOI: 10.1002/tal.1286
- 5) **Yekrangnia M.**, Aghababai A., (2015), “Restoration of Historical Al-Askari Shrine, Samarra-Part I: Field Observations, Damage Detection and Material Properties”, *Journal of Performance of Constructed Facilities*, DOI: 10.1061/(ASCE)CF.1943-5509.0000761
- 4) **Yekrangnia M.**, Aghababai A., (2015), “Restoration of Historical Al-Askari Shrine, Samarra-Part II: Vulnerability Assessment by Numerical Simulation”, *Journal of Performance of Constructed Facilities*, DOI:10.1061/(ASCE)CF.1943-5509.0000751, 04015031
- 3) Dolatshahi K.M., **Yekrangnia M.**, (2015), “Out-Of-Plane Strength Reduction of Unreinforced Masonry Walls Because of In-Plane Damages”, *Earthquake Engineering and Structural Dynamics*, DOI: 10.1002/eqe.2574
- 2) Dolatshahi K.M., Aref A.J., **Yekrangnia M.**, (2014), “Bidirectional Behavior of Unreinforced Masonry Walls”, *Earthquake Engineering and Structural Dynamics*, DOI: 10.1002/eqe.2455

1) Hashemi-Rafsanjani S.E., Bakhshi A., Ghannad M.A., **Yekrangnia M.**, Soumi F., (2014), "Predictive Tri-Linear Benchmark Curve for In-Plane Behaviour of Adobe Walls", International Journal of Architectural Heritage, DOI:10.1080/15583058.2014.89940.

