

CURRICULUM VITAE

Personal Data

Name	Rima Fayaz
Date and Place of Birth	22/1/1958, Tehran, Iran
Address	Department of Architecture and Energy, Faculty of Architecture and Urbanism, Art University, Hafez St., Sarhang Sakhaee St., No. 56, 1136813518, Tehran, Iran
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Academic Qualifications

Ph.D.	Architectural Engineering, Tehran University. Tehran, Iran, 2000
M.Sc.	Architecture, Tehran University. Tehran, Iran, 1987
Title of Ph.D. Thesis	Application of Solar Elements in Tall Buildings of Tehran
Title of M.Sc. Thesis	Solar Residential Complex in Tehran Climate

Work Experiences

1. 1999 to present Associate Professor, Department of Architecture, Department of Architecture and Energy, Faculty of Architecture and Urbanism
2. 1990 to 1993: Architect, self employed; Designing office, and residential buildings
3. 1987 to 1990: Architect, Poolad Consulting Engineers, Designing office, and industrial buildings.

Publications

Books

Written (in Persian)

1. R. Fayaz, et al., Building Code for Energy Conservation in Buildings No. 19, Ministry of Housing and Urbanism, 1991.
2. R. Fayaz, et al., Guidance for Constructional Details, Adjoined to Building code No. 19, Ministry of Housing and Urbanism, 1999.
3. R. Fayaz, et al., Building Code for Energy Conservation in Buildings No. 19, (Revised Version), Ministry of Housing and Urbanism, 2001.
4. R. Fayaz, et al., Principals and Techniques of Thermal Insulation According to Code No. 19 (Energy Conservation), Building and Housing Research Center (BHRC), 2007.
5. R. Fayaz, et al., Fundamentals of Designing Fixed Shading Devices for Various Climatic Regions of Iran, Building and Housing Research Center (BHRC), 2011.

Translations (into Persian):

1. M.H. Morgan, Vitruvius: The Ten Books on Architecture, Dover Publications, 1960.
2. S.V. Szokolay, Introduction to Architectural Science, The Basis of Sustainable Design, Third Edition, 2014.

Papers (in Persian):

1. R. Fayaz, et al., Thermal insulation of buildings in Tehran, *Innovations in Buildings and Habitations*, 3(2,3), (1998).
2. R. Fayaz, et al., Depth of shading devices in Different climatic regions of Iran, *Innovations in Buildings and Habitations*, 4(3), (1999).
3. R. Fayaz, et al., The effect of glass facades on interior thermal conditions, *Fine Arts*, 6,(1999): 67-71.
4. R. Fayaz, et al., Collector facade in a tall building of Tehran, *Fine Arts*, 8, (2000): 84-92.
5. R. Fayaz, et al., The limit of thermal comfort in Tehran, *Journal of Environmental Studies*, 28, (2001):14-17.

6. R. Fayaz, et al., Investigation of constructional details in residential projects in four provinces of Iran, *Innovations in Buildings and Habitations*, 27,8(3,4), (2004):9-20.
7. R. Fayaz, et al., Guidance for installing shading devices on transparent openings, *Building Engineering and Habitation Sciences*, 2,(2004):65-69.
8. R. Fayaz, et al., Interior design of a bedroom for efficient use of daylight, *Journal of Architecture and Urban Planning*, 81(2012: 133-149.
10. R. Fayaz, Optimal window area for residential buildings in Ardabil and Tehran, *Journal of Architecture and Urban Planning*,10 (2013): 105-119.
11. R. Fayaz, et al., The appropriate form of tall building to achieve solar energy in Tehran, *Iranian Journal of Energy*, vol.16 No.4 (2013: 47-60.
- 9 . R. Fayaz, et al., The range of thermal comfort in outdoor traditional residential of Yazd, *Hoviyyate Shahr*, 23 (9) (2015): 59-72.
- 12 . R. Fayaz, et al., Optimization of existing buildings in cold climates of Iran using Trombe -Wall characteristics, *Journal of Iranian Architecture Studies*; 1 (8) (2016) :107-118.
13. R. Fayaz, et al., Modular Building Envelope Panel with Heating and Cooling Capability, *Naqshejahan*, Volume 6, Issue 1(Summer 2016):41-31.
14. R. Fayaz, et al., The effect of Orosies on interior air flow: Case study Zinat-ol-molk residence in Shiraz, *The Scientific Society of Architecture and Urbanism*, 6(9) (2015): 19-26.
- 15.R. Fayaz, et al., An analysis of the built environment effects on creativity of children, *Bagh Nazar*, 13 (43), (January 2016): 17-36.
16. R. Fayaz, et al., The effect of Louvered shading devices on energy efficiency in Tehran office buildings, *Modarres Mechanical Engineering Journal*, 17(4), (July 2017):17-28.
17. R. Fayaz, et al., The effect of phase change materials on Spring and Autumn seasonal transition period in residential buildings, *Nameyeh Memari & Sharsazi Journal*, 19 (Autumn & Winter 2017): 39-60.
18. R. Fayaz, et al., The typology of courtyard houses of Tabriz regarding the effective physical criteria on climatic performance of central courtyard, *Urban Management*, 51 (Summer 2018): 87-105.

