



**Distinguished Professor of
Structural Engineering,
School of Civil Engineering,
Iran University of Science and
Technology (IUST), Tehran, Iran**

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PERSONAL IDENTITIES

Given Name: Ali

Family Name: Kaveh

Date and Place of Birth: 03.03.1948, Tabriz, Iran

Nationality: Iranian

Marital Status: Married (with 3 children)

POSITIONS

- Assistant Professor, IUST, 1974-1979.
- Guest Visitor, University of Surrey, UK, 1977-1978.
- Associate Professor, IUST, 1979-1985.
- Guest Professor, TU-Vienna, 01.03.1985 - 30.05.1986.
- Full Professor, IUST, 1985-1991.
- Guest Professor, TU- Vienna, 01.10.1991 - 30.06.1992
- Full Professor, IUST, 1992-May 1993.
- Guest Professor, GH-Essen, June 1993-September 1993.
- Full Professor, IUST, October 1993-1994.
- Guest Professor, TU- Vienna, 01.03.1996 - 31.07.1997.
- Full Professor, IUST, October 1996-2003.
- Guest Professor, TU- Vienna, 01.10.2003 - 31.07.2004.
- Visiting Researcher at LMC for One Month in 2004
- Full Professor, IUST, October 2003-2008.
- Guest Professor, TU- Vienna, 01.10.2008 - 30.09.2009.
- Full Professor, IUST, October 2008-2015.
- Guest Professor, TU- Vienna, 01.03.2015 - 31.07.2015.
- Full Professor, IUST August 2015-October 2016.
- Distinguished Professor, IUST, October 2016-2017.
- Guest Scholar, TU- Vienna, July 2017-January 2018.
- Distinguished Professor, IUST, 2018-July 2019.

- Guest Scholar, TU- Vienna, 01.10.2023 - 31.01.2024.
- Distinguished Professor, IUST, 2019-Present.

EDUCATION

- **BSc of Civil Engineering – Tabriz University (1969)**
- **MSc of Civil Engineering in the field of Structural Engineering (1971)**
Imperial College – London University – London – United Kingdom
- **DIC of Civil Engineering in the field of Structural Engineering (1971)**
Imperial College – London University – London – United Kingdom
- **PhD of Civil Engineering in the field of Structural Engineering (1974)**
Imperial College – London University – London – United Kingdom
- **Dipl. Ing of Civil Engineering (1991)**
Technical University of Vienna – Vienna – Austria
- **Dr. Tech of Civil Engineering (1993)**
Technical University of Vienna – Vienna – Austria

MEMBERSHIPS

- **ACADEMIES**
 - **Fellow of the Iranian Academy of Science (FIAS) since 1997.**
 - **Fellow of the World Academy of Sciences (FTWAS) since 2006.**
 - **Active Member of the European Academy of Sciences and Arts (AMEASA) since 2015.**
 - **Fellow of the International Core Academy of Sciences and Humanities, 2025**
- **SOCIETIES**
 - Fellow of the Iranian Society of Civil Engineering (FISCE).
 - Associate Fellow of the Institute of Mathematics and its Applications (AFIMA).
 - Member of International Society for the Interaction of Mechanics and Mathematics (ISIMM).
 - Member of Association for Computational Mechanics (European Section).
 - Member of American Mathematical Society (AMS).
 - Former-Member of the Iranian Mathematical Society (IMS).
 - Former-Member of Gesellschaft für Angewandte Mathematik und Mechanik (GAMM).
 - Former-Member of the American Society of Civil Engineering (ASCE).
 - Former-Member of the Society for Industrial and Applied Mathematics (SIAM).

COMMUNICATION WITH NATIONAL and INTERNATIONAL JOURNALS

1. Asian Journal of Civil Engineering (Editor-in-Chief)
2. International Journal of Optimization in Civil Engineering (Editor-in-Chief)