D) International Conference Papers

- 34) Salimi Saeid, **Yekrangnia M.**, Nejati Faezeh, "Experimental Study on the Effects of Elevated Temperature on Fibrous Lightweight Concrete", 2nd International Conference on Architecture, Civil Engineering, Urban Development, Environment and Horizons of Islamic Art, in the Second Step Statement of the Revolution, December 08, Tabriz, Iran (in Persian).
- 33) Ehteshami Moeini M., **Yekrangnia M.**, "Vulnerability Assessment of Seismically Isolated Unreinforced Masonry Buildings with Low Damping Steel-reinforced Elastomeric Bearings", The 3rd International Conference on Natural Hazards and Infrastructure (ICONHIC 2022), July 5-7, 2022, Athens, Greece.
- 32) Ehteshami Moeini M., Razavi S.A., **Yekrangnia M.**, Khaloo A., "Numerical Study on An Innovative Elastomeric-Steel Cushion Damper", The 9th European Conference on Steel and Composite Structures (EUROSTEEL 2021), September 1-3, 2021, Sheffield, UK.
- 31) Pourasgari P., **Yekrangnia M.**, Ehteshami Moeini M., Razavi S.A., and Abbasian N., "Assessment of influence of opening on damping property of steel-reinforced shotcrete repaired masonry walls", 4th International Conference and 5th National Conference on Civil Engineering, Architecture, Art and Urban Design, September 21-22, 2021, Tabriz, Iran.
- 30) Ghezelbash A., Beyer K., Dolatshahi K.M., **Yekrangnia M.**, "Experimental Study on Seismic Behavior of Masonry Buildings Retrofitted with Shotcrete", The 8th International Conference on Seismology and Earthquake Engineering (SEE-8), November 11-13, 2019, Tehran, Iran.
- 29) **Yekrangnia M.**, Moghadam A.S., Mohammadi F., Mardani A., Mohammadi H., "A Case Study of Seismic Retrofit of URM School Buildings in Iran", The Pacific Conference on Earthquake Engineering and Annual NZSEE Conference (PCEE 2019), April 4-6, 2019, SkyCity, Auckland, New Zealand.
- 28) **Yekrangnia M.**, Aghababai A., Bakhshi A., Ghannad M.A., Mirghaderi S.R., Khanmohammadi M., "In-situ Cyclic Testing on A Typical URM School Building-Part II: The Confined Masonry Building", The 10th International Masonry Conference, July 9-18, 2018, Milan, Italy.
- 27) Aghababai A., Khanmohammadi M., Mirghaderi S.R., **Yekrangnia M.**, Bakhshi A., Ghannad M.A., "In-situ Cyclic Testing on A Typical URM School Building-Part I: The Unconfined Masonry Building", The 10th International Masonry Conference, July 9-18, 2018, Milan, Italy.
- 26) Raissi M., Abbasi A., Alyannezhad H., Seyri H., **Yekrangnia M.**, Eghbali M., "Seismic Retrofit of Iranian Masonry School Buildings by Shotcrete", The 16th World Conference on Earthquake Engineering (15WCEE), January 7-13, 2017, Santiago, Chile
- 25) Hatami M., Borzouie J., MacRae G.A., **Yekrangnia M.**, Abubakar S., "Finite Element Analysis of Column Base Non-prying Friction Connection", 8th International Conference on Behavior of Steel Structures in Seismic Areas, July 1-3, 2015, Shanghai, China
- 24) Raissi M., Yaghubi A., **Yekrangnia M.**, "Numerical Study on Single-story Masonry Buildings Retrofitted by Peripheral Shotcreting", 10th International Conference on Civil Engineering, 5-7 May, 2015, Tabriz, Iran
- 23) Raissi M., Torabizadeh M.H., Shahri A., Eghbali M., **Yekrangnia M.**, "Post-earthquake Rapid Assessment of Building Based on Qualitative and Quantitative Criteria", The 7th International Conference on Seismology and Earthquake Engineering (SEE-7), May 16-18, 2015, Tehran, Iran
- 22) Abrams D.P., Moghadam A.S., Bozorgnia Y., **Yekrangnia M.**, "Seismic Retrofit of School Buildings in Iran", 12th North American Masonry Conference, May 17-20, 2015, Denver, Colorado, USA
- 21) Shahri A., **Yekrangnia M.**, Eghbali M., Mardani A., "The Modified Prioritizing Algorithm in Retrofitting of School Buildings in I.R.Iran", The 5th International Conference on Integrated Natural Disaster Management, February 23-24, 2014, Tehran, Iran (in Persian)
- 20) Farzampour A. and **Yekrangnia M.**, "On The Behavior of Corrugated Steel Shear Walls With And Without Openings", The 2nd European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey
- 19) Raissi M., Torabizadeh M.H., **Yekrangnia M.**, Eghbali M., "Prioritizing Algorithm in Retrofitting of School Buildings in I.R.Iran", The Second European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey
- 18) Raissi M., **Yekrangnia M.**, Eghbali M., Mahdizadeh A., "Report on Retrofit Procedure of School Buildings in I.R.Iran", The 2nd European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey
- 17) Dolatshahi K.M., Aref A.J., **Yekrangnia M.**, "On Bidirectional Behavior of Unreinforced Masonry Walls", The 2nd European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey

- 16) Bakhshi A., Ghannad M.A., Khajepour M., **Yekrangnia M.**, Mohammadpanah H., “Numerical Analysis of a Typical Dome-roof Adobe Building Under Earthquake Excitations”, The 2nd European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey
- 15) Bakhshi A., Ghannad M.A., Mohammadpanah H., **Yekrangnia M.**, Khajepour M., “Cyclic In-plane Behavior of Retrofitted Adobe Walls”, The 2nd European Conference on Earthquake Engineering and Seismology (2ECEES), August 24-29, 2014, Istanbul, Turkey
- 14) Dolatshahi K.M., **Yekrangnia M.**, Mahdizadeh A., “On The Influence of In-plane Damages On The Out-of-plane Behavior of Unreinforced Masonry Structures”, The 10th U.S. National Conference on Earthquake Engineering (10NCEE), July 21-25, 2014, Alaska, U.S.
- 13) Bakhshi A., Ahmadi M.H., **Yekrangnia M.**, “Development of Fragility Curves of Confined Masonry Buildings”, The 9th International Masonry Conference, July 7-9, 2014, Guimarães, Portugal
- 12) Bakhshi A., Soleymanzadeh A., **Yekrangnia M.**, “Interaction of In-plane And Out-of-plane of Masonry Walls”, The 9th International Masonry Conference, July 7-9, 2014, Guimarães, Portugal
- 11) **Yekrangnia M.**, Bakhshi A., Ghannad M.A., “Force-Displacement Model for Confined Masonry Walls with Shear-dominated Failure Mode”, The 9th International Masonry Conference, July 7-9, 2014, Guimarães, Portugal
- 10) **Yekrangnia M.**, Mahdizadeh A., Seyri H., Raissi M., “Seismic Performance Improvement of Masonry Buildings by WSBI Method”, The 15th World Conference on Earthquake Engineering (15WCEE), September 24-28, 2012, Lisbon, Portugal
- 9) Borzouie J., **Yekrangnia M.**, Mahdizadeh A., Seyri H., Raissi M., “Financial Analysis of Retrofitting Projects and Its Role in Decision Making”, The 15th World Conference on Earthquake Engineering (15WCEE), September 24-28, 2012, Lisbon, Portugal
- 8) Motamedi M., Kakolyand H., **Yekrangnia M.**, “Evaluation of A Retrofit Solution Used for Concrete Masonry Walls with Large Openings Using FEM Nonlinear Analysis”, The 15th World Conference on Earthquake Engineering (15WCEE), September 24-28, 2012, Lisbon, Portugal
- 7) Motamedi M., Hafezi M., **Yekrangnia M.**, “Analytical Study of Steel Ring Connections as Hysteretic Metallic Damper”, The 15th World Conference on Earthquake Engineering (15WCEE), September 24-28, 2012, Lisbon, Portugal
- 6) Hashemi-Rafsanjani S.E., **Yekrangnia M.**, Bakhshi A., Ghannad M.A., Somi F., “Numerical Simulation of In-plane Behavior of Adobe Walls with Different Openings”, The 6th International Conference on Seismology and Earthquake Engineering (SEE-6), May 16-18, 2011, Tehran, Iran
- 5) Somi F., **Yekrangnia M.**, Bakhshi A., Ghannad M.A., Hashemi-Rafsanjani S.E., “Study of In-plane Behavior of Adobe Walls with Cyclic Tests”, The 6th International Conference on Seismology and Earthquake Engineering (SEE-6), May 16-18, 2011, Tehran, Iran
- 4) **Yekrangnia M.**, Mahdizadeh A., “Performance of Safe-room Under Jack-arch Roof Gravity Loads”, The 6th International Conference on Seismology and Earthquake Engineering (SEE-6), May 16-18, 2011, Tehran, Iran
- 3) Bakhshi A., Ghannad M.A., **Yekrangnia M.**, Masaeli H., “Evaluation of Seismic Performance of Adobe Dome-roof Structures Retrofitted by Steel Rods and Mesh Using Shaking Table Facility”, The 1st International Conference on Rural Settlements, May 18-19, 2010, Tehran, Iran
- 2) **Yekrangnia M.**, Dastan M.A., Vafai A., “Nonlinear Seismic Behavior of an R.C. Frame Repaired by F.R.P. Laminates”, The 14th World Conference on Earthquake Engineering (14WCEE), October 12-17, 2008, Beijing, China
- 1) Dastan M.A., **Yekrangnia M.**, Vafai A., “Numerical Studies on Residual Seismic Capacity of R.C. Frames with Unreinforced Block Wall Based on Their Crack Patterns”, The 14th World Conference on Earthquake Engineering (14WCEE), October 12-17, 2008, Beijing, China