19. R. Fayaz, et al., Parametric simulation of building efficiency in primary phases of design: Mid-rise residential building in hot-arid climate, *Nameyeh Memari & Sharsazi Journal*, 11(23); (Summer 2019): 5-28.
20. R. Fayaz, et al., The effect of texture formation on absorbing solar radiation of buildings in neighborhood units of regions with cold climate (Case study: Chehrehghan village), *Housing and Rural Environment*, 167 (Fall 2019): 19-34.

Papers (in English):

1. R. Fayaz, et al., Evaluation of the Iranian thermal building code, *Asian Journal of Civil Engineering (Building and Housing)*, Vol. 7, No. 6 (2006): 671-684.
2. R. Fayaz, et al., Comparison of energy conservation building codes of Iran, Turkey, Germany, China, ISO 9164, and EN, *Applied Energy*, Vol.10, No. 86(2009): 1949-1955.
3. R. Fayaz, et al., Thermal behavior of a ventilated double skin facade in hot arid climate, *Energy and Buildings*, 42 (2010):1823-1832.
4. R. Fayaz, et al., Vertical illuminance measurement for clear skies in Tehran, *Armanshahr*, 4 (8) (2012): 11-19.
5. R. Fayaz, et al., Integrating thermal and lighting analysis to optimize window size of educational buildings, *Naghshe Jahan*, 4(5) (2015): 45-60.
6. R. Fayaz, et al., Investigating the national criteria and standards of building window in the sustainable architecture of Iran, *Journal of Applied Environmental and Biological Sciences*, 5(8), August (2015): 125-133.
7. R. Fayaz, et al., Design and geometrical optimization of the veranda roof pattern with the target of visual comfort in Shareman as one of the Solar Decathlon China 2013 houses, *Building Simulation*, 8(3), June (2015)- pp. 323-336.
8. R. Fayaz, et al., Cooling load reduction in office buildings of hot arid climate, combining phase change materials and night purge ventilation, *Renewable Energy*, 58(2016):725-731.

9. R. Fayaz, et al., The Optimum design of sunspaces in apartment blocks in cold climate, *Architectural Science Review*, 59(3) (2016): 239-253.
10. R. Fayaz, et al., The effect of solar chimney layout on ventilation rates in buildings, *Energy and Buildings*, 123, July (2016): 71-78.
11. R. Fayaz, et al., The impact of phase change materials assisted night purge ventilation on the indoor thermal conditions on office buildings in hot arid climates, *Energy and Buildings*, 150, (2017): 488- 479.
12. R. Fayaz, et al., Horizontal and Vertical Illuminance Correlations in a Case Study for Shaded South Facing Surfaces, *International Journal of Energy and Environmental Engineering*, Vol:11, No:12, (2017):
13. R. Fayaz, et al., Single and combined phase change materials: Their effect on seasonal transition period, *Energy and Buildings*, 169 (2018): 453-472.
14. R. Fayaz, et al., Computational optimization of housing complexes forms to enhance energy efficiency, *Journal of Civil engineering and Management*, 24 (3) (2018): 193-205.
15. R. Fayaz, et al., Analysing The Climatic Impact Of Central Courtyards In Traditional Houses Of Tabriz, *Space Ontology International Journal*, Vol. 7, Issue 1, Winter (2018): 29-49.
16. R. Fayaz, et al., A modelling methodology for a solar energy-efficient neighborhood, *Smart and Sustainable Built Environment*, Vol. 7 Issue: 1(2018):117-132.
17. R. Fayaz, et al., A comparison of outdoor thermal comfort in historical and contemporary urban fabrics of Lar City, *Urban Climate*, 27 (2019): 212-226.
18. R. Fayaz, et al., Effects of interior architecture for optimal use of natural light and electrical energy saving, *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, (2019): 1-15.