3. Journal of Construction Engineering Innovations and Research (Editor-in-Chief)
4. Periodica Polytechnica (Editorial Board; Associate Editor)
5. Scientia Iranica (Advisory Board; Senior Executive Editor)
6. Computers and Structures (Editorial Advisory Board)
7. Advances in Engineering Software (Editorial Advisory Board)
8. Sharif Journal, Sharif University of Technology (Member of Editorial Board)
9. Editorial Board of Bulletin of Computational Intelligence (Member of Editorial Board)
10. Architectural Engineering, *An International Journal (AEI)* Editorial Board Member
11. Journal of Technology Education, Shahid Rajaee Teacher Training University (Member of Editorial Board)
12. Saffeh (Editorial Advisory Board)
13. The Open Civil Engineering Journal (Editorial Board; Associate Editor)
14. International Journal of Engineering, (Editorial Board)
15. Amirkabir Journal of Science and Technology (Former-Advisory Board)
16. Journal of Tabriz University (Advisory Board)
17. International Journal of Civil Engineering, IUST (Founder and Former -Editor-in-Chief)
18. Asian Journal of Structural Engineering (Former -Editor-in-Chief)
19. Member of Editorial Board, Soffeh, Journal of the school of Architecture and Urban Planning
20. Iranian Journal of Science and Technology (Former -Advisory Board)
21. The Open Construction and Building Technology Journal (Editorial Board)
22. International Journal for Engineering and Applied Sciences (Editorial Board)
23. Intelligent Information Management (Editorial Board)
24. Applied Mathematics (Member of the Editorial Board)
25. Editorial Board Member: Advances in Architectural Engineering, An Int'l Journal. Techno-Press
26. Editorial/Reviewer Board Member: Journal of Advances in Applied & Computational Mathematics
27. Engineering Education, Iranian Academy of Sciences (Former -Editor-in-Chief, and Current Editorial Board Member)
28. Quarterly of Education of Technology (Editorial Board)
29. Civil Engineering and Urban Planning: An International Journal (Editorial Board)
30. I.J. Water Resources Engineering (Former -Editorial Board)
31. Journal of Advances in Applied & Computational Mathematics (Editorial Board).
32. Journal of Modern Mechanical Engineering and Technology (Member of Editorial Board)
33. Current Trends in Civil & Structural Engineering (Member of Editorial Board)
34. Scientific Committee Member at the Global Summit on Civil, Structural and Environmental Engineering (GSCSEE2024) which is scheduled to be held during June 17-19, 2024 in Porto, Portugal.
35. Editorial Board of Clean Energy Technology and Application, Italy.
36. Editorial Board – Mechanical Engineering and Manufacturing Technology,
37. Editorial Board of the Journal of Energy and Power Engineering, 2024.
38. The Editorial Board Member of Journal of Construction Engineering Innovations and Research, 2025.
39. The editorial board team for the Journal of Architectural Environment & Structural Engineering Research (JAESER). 2025.
40. The Editorial Board Member of Journal of Resilient Structural Control and Smart Monitoring (JRSCSM) 2025
41. The Editorial Board of Majestic Journal of Applied Engineering and Technology (MJAET), 2025
42. Editorial Board Member for our Journal of Architectural Engineering and Built Environments, 2026

MEMBERSHIP OF SCIENTIFIC COMMITTEES

1. Third International Conference on Space Structures, Surrey, UK, 1984.
2. International Conference on Applied Mathematics, IUST, Tehran, 1991.
3. Fourth International Conference on Space Structures, Surrey, UK, 1993.
4. Iranian Congress on Numerical Methods in Engineering, Shiraz, 1993.
5. Civil-Comp 93, Edinburgh, UK, 1993.
6. First International Conference on Graphs and Mechanics, Poland, 1993.
7. International Conference on Applications of Fuzzy Systems, Iran, 1994.
8. Civil-Comp 95, Cambridge, UK, 1995.
9. Computational Structures Technology, Budapest, Hungary, 1996.
10. Mouchel Centenary Conference on Innovation in Civil Engineering, Cambridge, 1997.
11. Civil-Comp 98, Edinburgh, UK, 1998.
12. International Conference on Theoretical, Applied, Computational and Experimental Mechanics, Indian Institute of Technology, Kharagpur, India, 1998.
13. Fourth International Conference on Civil Engineering, Iran, 2000.
14. Civil and Structural Engineering Computing, Oxford, 1999.
15. Second International Conference on Graphs and Mechanics, Poland, 1999.
16. Civil and Structural Engineering Computing, Belgium, 2000.
17. Civil and Structural Engineering Computing, Austria, 2001.
18. Fifth International Conference on Space Structures, Surrey, UK, 2002.
19. The first M.I.T. Conference on Computational Fluid and Solid Mechanics, USA, 2001.
20. The second M.I.T. Conference on Computational Fluid and Solid Mechanics, USA, 2003.
21. Civil and Structural Engineering Computing, Prague, 2002.
22. Sixth Int. Conference on Civil Engineering, Isfahan-Iran, 2003.
23. Civil and Structural Engineering Computing, Netherlands, 2003.
24. Civil and Structural Engineering Computing, Lisbon, 2004.
25. The Tenth International Conference on Civil, Structural and Environmental Engineering Computing, Rome, Italy, 2005.
26. Civil and Structural Engineering Computing, Spain, 2006.
27. The Eleventh International Conference on Civil, Structural and Environmental Engineering Computing, St. Julians, Malta 2007.
28. Third International Conference on Computational Mechanics, Cape Town, South Africa 2007.
29. The Ninth International Conference on Computational Structures Technology, Athens, Greece, 2008.
30. The Twelfth International Conference on Civil, Structural and Environmental Engineering Computing, Madeira, Portugal, 2009.
31. Second Conference on Domestic Technology, IUST, Tehran, 2009.
32. Fourth International Conference on Structural Engineering, Mechanics and Computation, Cape Town, South Africa, 2010.
33. International Conference on Advances in Materials and Techniques in Civil Engineering India, 2010.
34. The Tenth International Conference on Computational Structures Technology, Valencia, Spain from 14-17 September 2010.
35. The First International Conference on Structural and Building Materials, Guangzhou, China, 7-9 January 2011.