E) National Conference Papers

- 11) Assarzadeh Mahani H., Mahmoudi Sahebi M., **Yekrangnia M.**, “Study on the Effects of ECC for Repair of URM walls Damaged during Earthquakes”, National Conference on Architecture, Civil Engineering, Urban Development and Horizons of Islamic Art in the Second Step Statement of the Revolution, May 20, 2021, Tabriz, Iran (in Persian).
- 10) Adresi M., Tarighat A., Soltani A., **Yekrangnia M.**, “Residual Life of Self-sensing RC Pavements”, The 3rd National Conference on Concrete Pavements (3rd NCCP), April 23-24, 2019, Tehran, Iran (in Persian).
- 9) Karimi A.H., Entezari, B., **Yekrangnia M.**, “Static and Dynamic Behavior of Yazd Grand Mosque Main Door through Numerical Simulation”, The 6th National Conference on Applied Research in Civil Engineering, Architecture and urban Management, May 2-3, 2019, Tehran, Iran (in Persian).
- 8) Vaseghi Amiri M., Dehestani M., **Yekrangnia M.**, “Numerical Study on GFRP Arrangement on Out-of-plane Behavior of URM Walls”, the 2nd National Conference on Structural Engineering and Construction Management, March 3-4, 2018, Tehran, Iran (in Persian).

- 7) Raissi M., Yaghubi A., **Yekrangnia M.**, “Seismic Retrofit of Single-story URM Buildings with Peripheral Shotcrete Method”, The 8th National Congress on Civil Engineering, May 7-8, 2014, Babol, Iran (in Persian).
- 6) Raissi M., Eghbali M., **Yekrangnia M.**, Mahdizadeh A., “Evaluation of Feasible Seismic Retrofit Methods for URM Buildings”, The 8th National Congress on Civil Engineering, May 7-8, 2014, Babol, Iran (in Persian).
- 5) Vatani Oskouie A., Hagi M., **Yekrangnia M.**, “Optimized Bond Length of FRP in Prefabricated R.C. Beam-column Connections Using FEM Method”, The 2nd National Conference on Concrete Industry, December 4-5, 2013, Semnan, Iran (in Persian).
- 4) Hafezi M., Motamedi M., **Yekrangnia M.**, “Evaluation of Geometrical Characteristics on The Performance of Yielding Ring Dampers “, The 3rd National Conference on Structure and Earthquake, October 27-28, 2012, Kerman, Iran.
- 3) Motamedi M., Kakolvand H., **Yekrangnia M.**, “Evaluation of Surcharge Effects on In-plane Behavior of Masonry Walls with and without Openings Using FEM Nonlinear Analysis”, The 7th National Congress on Civil Engineering, May 7-8, 2013, Zahedan, Iran (in Persian).
- 2) Motamedi M., Kakolvand H., **Yekrangnia M.**, “Evaluation of A Retrofit Solution for Masonry Walls with and without Openings Using FEM Nonlinear Analysis”, The 3rd National Conference on Earthquake and Structural Engineering, October 18-19, 2019, Kerman, Iran (in Persian).
- 1) Alan S.M., **Yekrangnia M.**, Abasaltiyani P., “Coupled Thermal-Mechanical FEM Analysis of PDC in Steel Direct Reduction Plant”, Steel Symposium, March 1-2, 2011, Isfahan, Iran (in Persian).

F) International Reports

- 5) **Yekrangnia M.**, et al., “A preliminary report on school buildings performance during M 7.3 Ezgeleh, Iran earthquake of November 12, 2017”, Earthquake Engineering Research Institute (EERI), 2017
- 4) **Yekrangnia M.**, Bakhshi A., Ghannad M.A., Khosravifar A., MousaviEshkiki E., Masaeli H., “Adobe Arched-Roof”, World Housing Encyclopedia, Earthquake Engineering Research Institute (EERI) and International Association for Earthquake Engineering (IAEE), Report#177, 2014
- 3) Mahdizadeh A., Raissi M., **Yekrangnia M.**, “Report on Retrofit Procedure of School Buildings in Islamic Republic of Iran”, PEER 2013/26, December 2013, Urban Earthquake Engineering, Proceedings of the U.S.-Iran Seismic Workshop, December 18-20, 2012, Tehran, Iran
- 2) Akdogan M. and **Yekrangnia M.**, “Earthquake Field Investigation Report, M6.4 & M6.2 East Azarbaijan Earthquake I.R. of IRAN”, August 11, 2012, United Nations Human Settlement Programme (UN-HABITAT)
- 1) Bakhshi A., Ghannad M.A., **Yekrangnia M.**, Masaeli H., “Seismic Performance of Existing and Retrofitted Dome-Roof Adobe Houses in Iran Using Shaking Table Tests”, PEER 2009/02, October 2009, Proceedings of the U.S.-Iran Seismic Workshop, June 29–July 1, 2009, Irvine, California

