

Hossein Bakhshi

CONTACT INFORMATION

Address: Department of Civil Engineering, Hakim Sabzevari University,
Sabzevar, Iran

E-mail: h.bakhshi@hsu.ac.ir , bakhshi_hossein@yahoo.com

Mobile: +98 9151710370

Google Scholar Link:

<https://scholar.google.com/citations?user=3kMJliAAAAAJ&hl=en>

REASERCH INTERESTS

- Structural analysis and design
- Repair and retrofit of structures against wind and earthquake
- Design of special structures such as bridges and light structures
- Energy conservation and renewable energy
- Green buildings

EDUCATION

- Ph.D., Civil Engineering, Iran University of Science and Technology, Tehran, Iran, 2006-2011.
- Visiting Scholar, School of Civil Engineering, the University of Queensland, 2010-201.
- M.Sc., Civil Engineering, Yazd University, Yazd, Iran, 1996-1998.
- B.Sc., Civil Engineering, Ferdowsi University of Mashhad, Mashhad, Iran, 1991-1995.

SCIENTIFIC & RESEARCH ACTIVITIES

- Associate Professor of Civil Engineering at Hakim Sabzevari University, 2017-present
- Assistant Professor of Civil Engineering at Hakim Sabzevari University, 2011-2017
- Supervisor of more than 65 graduate students.
- Publishing 21 ISI, scientific research papers
- Presenting 50 papers at national conferences

PUBLICATIONS

Journal Papers:

1. **H. Bakhshi**, M. Khorasani, G. Ghodrati Amiri, M. A. Barkhordari, "Estimation of Acceleration, Speed and Maximum Earth Movement Parameters Using Artificial Neural Network", Journal of Modeling in Engineering, No. 19, 2009.
2. A. Bagheri, G. Ghodrati Amiri, M. khorasani, **H. Bakhshi**, "Structural Damage Identification Of Plates Based On Modal Data Using 2D Discrete Wavlet Transform", Structural Engineering And Mechanics, vol. 40, 2011
3. N.K.Luan, **H. Bakhshi**, H.R. Ronagh, M.A. Barkhordari, G. Ghodrati Amiri, "Analytical Solutions for the In-Plane Behavior of Composite Steel/Concrete Beams with Partial Shear Interaction", Asian Journal Of Civil Engineering (Building And Housing), vol. 13, 2011
4. B. Abolpour, B. Abolpour, R. Abolpour, **H. Bakhshi**, "Estimation of concrete compressive strength by a fuzzylogic model", Res Chem Intermed, doi 10.1007/s11164-012-0591-0, pp1-13, 2012.
5. **H. Bakhshi**, S.E. Hossein, "Evaluation of Factors Affecting MR Damper Performance in Seismic Response Reduction of Structures", European Journal of Scientific Research 102 (4), 596-609, 2013.
6. **H. Bakhshi**, G. Ghodrati Amiri, A. Bagheri, M. A. Barkhordari, "Estimation of spectral acceleration based on neural networks Structures and Buildings", Proceedings of the Institution of Civil Engineers Structures and Buildings vol. 167 Issue 8, p. 457-468, 2014.
7. M. Azarpira, H. Sarkardeh, S. Tavakkol, R. Roshan and **H. Bakhshi**, "Vortices in dam reservoir: A case study of Karun III dam", Sādhanā, 2014.
8. S. H. Delbari, B. Siavash Pour and **H. Bakhshi**, "Evaluation Of Trends In The Structure Of Work Space Among Civil Engineers (Compared To Tent Structures)", International Journal Of Current Life Sciences, vol. 9, Issue 10, pp. 8844-8845, 2014.
9. M. Rakhshani Mehr, **H. Bakhshi**, "Investigating the Effect of Fiber Content and Resistance Class on Mechanical Properties of Concrete with Steel Fibers", Concrete Research, No. 1, 2015.
10. H. Eskandari-Naddaf, M. Lezgy-Nazargah, and **H. Bakhshi**,

“Optimal Methods for Retrofitting Corrosion-Damaged Reinforced Concrete Columns”, *Procedia Computer Science*, vol. 101, pp. 262-271, 2016.

11. **H. Bakhshi**, R. Ahmadi, “Influence of nano-silica and silica fume in the steel corrosion embedded in concrete”, *Journal of Rehabilitation in Civil Engineering*, vol. 6, 2016.