36. The Thirteenth International Conference on Civil, Structural and Environmental Engineering Computing, Chania, Crete, Greece, 6-9 September 2011.
37. International Conference on Civil, Architectural and Hydraulic Engineering, Member of Scientific Committee, Zhangjiajie, China, 10-12 August 2012.
38. The Second International Conference on Structural and Building Materials, Hangzhou, China, March 10-12, 2012.
40. The Eleventh International Conference on Computational Structures Technology, Dubrovnik, Croatia 4-7 September 2012.
41. Innovations in Concrete Construction Congress, Jalandhar Punjab India, 5-8 March 2013.
42. The Fourteenth International Conference on Civil, Structural and Environmental Engineering Computing (CC2013) is to be held in Cagliari, Sardinia, Italy from 3-6 September 2013.
43. The Third International Conference on Soft Computing Technology in Civil, Structural and Environmental Engineering, Cagliari, Sardinia, Italy, 3-6 September 2013.
44. Conference on Engineering and Applied Sciences Optimization (OPTI 2014), Kos Island, Greece on 4-6 June 2014.
45. The 15th EU/ME European Metaheuristics Community Workshop, Metaheuristics and Engineering, Istanbul, 24-25 March 2014.
46. The Twelfth International Conference on Computational Structures Technology (CST2014) Naples, Italy, 2-5 September 2014.
47. 2014 International Conference on Environmental Protection and Sustainable Ecological Development [EPSED2014], Wuhan, Hubei, China, 30 - 31 August 2014.
48. Third International Conference "Graph Modelling In Engineering", 22 - 24 June 2015, University of Bielsko-Biala, Poland.
49. The Seventh International Conference of Seismology and Earthquake Engineering (SEE7), Member of the Scientific Committee.
50. The Sixth International Conference on Structural Engineering, Mechanics and Computation, 5-7 September 2016, Cape Town, South Africa, International Advisory Board for SEMC 2016.
51. Fifth International Conference on Parallel, Distributed Computing Technologies and Applications (PDCTA-2016), Program Committee Member, Zurich, Switzerland, 2~3 January, 2016.
52. International Conference on Structural Dynamics EURODYN 2017, Member of the Scientific Committee, Rome, Italy, 10-13 September, 2017.
53. The fourth International Conference on Applied Mechanics, Mechatronics and Intelligent System (AMMIS-2016), Member of the Scientific Committee, Beijing, China, April 16-17, 2016.
54. Second International & sixth National Conference on Earthquake & Structures, Member of the Scientific Committee, October 14-15, 2015, ACECR of Kerman, Kerman, Iran.
55. World Symposium on Civil Engineering 2017 WSCE 2017, Member of the Scientific Committee, Hong Kong, 22-24 February, 2017.
56. Member of European Research Committee (Engineering) for the year 2014.
57. Member of TPC, International Conference on Mechanics, Civil Engineering and Transportation (ICMCT2016), November 4-6 of 2016, Guilin, China.
58. Bright Optimizer, International Student Competition in Structural Optimization Committee Member, 2017.
59. Member of Scientific Committee, International Conference on Civil Engineering, Architectural and Environmental Engineering (CEAEE 2017) to be held on May 27-28, 2017 in Guangzhou, China.
60. Member of Technical Committee, The 5th International Conference on Mapping and Remote Sensing (ICMRS 2017) to be held in Lushan, China, from Nov. 10-11, 2017.

61. Member of the Editorial Board, The Thirteenth International Conference on Computational Structures Technology (CST2018) will take place in Sitges, Barcelona, Spain, from September 4th to 6th 2018.
62. Member of the Editorial Board, The Tenth International Conference on Engineering Computational Technology (ECT2018) will take place in Sitges, Barcelona, Spain, September 4th to 6th 2018.
63. Member of the International Advisory Board for SEMC 2019: The Seventh International Conference on Structural Engineering, Mechanics and Computation, 2-4 September 2019, Cape Town, South Africa.
64. The 5th International Conference on Civil Engineering (ICCE2018), Nanchang, P.R. China, December 20th to 21st, 2018.
65. The 1st international conference on artificial intelligence and applied soft computing (ICAASOC 2019) is organized in the Cappadocia region, 2019.
66. Program committee member / Reviewer of the 7th International Conference of Networks and Communications (NC 2019), Zurich, Switzerland March 30~31, 2019.
67. Editor, Current Trends in Civil & Structural Engineering, 2018.
68. Member of Committee, International Conference on Railway Engineering, IUST, 2019.
69. Member of Scientific Committee, the First International Conference on Optimization Driven Architectural Design (OPTARCH2019), Amman, Jordan on 5-7 November 2019.
70. Member of Scientific Committee, 3rd International Conference on Structures and Construction Management, Sharif University of Technology, 2019.
71. Editorial Advisory Board, The Fifth International Conference on Soft Computing and Optimization in Civil, Structural and Environmental Engineering, CIVIL-COMP-OPTI 2019, Riva Del Garda Congress Centre, Lake Garda, Italy, 16-19 September 2019.
72. Member of Advisory Board, International Conference on Sustainable Systems and Structures during 1-2 November 2019 at Maharaj Vijayaram Gajapathi Raj College of Engineering (Autonomous), Vizianagaram, Andhra Pradesh, India
73. Member of the Technical Committee of CCI2020-CFIS2020, Ferdowsi University, 2020.
74. Member of organizing committee of International Conference And Expo On Urban And Civil Engineering which will be held during June 15-16, 2020 in Montreal, Canada.
75. Organizing Committee Member (OCM) to "International Conference and Expo on Infrastructure and Construction", June 11-12, 2020 in Kuala Lumpur, Malaysia.
76. Scientific Committee Member, The 6th International Conference on Civil Engineering (ICCE2019), December 21-22, 2019, Nanchang, China.
77. Member of Scientific Committee, World Congress on Materials Science and Engineering, June 17-19, 2020, London, UK.
78. Member of Scientific Committee, 12th National Congress on Civil Engineering (NCCE), Sahand University of Technology, 27-28 May 2020, Tabriz, Iran.
79. Member of Scientific Committee, 6th International Conference on Harmony Search, Soft Computing and Applications (ICHSA 2020) 22-24 April 2020, Istanbul, Turkey.
80. Member of Organizing Committee, 3rd International Conference on Computer Science & Cloud Computing, July 20-21, 2020 at Montreal, Canada.
81. Member of Scientific Committee, 12th Structural Engineering Convention - An International Event, Jaipur, India, 17th December to 19th December, 2020.
82. Member of Scientific Committee, [International Conference on Ubiquitous Intelligent Systems \(ICUIS 2020\)](#) is being organized on 3-4, June 2020 Organized by Shree Venkateshwara Hi-Tech Engineering College, Tamil Nadu, India.