G) National Reports

- 9) Moghadam A.S., **Yekrangnia M.**, (2020) “Prescriptive Retrofit Details for 2-story URM School Buildings in Iran”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 8) **Yekrangnia M.**, (2020) “Customizing Base Scores of RVS for Iranian URM Residential Buildings”, Tehran Disaster Mitigation and Management Organization (TDMMO).
- 7) **Yekrangnia M.**, (2020) “Comparison of Various Versions of Iranian National Guidelines for Seismic Retrofitting of Building (Code 360) changes for URM buildings”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 6) **Yekrangnia M.**, (2020) “Customizing RVS for Iranian School Buildings”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 5) **Yekrangnia M.**, (2019) “Design Manual for Reinforced Masonry School Buildings in Iran”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 4) **Yekrangnia M.**, (2015) “Optimum Embedment Length of Anchors”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 3) **Yekrangnia M.**, Mardani A., (2014) “Prioritizing Algorithm for Retrofitting School Buildings”, State Organization of School Renovation, Development and Organization Reports.
- 2) Mahdizadeh A., **Yekrangnia M.**, et al., (2010) “Country Report on Retrofit Procedure of School Buildings in Iran”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).
- 1) **Yekrangnia M.**, Mahdizadeh A., (2009) “Masonry Buildings and Earthquake”, Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES).

ACADEMIC ACTIVITY

A) Supervisor:

A-1) PhD:

- 4) Mohsen Rasooli, (2021), Joined with Dr. Sharifi, Thesis title: To be determined, Shahid Rajae Teacher Training University.
- 3) Fatemeh Khodabakhshian, (2021), Joined with Dr. Mortazavi, Thesis title: To be determined, Shahid Rajae Teacher Training University.
- 2) Mohammad Hosseini, (2021), Joined with Dr. Vatani Oskouie, Thesis title: “Experimental investigation of static cyclic performance of composite RC shear walls with steel and GFRP reinforcement”, Shahid Rajae Teacher Training University.
- 1) Hamid Assarzadeh Mahani, (2020), Joined with Dr. Mahmoudi, Thesis title: To be determined, Shahid Rajae Teacher Training University.

A-2) MSc:

- 16) Aryan Baybordi, (2022), Thesis title: “Improving the Interlayer Bond of Rammed Earth”, Shahid Rajae Teacher Training University.
- 15) Javid Hosseinzadeh, (2021), Thesis title: “Experiential Studies on the Durability of Hempcrete”, Shahid Rajae Teacher Training University.
- 14) Alireza Roozban, (2021), Thesis title: “Determination of the Optimum Properties of Hempcrete as a Semi-structural Material”, Shahid Rajae Teacher Training University.
- 13) Reza Babaie, (2021), Joined with Dr. Vatani Oskouie, Thesis title: “Seismic Analysis of Low-rise & Mid-rise Concrete Frames Reinforced with FRP Bars”, Shahid Rajae Teacher Training University.
- 12) Hamid Kazemi, (2021), Joined with Dr. Vatani Oskouie, Thesis title: “Experimental investigation of FRP bars bond with different types of concrete, Normal, Self-compacting, and Fiber-reinforced concrete, exposed to various environmental conditions”, Shahid Rajae Teacher Training University.
- 11) Ali Mahmoudi, (2021), Thesis title: “Verification of the typical retrofit scheme for two-story URM school buildings by shotcrete and cost analysis”, Shahid Rajae Teacher Training University.
- 10) Hadi Sabouri, (2020), Thesis title: “Experimental evaluation of the effects of construction details on the bar pullout behavior in shotcreted layer”, Shahid Rajae Teacher Training University.
- 9) Amirhossein Hafeznia, (2020), Thesis title: “Experimental study on the effects of environmental conditions on the pullout behavior of bars in shotcreted masonry”, Shahid Rajae Teacher Training University.
- 8) Fatemeh Dehghani Tafti, (2020), Thesis title: “Experimental investigation on the static cyclic response of shotcreted masonry connections”, Shahid Rajae Teacher Training University.
- 7) Milad Abedifar, (2020), Thesis title: “Numerical study on the seismic performance of realigned steel moment frames against aftershocks”, Shahid Rajae Teacher Training University.
- 6) Amir Kohansal, (2020), Thesis title: “Evaluation of fiber use in residual tensile splitting strength of adobe material under elevated temperature.”, Azad University, West Branch.
- 5) Behrouz Shoghianpour valipour, (2020), Thesis title: “Evaluation of fiber use in residual compressive strength of adobe material under elevated temperature.”, Azad University, West Branch.
- 4) Mehdi Dorali, (2019), Thesis title: “Numerical study on the in-plane and out-of-plane interaction of confined masonry walls”, Shahid Rajae Teacher Training University.
- 3) Mohammad Amin Hoseini, (2018), Thesis title: “Semi-detailed post-earthquake damage assessment procedure of buildings and developing application”, Shahid Rajae Teacher Training University.
- 2) Parsa Pourasgari, (2018), Thesis title: “Experimental evaluation of seismic behavior of masonry walls repaired with reinforced shotcrete”, Shahid Rajae Teacher Training University.
- 1) Saeed Salimi, (2018), Thesis title: “Evaluation of performance of fibrous concrete under elevated temperatures”, Ayandegan Tonekabon Institution.