12. A. Baghani, **H. Bakhshi**, M. Rakhshaniyehr, "Investigating the Effect of Natural Zeolite on Physical and Hydraulic Properties of Cement Stabilized Soils," *Concrete Research*, No. 2, 2016.

13. **H. Bakhshi**, M. Rakhshani-Mehr, M. Nowroozi, "Seismic risk analysis and preparation of maps for acceleration of Neishabour city", *Journal of Modeling in Engineering*, No. 50, 2017.

14. **H. Bakhshi**, F. Faghih Khorasani, M. Rakhshani Mehr, "Investigating the behavior of joints under the influence of gravity and lateral load", *Sharif Civil Engineering*, No. 32, 2017.

15. **H. Bakhshi**, M. Rakhshanimahr, M. Ramshini, "Investigation of wind turbulence in high-rise buildings during construction with different sections in the plan", *Modares Civil Engineering Magazine*, No. 2, 2017.

16. B. Abolpour, B. Abolpour, **H. Bakhshi** and M. Yaghobi, “An Appropriate Extreme Value Distribution for the Annual Extreme Gust Winds Speed”, *Journal of Fundamentals of Renewable Energy and Applications*, vol. 7:1, 2017.

17. **H. Bakhshi**, H.R. Ronagh, “Finite Element Instability Analysis of the Steel Joist of Continuous Composite Beams with Flexible Shear Connectors”, *Journal of Solid Mechanics*, vol. 9, No. 2, pp. 351 -369, 2017.

18. S. Sarabi1, **H. Bakhshi**, H. Sarkardeh, and H. Safaye Nikoo, “Thermal stress control using waste steel fibers in massive concretes”, *The European Physical Journal Plus*, vol. 132:491, 2017.

19. M. Halimi, M. Kioumarsi, **H. Bakhshi**, H. Sarkardeh “Numerical investigation on effects of steel fibers content on flexural behavior of UHPCC”, *Taylor & Francis*, 2019.

20. **H. Bakhshi**, Z. Rezaei, "Preparation of Same Acceleration Maps for Use in the Improvement of Structures in Sabzevar City", *Journal of Rehabilitation in Civil Engineering*, vol. 9-2, 101-119, 2021.

21. **H. Bakhshi**, Z. Rezaei, "Deterministic and Probabilistic Seismic Hazard Analysis of Petroleum Storage of Sabzevar", Journal of Rehabilitation in Civil Engineering, 2021.

Conference Papers:

22. **H. Bakhshi**, H. Baji, H.R. Ronagh, M.A. Barkhordari, "Capacity of cold formed steel walls subjected to lateral cyclic loading", 1st international postgraduate conference on engineering, designing and developing the built environment for sustainable wellbeing, Queensland University of Technology, 2011.

23. **H. Bakhshi**, H. Baji, H.R. Ronagh, M.A. Barkhordari, "Estimation of strong ground motion parameters using artificial neural networks", 1st international postgraduate conference on engineering, designing and developing the built environment for sustainable wellbeing, Queensland University of Technology, 2011.

24. M. Hassanzadeh Firoozi, M. Kalami Moghadam, **H. Bakhshi**, "Origami as a New Construction Technology in Sustainable Architecture", 1st Conference on New Thoughts and Technologies in Architecture, Iran, Tabriz, 2012.

25. **H. Bakhshi**, H. Arzoo, G. Poor-o-Ghanei, "Construction Requirements and Architecture of Hospital Building with Inactive Passive Approach", National Conference on Civil and Sustainable Development, Iran, Mashhad, 2012.

26. A. Khodadadi, **H. Bakhshi**, "Investigating and comparing the seismic performance of steel buildings with CFT columns with frictionless and non-dampers fitted with a pendulum friction separator", 3rd National Conference on Materials and Structures in Civil Engineering, Iran, Semnan, 2012.

27. M. R. Zare Barzeshi, **H. Bakhshi**, "Earthquake, Groundwater Pollution and its Effects on the Environment", 1st National Conference on Environmental Conservation and Planning, Iran, 2012.

28. A. Ahmadi, **H. Bakhshi**, "Investigating nonlinear behavior of concrete flexural frames with comparative approach with Iran's seismic reconstruction regulations", 1st national conference on civil engineering and sustainable development of Iran, Tehran, 2013.

29. A. Ahmadi, **H. Bakhshi**, "Investigating the Effect of Concrete Strength on the Seismic Behavior of Modular Concrete Frames", 1st National Conference on Civil Engineering and Sustainable Development of Iran, Tehran,

Iran, 2013.