83. 2020 International Conference on Materials in Civil Engineering (MICE 2020) organizing committee, it is our great pleasure to invite you to join us as Technical Program Committee (TPC) member. Thanks for your time. MICE 2020 will be held on October 23-25, 2020 in Sanya, China.
84. Member of Scientific Committee, *EUROGEN 2021*, International Conference on Evolutionary and Deterministic Methods for Design, Optimization and Control, 17-19 May 2021, Athens, Greece.
85. Member of Scientific Committee, CEC-RIAEC 2020: IEEE CEC-33 Real-World and Industry Applications of Evolutionary Computation, USA.
86. Member of Scientific Committee The 2020 4th International Conference on Civil Engineering, Architectural and Environmental Engineering (CEAEE 2020) to be held on April 24-26, 2020 in Sanya, China.
87. Committee Member, 5th International Conference on Computing Methodologies and Communication (ICCMC 2021), Surya Engineering College, 03-05, March 2021.
88. Editorial Advisory Board, Journal of Advances in Applied & Computational Mathematics, Poland.
89. Program Committee Member of the International Conference on Cloud, Big Data and IoT (CBIoT 2020).
90. Scientific Committee of International Seminar in Civil Engineering to be held in the Tipaza University in Algeria, 2021.
91. A program committee member / Reviewer of "**6th International Conference on Computer Science, Information Technology and Applications (CSITA 2020)**", **June 20~21, 2020, Dubai, UAE.**
92. Committee Member, International Conference on Big Data, Blockchain and Security (BDBS 2020) "to be held in August 22~23, 2020, Chennai, India, 2020.
93. Organizing committee Member at "Global Summit on Civil, Architectural and Environmental Engineering (GSCAEE2021)", Barcelona, Spain from July 19-21, 2021.
94. Member of the conference committee of CEWCHE 2021, January 15-17, 2021 in Zhengzhou, China.
95. International Advisory Board for SEMC 2022: The Eighth International Conference on Structural Engineering, Mechanics and Computation, 5–7 September 2022, Cape Town, South Africa.
96. The 9th International Symposium on Project Management (ISPM 2021). Organized by Institute of engineering management, Beijing University of Civil Engineering & Architecture and Hubei Zhongke Institute of Geology and Environment Technology. In 2021.
97. International Advisory Board for SEMC 2025: The Eighth International Conference on Structural Engineering, Mechanics and Computation, 1–3 September 2025, Cape Town, South Africa.
98. Honorary Editor, Invitation to Serve as the Editorial Board Member for the Journal---Mathematics and Systems Science.
99. Program Committee Member, 4th International Conference on NLP Techniques and Applications (NLPTA 2023)", November 25 ~ 26, 2023, London, United Kingdom.
Member of the FWO Review College for four years.
100. EUROGEN 2025 hosted by LUT in Lahti, Finland.
101. Organizing Committee Member at the World Forum & Expo on Environmental Science & Applications July 21-23, 2025 Munich, Germany
102. Program Committee Member of "**2nd International Conference on Information Theory and Machine Learning (ITEORY 2024)**" to be held in **December 28 ~ 29, 2024, Dubai, UAE.**
103. World Summit on Civil Engineering and Infrastructure, scheduled for September 25-27, 2025, in Frankfurt, Germany.
104. Program Committee Member, **12th International Conference on Advanced Computing (ADCO 2025)** to be held in **March 15 ~ 16, 2025, Vienna, Austria**