Workshops and presentations

1. R. Fayaz, et al., "The use of passive energies in past and present architecture", The First Conference on Climate Change, Tehran, 1996.

2. Invited lecturer, "Building physics: climatic design, energy efficiency in buildings, acquaintance with methods and codes", Building and Housing Research Center (BHRC), 1998, Tehran.
3. Invited lecturer," Energy management in building", Ministry of Power, 1998, Tehran.
4. Invited lecturer, "Introducing Building Code No. 19, (energy efficiency in Buildings)", Building and Housing Research Center (BHRC), 2001, Tehran.
5. Participant, " Young Cities, Energy Conservation, Case study: The New Town of Hashtgerd", Building and Housing Research Center (BHRC), 8-9 Feb., 2013, Tehran.
6. Invited lecturer," Sustainable Architecture Workshop", Iranian University of Science and Technology, Faculty of Architecture, 29 April, 2015, Tehran.
7. Invited lecturer," The International Symposium on Energy Efficient Architecture and Urbanism", Tarbiat Modares University, Faculty of Art and Architecture, 26 Dec., 2015, Tehran.
8. Invited lecturer," The Second Gathering on Green Management in Educational, Training and Sport Spaces", Organization for Development, Renovation and Equipping Schools, 6-7 Jan. 2020, Tehran.

Conferences

1. R. Fayaz, et al.," The world trend on energy efficiency in buildings", The Seventh Conference on Policies of Development of Habitations in Iran, 2000, 3-4 October, Tehran
2. R. Fayaz, et al., "Energy auditing of a school in Tehran", The First Conference on the Role of Insulation in Building and Utilities, 2001, 6 February, Tehran.
3. R. Fayaz, et al.," Energy auditing of two residential buildings in Tehran", The First Conference on Efficiency of Fuel Consumption in Buildings, 2001 March, Tehran.
4. R. Fayaz," New building systems and green buildings", The Second Conference on New Building Technologies and Industrialization, 2010, 22-23 November, Tehran.
5. R. Fayaz, et al.," Introducing building code No. 19", Third Conference on Building Code, 2011, 8 March, Tehran.
6. R. Fayaz," Galss facades in Tehran and glare", Building Facade and City Image Conference,

2011, 19-20 April, Tehran.

7. R. Fayaz, et al., "Hydrogen economy and the built environment", World Energy Renewable Congress, 2011, 8-13 May, Linkoping, Sweden.

8. R. Fayaz, et al., "Comparing the performance of air-flow and conventional Windows in terms of energy conservation", The First National Architecture, Conservation, Urbanism and Sustainable Environment Conference, 2013, 19 Sept., Hamedan.

9. R. Fayaz, et al., "Energy analysis of building envelope shading devices in traditional building design of Yazd", The Third International Conference on New Approaches in Energy Preservation, 2013, 1-2 March, Tehran.

10. R. Fayaz, et al., "Sunspace performance analysis for energy efficiency in residential buildings", The Third International Conference on New Approaches in Energy Preservation, 2013, 1-2 March, Tehran.

11. R. Fayaz, et al., "Criteria and standards of windows in sustainable architecture", The First International Conference on New Horizons in Architecture and urbanism", 2013, 6-7 Jan, Tehran.

12. R. Fayaz, et al., "The effect of window dimensions regarding lighting and heat in residential buildings of mild humid climate ", The First International Conference on New Horizons in Architecture and urbanism", 2013, 6-7 Jan, Tehran.