B) Advisor:

B-1) PhD:

- 3) Shahram Mohammadi, under supervision of Dr. Abbasi and Dr. Yaghubi, (2020), “Experimental and Numerical Study of Pipe Damper in Frame in Frame Configuration”, South Branch, Islamic Azad University.
- 2) Arashk Sabzipour, under supervision of Dr. Fadaie, (2019), “Study of behavior and providing solutions of improving performance of masonry wall due to normal fault Rupture by 1-g physical and numerical modeling by finite element method”, Science and Research Branch, Islamic Azad University.
- 1) Saeed Pourkarimi, under supervision of Dr. Fadaie, (2019), “Investigation of Fault Rupture -Masonry Structures Interaction by Using 1g Physical Model Tests and Numerical Modeling”, Science and Research Branch, Islamic Azad University.

B-2) MSc:

- 13) Nahid Mirinejad, under supervision of Dr. Rahimnia, (2020), "Repair Strategy for Grand Mosque of Qazvin", Imam Khomeini International University (Department of Architectural Engineering).
- 12) Masoud Amini, under supervision of Dr. Fadaie, (2020), "Numerical study on the behavior of oblique piles under normal fault", Science and Research Branch, Islamic Azad University.
- 11) Fatemeh Mahmoudi Bardzardi, under supervision of Dr. Rezaian, (2020), "Seismic behavior of bolted connections in column-Tree MRF after fire", Science and Research Branch, Shahid Chamran University of Ahwaz.
- 10) Hossein Sadeghienik, under supervision of Dr. Karimayi, (2019), "Investigation of stability and seismic response of Embankment dams in reservoir sedimentation condition", Shahid Rajaei Teacher Training University.
- 9) Fatemeh Khoshnoudi, under supervision of Dr. Fadaie, (2019), "Three-dimensional numerical study on reverse faulting effect on the behavior of reinforced concrete lining", Science and Research Branch, Islamic Azad University.
- 8) Sina Hajilar, under supervision of Dr. Vatani Oskouie, (2018), "Numerical Study on the Behavior of Masonry Walls Strengthened by NSM Method having Prestressed FRP bars", Shahid Rajaei Teacher Training University.
- 7) Farzaneh Malekian Sabet, under supervision of Dr. Mahmoudi, (2018), "Evaluation of Seismic Performance of Very Important Structures Equipped with Base Isolation and Shape Memory Alloys", Shahid Rajaei Teacher Training University.
- 6) Maryam Vaseghi Amiri, under supervision of Dr. Dehestani, (2017), "Numerical Evaluation of In-plane and Out-of-plane Behavior of URM Walls Retrofitted by Various Methods", Babol Noshirvani University of Technology- Mazandaran.
- 5) Amir Yaghubi-Dust, under supervision of Dr. Raissi, (2013), "Evaluation of Seismic Performance of Shotcreted URM Buildings", Iran University of Science and Technology- Tehran.
- 4) Mehdi Haghi, under supervision of Dr. Vatani Oskouie, (2012), "Experimental And Numerical Study of Precast R.C. Connections Under Cyclic Loading", Azad University- Takestan.
- 3) Moahmmadreza Fekri, under supervision of Dr. Hosseini, (2012), "Seismic Design of Steel Frames with Rocking Telescopic Columns", Azad University- Tehran South Branch.
- 2) Habibollah Kakolvand, under supervision of Dr. Motamedi, (2011), "Evaluation of Proposed Retrofitting Techniques of URM Walls with Consideration of Opening Configuration by FEM Analyses", Azad University- Tehran South Branch.
- 1) Maryam Hafezi, under supervision of Dr. Motamedi, (2011), "Analysis of Yielding Ring Dampers and Utilization in Multi-story Frames", Azad University- Tehran South Branch.