105. Program Committee Member of “ 11th International Conference on Data Mining and Applications (DMAP 2025) ” to be held in March 22 ~ 23, 2025, Sydney, Australia
106. Program Committee Member of 13th International Conference on Signal Image Processing and Multimedia (SIPM 2025) to be held in April 19-20, 2025, Melbourne, Australia.
107. Program Committee for the 1st International Conference on Innovative Structure and Resilient City (ISRC 2025), September 27–29, 2025, in Nagoya, Japan
108. Program Committee Member of “17th International Conference on Network and Communications Security (NCS 2025) to be held in July 19 ~ 20, 2025, Toronto, Canada.” We would also like to invite as a PCM to related Conferences of AIRCC Communities for the year 2025 world wide.
- 109 Program Committee Member of. 17th International Conference on Network and Communications Security (NeTCoM 2025)” to be held in July 19 ~ 20, 2025, Toronto, Canada
110. Program Committee Member 6th International Conference on Advances in Artificial Intelligence Techniques (ArIT 2025)” to be held in July 19 ~ 20, 2025, Toronto, Canada
111. Program Committee Member / Reviewer of “14th International Conference on Data Mining & Knowledge Management Process (CDKP 2025)” to be held in May 17 ~ 18, 2025, Zurich, Switzerland
112. Program Committee Member, International Conference on Infrastructure and Construction Engineering (ICICE-2026) as an Organizing Committee Member (OCM
113. Program Committee Member, 3rd International Conference on Bioinformatics and computational studies (ICBCS 2025) ” to be held in June 26 ~ 27, 2025.
114. Program Committee Member, 11th International Conference on Software Engineering (SOENG 2025)”to be held in July 26 ~ 27, 2025, London, United Kingdom.
- 115, Program Committee Member, 3rd International Conference on Bioinformatics and computational studies (ICBCS 2025), to be held in June 26 ~ 27, 2025, Virtually.
116. Program Committee Member, The International Conference on Sustainable development in Civil Engineering in May/June College of Engineering, Akurdi, Pune, India 2026.
117. Committee member of " 11th International Conference on Software Engineering (SOENG 2025)”to be held in July 26 ~ 27, 2025, London, United Kingdom
118. Program Committee Member of "17th International Conference on Wireless & Mobile Network (WiMo 2025)" to be held in September 20 ~ 21, 2025, Copenhagen, Denmark.
119. Program committee member / Reviewer of “16th International Conference on Ubiquitous Computing (UBIC 2025) ” to be held in November 22 ~ 23, 2025, London, United Kingdom
120. Scientific Committee Member at the upcoming Global Summit on Civil, Structural and Environmental Engineering (GSCSEE2026) which is going to be organized during June 15-17, 2026 at Rome
121. Program Committee Member of "10th International Conference on Software Engineering (SOEN 2025)", September 27 ~ 28, 2025, Toronto, Canada
122. Program Committee Member / Reviewer of “6th International Conference on Machine Learning Techniques and Data Science (MLDS 2025)” to be held in November 22 ~ 23, 2025, London, United Kingdom
123. Committee Member 8th International Conference on Mechanical Engineering (MEN 2025) to be held in September 29 ~ 30, 2025, Virtual Conference
124. Program Committee Member of “3rd International Conference on AI & Civil Engineering (AICIVIL 2025)” to be held on December 27 - 28, 2025, Dubai ,UAE.
- 125.
125. Committee Member, 2nd International Conference on Signal Processing Trends (SPT 2025) to be held in December 18 ~ 19, 2025
126. “7th International Conference on Machine learning and Cloud Computing (MLCL 2026)” to be held in January 17 ~ 18, 2026, Zurich, Switzerland and also the same category AIRCC conferences worldwide in the year of 2026.

127. Program Committee Member / Reviewer of "11th International Conference on Recent Trends in Electrical Engineering (MEDS 2025).
128. Program Committee Member **2nd International Conference on Signal Processing Trends (SPT 2025)** to be held in **December 18 ~ 19, 2025**
129. Committee Member & Speaker at the 4th International Summit on Civil, Structural and Environmental Engineering which will be held during July 23-25, 2026 in Prague, Czech Republic
130. Committee Member at the Global Summit on Space Sciences and Aerospace Engineering, to take place from August 26-27, 2026, in Venice, Italy
131. Program Committee Member of "**12th International Conference on Software Engineering (SOFE 2026)**" to be held in **February 21 ~ 22, 2026, Vancouver, Canada.**