30. A. Khodadadi, H. Bakhshi, “Investigating and comparing the seismic performance of steel buildings with CFT columns with frictionless and non-damping dampers equipped with pendulum friction separators”. 1st national conference on civil engineering and sustainable development of Iran, Tehran, 2013.
31. H. Bakhshi, F. Faghih Khorasani, N. Tafiqi Mohammadi, N. Kordi, “Investigating the Intermediate Effect of Building Materials on the Type of Soil and Building Height in Steel Structures”, 7th National Congress of Civil Engineering, Iran, Zahedan, 2013.
32. H. Albouyeh, M. A. Barkhordari, H. Bakhshi, “Investigation of the effect of mass dampers on high-altitude structures in earthquake and wind”, 3rd National Conference on Earthquake and Structures, Iran, Kerman, 2013.
33. H. Albouyeh, M. A. Barkhordari, H. Bakhshi, “Investigation of passive dampers in improving seismic response in retrofitting structures”, 3rd National Conference on Earthquake and Structures, Iran, Kerman, 2013.
34. S. H. Delbri, H. Bakhshi, “Investigating the Effect of Steel Fibers on Tensile Resistance Classes”, 9th Symposium on Advances in Science and Technology, Iran, Mashhad, 2014.
35. S. A. Hejaziyan, H. Bakhshi, “Investigating Seismic Rehabilitation and Repairing Damaged Structures”, 15th National Students Conference in Iran, Urmia, 2014.
36. H. Bakhshi, A. Khodadadi, “Investigating and comparing the seismic performance of steel buildings with compound columns CFT and SRC with friction damper”, 1st National Conference on Civil, Urban and Sustainable Development, Tehran, 2014.
37. S. A. Hejayazian, H. Bakhshi, “Investigating Types of Nonlinear Analytical Methods for Determining Internal forces and Structural Transformations by Seismic Force”, 15th National Students Conference in Iran, Urmia, 2014.
38. M. Dzhjanshah, H. Bakhshi, “Assessing the Strength of Steel with I Geometry Rounded by Polymer Composites”, 15th National Students Conference, Iran, Urmia, 2014.
39. M. Nashveh, M. Lazgi, Nzargah, H. Bakhshi, “Analysis of limited parts of FRP slabs reinforced with cores”, International Conference on Civil

Engineering, Architecture and Sustainable Urban Development, Iran, Tabriz, 2014.

40. M. Nashvah, M. Lazghi Nzargah, **H. Bakhshi**, “Analysis of Finite Elements of Concrete Sidewalls Armed with TRC Network”, International Conference on Civil Engineering, Urban Architecture and Sustainable Development, Iran, Tabriz, 2014.

41. **H. Bakhshi**, S. Nazari, “A Study of Damage Marking Models for Concrete Shear Sections”, 2nd National Congress on Construction Engineering and Evaluation of Construction Projects, Iran, Semnan, 2015.

42. **H. Bakhshi**, M. Babalahaveji, D. jahani, “Investigating the Effect of Rigidity of Fitting and Frame Geometry on the Failure in Steel Flexible Frames”, International Conference on Civil, Architecture and Urban Infrastructure, Iran, Tabriz, 2015.

43. A. Ebtekar, **H. Bakhshi**, S. Kamali, “Laboratory study of the effect of rock aggregate on mechanical properties of roller concrete”, 3rd International Civil, Architecture and Urban Development Congress, Tehran, 2015.

44. R. Krughdeh, **H. Bakhshi**, A. Hashemzadeh, “Need of selecting the appropriate and efficient template for the project Using specific tools and frameworks”, 3rd international congress of civil, architecture and urban development, Iran, Tehran, 2015.

45. M. Saharkhiz, **H. Bakhshi**, “Vulnerability Assessment and Seismic Detection of Residential Buildings in Sabzevar”, 1st Annual Conference on Architectural, Urban and Research, Iran, Yazd, 2015.

46. Z. Gholami Sabagh, A. Hashemizadeh, **H. Bakhshi**, “Improving the Risk Management Process of Construction Projects Using Value Engineering”, 1st International Congress on Urban Development, Urban Management and Development, Iran, Shiraz, 2015.

47. H. Jalali, **H. Bakhshi**, “Evaluation of Seismic Performance of Steel Bracing Frames Using Nonlinear Methods”, Annual International Civil, Architecture and Urban Development Conference, Iran, Shiraz, 2015.