13. R. Fayaz, et al., "The effect of natural lighting intensity in optimal windows regarding thermal performance ", The First International Conference on New Horizons in Architecture and Urbanism", 2013, 6-7 Jan, Tehran.

14. R. Fayaz, et al., "Selecting the most efficient thermal insulation in terms of thermal transmittance and economic efficiency", The First International Conference on New Horizons in Architecture and urbanism", 2013, 6-7 Jan, Tehran.

15. R. Fayaz, et al., "Sunspace performance analysis for energy efficiency in residential buildings", The Third International Conference on New Approaches in Energy Preservation, 2013, 1-2 March, Tehran.

16. R. Fayaz, et al., " Optimization of shading devices angle regarding light and heat in residential buildings of mild humid climate", The Fourth International Conference on New Approaches in Energy Preservation, 2014, 17-18 Feb., Tehran.
17. R. Fayaz, et al., " The amount of natural lighting intensity in optimal windows regarding thermal performance, Case study: Tehran", The First National Conference on Urbanism, City Management and Sustainable Development, 2014, 11 March, Tehran.
18. R. Fayaz, et al., " Optimizing window dimension on south facade of residential buildings In mild humid climate to achieve a sustainable architecture", The Second International Conference on Structure, Architecture and Urban Development, 2014, 16-18 Dec., Tehran.
19. R. Fayaz, et al., " Evaluating the effective parameters on regulating blinds in office buildings of Tehran", The National Symposium on Structure, Urbanism and Sustainable Development, 2014, 4 Jan., Tehran.
20. R. Fayaz, et al., " The effect of central courtyard proportions on the geometry of air flow inside the courtyard ", The International Conference on New Design and Construction Methods in Contextual Architecture, 2014, 7-8 Oct., Tehran.
21. R. Fayaz, et al., " Orosies as elements controlling the geometry of air flow inside the spaces, Case Study: Zinat-ol-molk residence in Shiraz ", The International Conference on New Design and Construction Methods in Contextual Architecture, 2014, 7-8 Oct., Tehran.
22. R. Fayaz, et al., " Methods to benefit from solar energy in buildings", The International Conference on New Design and Construction Methods in Contextual Architecture, 2014, 7-8 Oct., Tehran.
23. R. Fayaz, et al., " The second fabric of an office building with glazed facade regarding daylighting and energy consumption ", The Third International Conference on Civil Engineering, Architecture and Urban Development, 2014, 28-29 Dec., Tehran.
24. R. Fayaz, et al., "Natural illuminance intensity level in optimal thermal windows", The First Conference on Urbanism, Urban Management and Sustainable Development, 2014, 11-12 Jan., Tehran

25. R. Fayaz et al., Community engagement as a tool to help deliver smart city innovation, ECEEE Summer Study Proceedings, Consumption, Efficiency and Limits ,2017: 807- 820.
26. R. Fayaz et al., Horizontal and vertical illuminance correlations in a case study for shaded south facing surfaces, ICSREE 2017: 19th International Conference on Sustainable and Renewable Energy Engineering, Rome, Italy, 2017, December 11-12.
27. R. Fayaz et al., “Evaluating the Performance on Green Envelopes as a Strategy to Improve the Environmental Quality of Shiraz”, The Third National Conference on Sustainable Architecture and City, Tehran, 2017, March 10.
28. R. Fayaz et al., “The Effect of Buildings Shadows on Outdoor Thermal Comfort Conditions in Birjand University Campus”, The Fifth Conference of Iranian Energy Society, Tehran, 2019, February 24-25.

Teaching experiences

Associate Professor	Head of Department of Technology in Architecture, Faculty of Architecture and Urbanism, University of Art (from 2012)
Courses Taught	Applied Geometry; Perspective Drawing; Architectural Design Studios
B.Sc.	1,2,3,4 and 5; Regulating Environmental Conditions, supervisor of final thesis
M.Sc.	Architecture and Energy Design Studio1& 2, Urban Design and Energy Studio, Architecture Consistent with Climate, Seminar on Special Subjects, Passive Solar Architecture, Supervisor of final thesis
Ph.D.	Energy Efficiency in Architecture, Supervisor of final thesis