AWARDS

1. **Educational Gold Medal:** awarded by the Iranian Ministry of Science and Education because of being the First Class Student during the Four Years of BSc Courses in Civil Engineering, 1965.
2. Ministry of Science and Higher Education Award: During 1970-1974 for Pursuing Studies toward a Ph.D. at Imperial College, London University.
3. **Alborz Foundation Prize:** awarded by Alborz Institute for the Distinguished Engineering Graduate of the Year in Iran, 1969.
4. Research Prize: Awarded by the Ministry of Science and Higher Education for the Selected Research, 1977.
5. Irano - British Fellowship: Awarded by the Ministry of Higher Education, 1977.
6. **Book Prize:** Awarded by the Ministry of Culture for Writing the Best Book in the Field of Engineering, 1984.
7. Research Prize: Awarded by Iran University of Science and Technology, 1985.
8. Research Prize: Awarded by Iran University of Science and Technology, 1989, 1990 and 1993.
9. Kharazmi Research Prize, Rank 2, Ministry of Science and Higher Education, 1994.
10. Research Prize: Awarded by Iran University of Science and Technology, 1994.
11. Press Media Prize for Scientific Publications: Ministry of Culture IRI, 1995.
12. Distinguished Civil Engineering Research Award, Building and Housing Research Centre, 1996.
13. Book Prize for the Best Engineering book in English: Ministry of Culture IRI, 1997.
14. Gold Medal of 2000, ABI, 1999.
15. Research Prize, Iran University of Science and Technology, 1999.
16. **Distinguished Professor of Iran**, Ministry of Science and Higher Education, 2000.
17. Selected researcher of the Iran University of Science and Technology, 2000.
18. National Project Award at Iran University of Science and Technology, 2000.
19. **Distinguished Researcher award of Iran**, Ministry of Science and Research and Technology, 2000.
20. **Memorable (Notable) Scientist of Iran in the field of Engineering, Academy of Sciences and Press Media, 2001. Allameh Tabatabaie Award: Tehran, Tehran, IR**
21. Selected Researcher of the Iran University of Science and Technology, 2001 and 2002.
22. **Distinguished Researcher Award of Iran**, Ministry of Science and Research and Technology, 2004.
23. Distinguished Researcher Award, Iran University of Science and Technology, 2004 and 2005.
24. Distinguished Researcher Award, Iran University of Science and Technology, 2006.
25. Distinguished Researcher Award of Iran, Ministry of Science and Research and Technology, 2006.

26. Distinguished Researcher Award, Iran University of Science and Technology, 2007.
27. Winner of the Afzalipour Prize, an Award Presented by University of Kerman, Iran, 2007.
28. Ranked First, Research Section, the First Iranian Civil Engineering Festival, 2008.
29. Ranked First, International books Section, the First Iranian Civil Engineering Festival, 2008.
30. Ranked First, Fundamental Research Section, the Second Yadvaree (Festival) Iranian Civil Engineering, Building and Housing Research Centre, 2008.
31. Distinguished Researcher Award, Iran University of Science and Technology, 2009.
32. Distinguished Researcher Award, Civil Engineering, Iran University of Science and Technology, 2010.
33. **Distinguished Professor and Researcher**, Allameh Tabatabaie Award, 2012.
34. Distinguished Researcher award, Civil Engineering, Iran University of Science and Technology, 2013.
35. Distinguished Professor of Engineering Day of Azerbaijan Province, Engineering NGO of Azerbaijan, 2013.
36. Distinguished Researcher Award, Iran University of Science and Technology, 2014.
37. Books Award (Springer Books), Iran University of Science and Technology, 2014
38. Distinguished Researcher Award of Iran, Ministry of Science and Research and Technology, 2014.
39. Distinguished Researcher Award, Ranked First in Iran University of Science and Technology, and Ranked First in Department of Civil Engineering, 2015.
40. Elected Distinguished Professor of Iran University of Science and Technology, 2016.
41. Distinguished Researcher Award, Ranked Second in Iran University of Science and Technology, and Ranked First in Department of Civil Engineering, 2016.
42. Ranked 111th in the most cited researchers in the field of Civil Engineering: The Most Cited Researchers: Developed for Shanghai Ranking's Global Ranking of Academic Subjects 2016 by Elsevier.
43. **Ranked 178th in the Most Cited Researchers** in the field of Computer Science Engineering: Developed for The Most Cited Researchers: Developed for Shanghai Ranking's Global Ranking of Academic Subjects 2016 by Elsevier.
44. The World's Most Highly Cited Researchers Listed in 2017 by Clarivate Analytics (Ranked 1040th from 3539 Announced Scientists).
45. Distinguished Researcher Award, Ranked Second in Iran University of Science and Technology, and Ranked First in Civil Engineering Department, 2017.
46. The selected scientist of the Iranian Academy of Sciences to receive **The Badge of Knowledge (Rank 1) from the President of the IR Iran** in 2019.
47. Distinguished Researcher Award, Ranked Third in Iran University of Science and Technology, and Ranked First in Department of Civil Engineering, 2019.
48. The Editorial Contribution Award for contributions to *Asian Journal of Civil Engineering*, *Nature Editorial Award*, 2024.
49. The Author Service Award for contributions to *Asian Journal of Civil Engineering*, *Springer Nature Editorial Award*, 2024.
50. Top 0.05% Scientists of the World according to Scholar GPS, 2024.
51. Rank 1 of the World in Optimal Design in 2024, according to Scholar GPS.
52. Rank 1 of the World in Metaheuristic Algorithms, in 2024, according to Scholar GPS.

TEACHING and PROFESSIONAL EXPERIENCES

- Analysis and Design of Structures for More than 3 Years.
- Lecturing the Following Subjects for the last 45 Years in Different Universities in Undergraduate and Postgraduate Levels:
 - Strength of Materials I and II.
 - Theory of Structures I and II.
 - Matrix Analysis of Structures with an Introduction to FEM.
 - Plastic Analysis and Design of Structures.
 - Optimal Analysis of Structures
 - Graph Theoretical Approaches to Matrix Analysis of Structures.
 - Application of Graph Theory and Topology in Civil Engineering.
- Supervision of MSc Seminars.
- Supervision of MSc and PhD theses.
- Consultant of the Iranian Building and Housing Research Centre, 1993-2010.
- Consultant of Nir Pars, 1994-1996.