48. H. Jalali, H. **B. Hossein**, “Study and Comparison of Steel Structures Behavior in Static and Nonlinear Analysis”, International Conference on Architecture and Urban Development, Iran, Shiraz, 2015.

49. V. R. Abbasi, **H. Bakhshi**, M. Kazemi, “Numerical study of the behavior of sub-column under bellow bending”, International Conference on

Civil Engineering, Iran, Tehran, 2016.

50. E. Ezi, H. Bakhshhi, “Influence of the Bursting Pillar Position on Improvement of Concrete Shear Pillars”, 3rd Congress of Modern Horizons in Civil Engineering, Architecture, Culture and Urban Management, Iran, Tehran, 2016.

51. N. Arefizadeh, H. Bakhshi, H. Saqi, “Model of Major Risks Management in Construction in Residential Project”, International Conference on Civil Engineering Elite, Architecture and Urban Development, Tehran, Iran, 2016.

52. A. Davandari, A. A. Khodadadi, A. Hashemizadeh, H. Bakhshi, “The role of project management in building construction activities in the comprehensive crisis management”, 7th International Conference on Crisis Management, Iran, Tehran, 2016.

53. H. Bakhshi, J. Shir Mohammadi, “Identification and location of damage using direct modal shapes in a beam”, 11th symposium on advances in science and technology, Iran, Mashhad, 2016.

54. H. Bakhshi, K. Hosseini Sani, “Investigating on Different Methods of Calculating Frequency in Tiers”, 11th Symposium on Advances in Science and Technology, Iran, Mashhad, 2016.

55. H. Bakhshi, M. Baradaran, “Investigation of the role of upper stiffeners, rigid joints, beam to pillars”, 4th national conference on applied research in civil engineering, architecture and urban management, Iran, Tehran, 2016.

56. H. Bakhshi, S. Hashemifard, “Surface Performance of Regular Flexible Structures”, 4th National Conference on Applied Research in Civil, Urban Architecture and Management, Tehran, 2016.

57. H. Bakhshi, M. Nowrozi, A. Adinizadeh, “Investigation of mass irregularities on the performance level of special steel bending frame structures”, 4th International Congress on Civil, Urban Development and Architecture, Tehran, 2016.

58. S. Moghadam, H. Bakhshi, H. Saghei, “Knowledge Management, A Methodology for Improving Organization Performance and Organizational Processes”, 4th International Congress on Civil, Urban Development and Architecture, Tehran, 2016.

59. A. Khazama, H. Bakhshi, M. Abolhasani, “Investigation of elastic modulus of concrete reinforced with steel fibers through micromechanical methods”, International Conference on Civil Engineering, Architecture and Urban

Planning of Contemporary Iran, Tehran, 2017.

60. G. Tadayonfar, **H. Bakhshi**, N. Dehnavi, “The effect of problem soil interactions on concrete structures”, 5th National Conference on Applied Research in Civil Engineering, Architecture and Urban Management, Tehran, 2018.
61. E. Salhabadi, **H. Bakhshi**, H. Shad, “Investigation and analysis of vulnerability using modeling of refrigerator structures” National Conference on Recent Advances in Engineering and Modern Science, Tehran, 2018.
62. E. Salhabadi, **H. Bakhshi**, H. Shad, “Investigation of vulnerability and methods of strengthening traditional structures (Case study Refrigerators)” National Conference on New Research in Civil Engineering, Architecture and Urban Management, Tehran, 2018.
63. R. Shahabi, **H. Bakhshi**, “Investigating the effect of cost management in the management of construction projects with an approach Value Engineering”, International Conference on Civil Engineering, Architecture and Urban Development Management in Iran. Tehran, 2018.
64. M. Hite, **H. Bakhshi**, A. Kovharrokhi, M. Yavariniya, “Comparison of performance of medium steel bending frame by PBPD method with Iranian earthquake regulations (code 2800)”, National Conference on New Research in Civil Engineering, Architecture and Urban Management, Tehran, 2018.
65. **H. Bakhshi**, A. Adinehzadeh, “Assessing the performance level of concrete hospitals in Sabzevar”, 3rd Annual Conference on Architectural, Urban Planning and Urban Management Research. Tehran, 2018.
66. **H. Bakhshi**, H. Shad, M. Hidar Khaled, “Numerical study of the effect of slabs on the philosophy of "strong column - weak beam" design criteria in structures Reinforced concrete”, 6th National Conference on Applied Research in Civil Engineering, Architecture and Urban Management, Tehran, 2019.
67. H. A. Joghataei, **H. Bakhshi**, F. Nickpour, “Investigating and evaluating the mediating role of value engineering in human resource management on the success of construction industry projects”, 2nd National Conference on Civil and Architectural Engineering with Emphasis on Employment in the Construction Industry, Tehran, 2019.
68. **H. Bakhshi**, H. Shad, M. Sepehri Rad, A. Adinehzadeh, “Investigating the vulnerability of steel buildings with residential use in Kashmar city”, Conference on Civil Engineering, Architecture and Urban Planning of the Islamic World, Tehran, 2019.