C) Peer Reviewer:

- Several MSc theses external and internal referee
- Books reviewer for Elsevier
- Book reviewer for Iranian academic publishers
- ACI Structural Journal
- ACI Materials Journal
- Construction and Building Materials
- Engineering Structures
- Bulletin of Earthquake Engineering
- The Structural Design of Tall and Special Buildings
- Structures
- Buildings
- Mathematics
- Sensors
- Safety
- Applied Sciences
- Frontiers in Built Environment
- Frontiers of Structural and Civil Engineering
- Journal of Structural Integrity and Maintenance
- Civil Engineering Infrastructures Journal
- Geomechanics and Engineering, An International Journal
- Structural Engineering and Mechanics, An International Journal
- Journal of Numerical Methods in Civil Engineering
- The Open Civil Engineering Journal
- Journal of Renewable Materials
- Iranian Journal of Science and Technology, Transactions of Civil Engineering
- Amirkabir Journal of Civil Engineering (in Persian)
- Journal of Structure and Steel (in Persian)
- Modares Civil Engineering Journal (in Persian)
- The Engineering Journal of the Ferdowsi University of Mashhad (in Persian)

- Journal of Structural and Construction Engineering (JSCE) (in Persian)
- Journal of Civil Infrastructure Researches (in Persian)

D) Editorial board:

- Frontiers in Built Environment
- Journal of Architectural Research and Development

E) Courses Taught:

- Statics
- Strength of Materials I
- Strength of Materials II
- Analysis of Structures II
- Steel Structures I
- Steel Structures II
- Steel Structures Construction
- Construction of Steel Structures
- Concrete Laboratory
- Reinforced Concrete Structures I
- Fundamentals of Bridge Engineering
- Reinforced Concrete Project
- Design of Earthquake-resistant Masonry Structures
- Repair and Maintenance of Structures
- Advanced Earthquake Engineering
- Dynamics of Structures
- Seismic Risk Analysis
- Seismic Retrofit of Structures

F) Scientific Events

- Speaker at Housing Foundation Symposium, 2019, Shiraz, Iran
- Speaker at International Institute of Earthquake Engineering and Seismology, 2019, Tehran, Iran
- Keynote speaker at the U.S.-Iran Seismic Workshop, September, 2015, Yerevan, Armenia
- Keynote speaker at the 12th North American Masonry Conference (On behalf of Prof. Daniel Abrams), May, 2015, Denver, Colorado, USA
- Keynote speaker at the U.S.-Iran Seismic Workshop, August, 2014, Istanbul, Turkey
- DRES representative in observation Trip to Tabriz after Ahar-Varzaghan Earthquake in September 2012; which was accompanied by Dr. Mehmet Akdogan, Delegation of UN-HABITAT Headquarters in Middle East
- Keynote speaker at the U.S.-Iran Seismic Workshop, December 19, 2012, Tehran, Iran
- Keynote speaker and organizer of Special Session “URM Buildings and Earthquake” at the 15th World Conference on Earthquake Engineering, September 24-28, 2012, Lisbon, Portugal.
- Keynote speaker at the “Seismic Retrofitting of Schools” workshop in The 6th International Conference on Seismology and Earthquake Engineering (SEE-6), May 17, 2011, Tehran, Iran.
- Student host of the presidents and chancellors from six U.S. universities (Cornell, U.C. Davis, Maryland College Park, Florida, Rice, Carnegie Melon and the president of A.A.U.), Sep. 2008; I was selected among all university students for the job by the International & Scientific Cooperation Director of Sharif Univ. of Tech., Prof. Vafai.
- Cooperation in preparation for the “First Specialty Workshop on Adobe and Masonry Structures” proceeded by a “Seminar on Seismic Hazard Mitigation” at Sharif Univ. of Tech., March 2008.