RESEARCH ACCOMPLISHMENTS

1. Graph Theory and its Generalization for Structural Mechanics:
 - Kaveh has extensively applied graph theory to conceptual analysis of structures with particular attention to combinatorial properties of structures.
2. Force Method in Structural Analysis:
 - The main development of this method is due to Kaveh. Two of his books cover these developments.
3. Sparse Matrix Techniques in Efficient Structural Analysis:
 - Kaveh for bandwidth, profile and front width reduction of sparse matrices developed many new and efficient approaches.
4. Configuration Processing:
 - Kaveh developed graph theory, set theoretical methods, and graph product methods for configuration processing of space structures and finite element models.
5. Conditioning of structural matrices:
 - Suitable statical and kinematical bases are developed for improving the conditioning of flexibility (mesh) and stiffness (node) matrices of structures by Kaveh.
6. Decomposition of Large-scale Models:
 - Graph and algebraic methods are developed by Kaveh for suitable decomposition of structural and finite element models suitable for parallel computing.
7. Optimal Analysis of Structures:

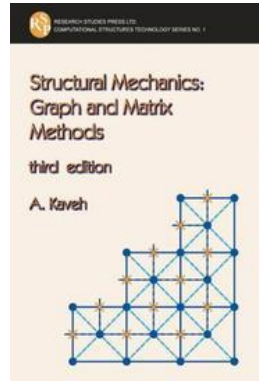
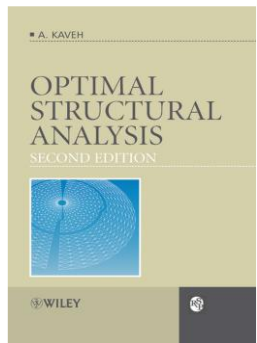
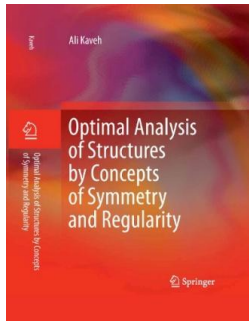
- Optimal analysis originally defined and developed by Kaveh leading to sparse, well-structured and well-conditioned structural and graph matrices. A book is published with this title for the first time.
8. Canonical Forms of Linear Algebra and Applications in Structural Mechanics:
 - Canonical methods are developed by Kaveh and students for eigen-solution of special block matrices involved in structural mechanics.
 9. Graph Products and Their Extensions and Applications:
 - Graph products are utilized in characterization of regular graphs and eigen-solution of regular graph and structural matrices by Kaveh and his students. Some of these products are generalized for configuration processing of complex finite element models.
 10. Symmetric and Regular Structures:
 - The concepts of symmetry and regularity are developed and utilized in the swift analysis of structures and finite difference models by Kaveh and his students. A book is written with this title.
 11. Finite Element Analysis Using Force Method:
 - Many elements are developed by Kaveh and his students for analysis of continuums by the finite element force methods.
 12. Optimal Design of Structures Using Novel Meta-heuristic Algorithms:

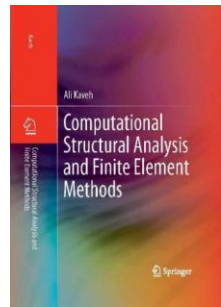
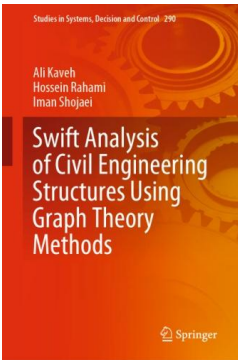
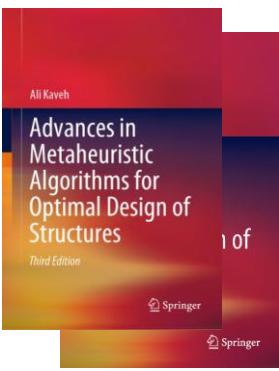
Many new meta-heuristic algorithms are developed by Kaveh and his research students. Examples are Charged System Search (CSS), Magnetic Charged System Search (MCSS), Democratic PSO (DPSO), Ray Optimization (RO), Dolphin Echolocation Optimization (DEO), Colliding Bodies Optimization (CBO), Enhances Colliding Bodies Optimization (ECBO), Thermal Exchange Optimization (TEO), Tug of War Optimization (TWO), Natural Forest Regeneration (NFR), Water Evaporation Optimization (WEO), Vibrating Particle System (VPS) and Cyclical Parthenogenesis Algorithm (CPA), Lion Pride Optimization (LPO), Artificial Coronary Circulation System (ACCS) Algorithm, Shuffled Shepherd Optimization Algorithm (SSOA), Set Theoretical Shuffled Shepherd Optimization Algorithm (STSSOA), Water Strider Algorithm (WSA), Plasma Generation Optimization (PGO).