69. **H. Bakhshi**, H. Shad, M. Sepehri Rad, A. Adinehzadeh, “Investigating the vulnerability of Concrete buildings with residential use in Kashmar city”, Conference on Civil Engineering, Architecture and Urban Planning of the Islamic World, Tehran, 2019.

70. A. Koshki, **H. Bakhshi**, A. Rajabi, “Review and evaluate the performance of PMBOK project management standard on the success of construction industry projects”, Conference on Civil Engineering, Architecture and Urban Planning of the Islamic World, Tehran, 2019.

71. H., Shad, **H. Bakhshi**, H., Saghi, Z., Rezaie, M., Rakhshanimehr, “Experimental investigating of structure dynamic response with single degree of freedom with a tuned liquid damper equipped by a baffle”, International Institute of Earthquake Engineering and Seismology (IIEES), 2020.

Books:

1- Management in Engineering, Hakim Sabzevari University Publishing, 2017. (in Persian)

2- Seismic Design of Buildings, Hakim Sabzevari University Publishing, in press, (in Persian)

JOURNAL & CONFERENCE REVIEWER

- Referee of the Festival of ASRAR
- Referee of the book "Principles and Basics of Design of Reinforced Concrete Buildings"
- Referee of the book "Static"
- Referee of the book "Visual AutoCAD"
- Referee of the Journal of Concrete Materials and Structures
- Referee of the Journal of Modelling in Engineering
- Referee of the 28th International Conference of the Iranian Association of Mechanical Engineers
- Referee of the Journal of Mechanical Engineering
- Referee of the Journal of Rehabilitation in Civil Engineering

PROFESSIONAL QUALIFICATIONS

- Infrastructure Advisor to the Mayor of Zanjan
- Technical adviser to the Mayor of Sabzevar

& EXPERIENCE

- Head of the Construction Engineering Organization
- Collaboration with the Australian company, NEOBUILD, to design the structure of the largest tower in Papua New Guinea
- Chair of the Department of Civil Engineering
- Deputy Dean of the Faculty of Engineering
- Director of University Development Planning Division
- Development committee chair of the universities of the 9th district of the country, appointed by the Deputy Minister of Science, Research & Technology
- Chairman of the specialized working group on urban development
- Certificate of enrolment in the training course *"Introduction to energy efficiency solutions in heating and cooling facilities of buildings"*
- Design and construction of laboratory vibrating table
- Certificate of enrolment in the 3rd national conference *"New technologies of the construction industry"*
- Development committee chair of the universities of the 8th district of the country, appointed by the Deputy Minister of Science, Research & Technology
- Certificate of enrolment in the conference *"Optimization of energy consumption and development of renewable energy in universities"*
- Attending the 1st national conference *"Green University"*
- Design and manufacture of roller concrete with local materials
- Attending the 1st specialized conference *"Optimization of energy consumption and use of renewable energy in universities"*
- Enrolment in the training course *"Introduction to renewable energy and its application in buildings"*
- Project manager of the dormitory complex project
- Advisor to Farjad Cement Company

ADDITIONAL

- Iranian Organization for Engineering Order of Building Khorasan

EMPLOYMENT

Razavi, Iran- (1998-2021)

Main Responsibilities:

- Design and supervision of construction of metal, concrete and LSF buildings and to comply with international codes & standards and a set of regional and local considerations and priorities.
- Modelling the energy consumption in residential buildings.
- Supervise the construction of green buildings in terms of optimizing energy consumption

MEMBERSHIP

- Senior licenced member of the Construction Engineering Organization
- Member of the University Development Council
- Member of the Board of Trustees of Beihag University, appointed by the Minister of Science, Research & Technology for 8 years
- Member of the Scientific Committee of the National Congress for Architecture and Urban Development
- Member of the Scientific Committee of the 4th National Conference on "Mechanical Engineering, Civil Engineering and Advanced Technologies"