G) Teaching Experiences

- Kharazmi University, Sep. 2012-Jan. 2013
- Azad University-Tehran South Branch, Sep. 2012-Jan. 2013
- University of Sadra, Jan. 2012-Sep. 2012
- University of Science and Culture, Sep. 2011-Jan. 2014, Sep. 2020-
- Teaching Assistant at Sharif Univ. of Tech., Sep. 2012-Jan. 2013
- Instructing Abaqus, 2009-2018, holding courses in several Iranian universities, institutions and consulting companies

H) Research Projects

- Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES) (2020-), “Mobile Application for Post-earthquake Damage Assessment of Buildings”
- Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES) (2020-), “Study on the Self-centering Mechanism of URM Buildings by Static Cyclic Tests”
- Tehran Disaster Mitigation and Management Organization (2019-2020), “Proposing RVS Scores for URM and Confined Masonry Buildings in Tehran”
- Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES) (2014-2016), “Guideline for Design of Reinforced Block-masonry Buildings”
- Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES) (2011-2018), “In-situ Experiments and on Unconfined and Confined URM Buildings”
- Housing Foundation (2008-2010), “Seismic Rehabilitation of Rural Houses in Iran”

SOFTWARE CAPABILITIES

- Abaqus
- OpenSees
- ANSYS
- SAP, ETABS, SAFE
- MATLAB, AutoCAD, ...

JOB EXPERIENCES

A) Advisorship and Membership

- Organization for Engineering Order of Building of Tehran; Design, Supervision, and Execution of Buildings License.
- Justice Experts' Association of Tehran; Central Tehran; Buildings.
- Senior technical advisor (2009-), Organization for Development, Renovation and Equipping Schools of IR. Iran (DRES) (Construction Executive Branch of Ministry of Education of Iran), Bureau of Technical and Supervision
- Member of the revision committee of the national general technical specification of construction works (Code 55) (2019-2021)
- Technical advisor (2020-), Technical deputy, Municipality of Tehran

B) Prominent Professional Projects

- Municipality of Tehran, “Repair and Retrofit of URM Dome roof of Grand Bazaar of Tehran”, Dec. 2020
- Ministry of Cultural Heritage, Handicrafts and Tourism of IR. Iran, “Rehabilitation of Falak-ol-Aflak Citadel”, Sep. 2020
- Sarzamin Consulting Company, Various projects, 2008-2018
- “Divan Alwaghf Alsheai”- “Imen Sazeh Fadak” Consulting Company, “Stabilization and Conservation of the Inclined Dhul-Kifl Minaret of Alnakhila Mosque in Alkufa, Iraq”, Oct. 2012
- PGSSCO-IRITEC-ASE, “Evaluation of Performance of Persian Gulf Saba PDC New DRI Mega Module-PDC Stress Analysis under Combined Pressure-Thermal Loading”, Dec. 2010
- UNESCO- “Imen Sazeh Fadak” Consulting Company, “Restoration Project of Al-Askari Shrine”, Sep. 2010
- Tehran Disaster Mitigation and Management Organization-Sarzamin Consulting Company-EERC of Sharif Univ. of Tech., “Incremental Seismic Rehabilitation of Common Urban Buildings”, Aug. 2008