These algorithms are used for different optimization problems. Seven international books are written based on some of these algorithms.
 13. Plastic Design of Frame Structures:
 - Mathematical programming methods and meta-heuristic algorithms are applied to plastic analysis and design of frame structures.
 14. Multi-objective Optimization and Seismic Design of Structures:
 - Methods are developed and applied to seismic design of frame structures.
 15. Optimal Analysis for Optimal Design:
 - To facilitate the optimal design of large-scale problems, Kaveh and his students incorporate optimal analysis in optimal design of structures.

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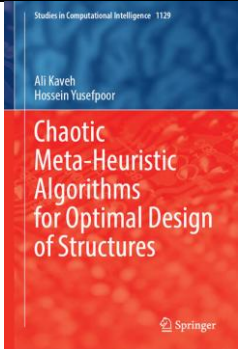
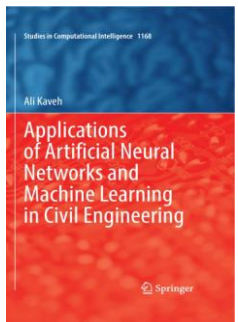
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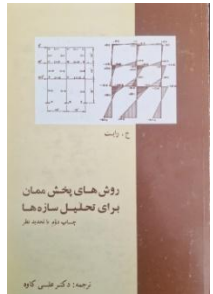
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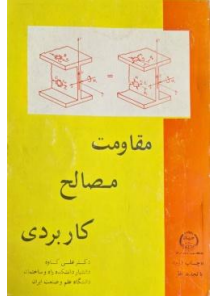

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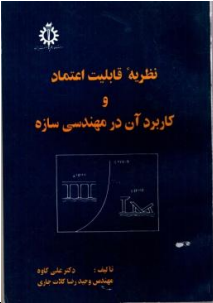
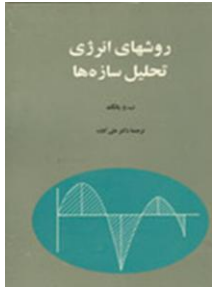
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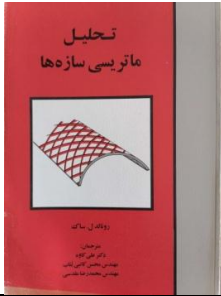
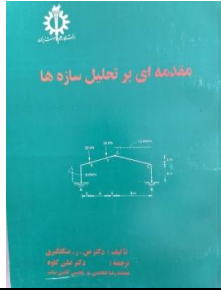

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- 5 Hossein Ali Rahimi Bondarabady, Optimal Structural Matrices for Efficient Analysis of Large-Scale Structures, Jan. 2001, Sole Supervisor. (Yazd)
- 6 Morteza Raiesi Dehkordi, Analysis and design of Dome Space Structures with Artificial Neural networks, September 2003, Sole Supervisor. (IUST)
- 7 Ali Jafarvand, Analysis and Optimal Design of Foldable Space Structures, April 1998, Joint Supervisor. (Zanjan)
- 8 Vahid Kalatjari, Optimization of Trusses Using Genetic Algorithm and the Algebraic Force Method, January 2002, Sole Supervisor. (Shahrour)
- 9 Hossein Rahami, Combinatorial Optimization in Structural Mechanics, February 2006, Sole Supervisor. (Tehran)
- 10 Khalil Paryab, Application of Graph Theory for evaluating Eigenvalues and Eigenvectors in Structural Systems, Autumn 2004, Sole Supervisor. (IUST)
- 11 Jafar Keyvani, Design and Analysis of Double Layer Grids Using Optimization and Neural Networks, March 2002, Joint Supervisor.(Kharazmi)
- 12 Kambiz Koohestani , Optimal Analysis of Finite Element Models via Force Method, February 2007, Joint Supervisor.(Tabriz)
- 13 Saeed Shojaee Baghini, Optimal Design of Structures Using Metaheuristic Algorithms, IUST, January 2008, Sole Supervisor.(Kerman)
- 14 Mehdi Yousefi (joint supervision), Dynamic Behaviour of Bell Tower-Like Structures in Earthquake Environment, January 2008, Joint Supervisor with Prof. Heuer, Technical University of Vienna. (Canada)
- 15 Mohsen Jahanshahi, Metaheuristic Algorithms for Plastic Analysis and Selection of Subminimal and Suboptimal Cycle Bases for the Force Method of Frame Analysis, May 2008, Joint Supervisor.(Sharif)
- 16 Mohammad Ali Sayarinejad, Decomposition and Healing of Graphs for Eigen Solution of Symmetric Models, IUST, October 2009, Sole Supervisor.(Shomal)
- 17 Maryam Daei, Applications of Heuristic Algorithms in Structural Mechanics, IUST, October 2009, Sole Supervisor.(Isfahan)
- 18 Leila Shahryari, Symmetry and Canonical Forms for Free Vibration and Stability Analyses of Skeletal Structures using Displacement Method, IUST, November 2009, Joint Supervisor.(Isfahan)
- 19 Behnoosh Salibahrami, Applications of Graph Products in Eigen Solution of Regular and Symmetric Structures, IUST, February 2010, Sole Supervisor.(Tehran)
- 20 Mahdi Nouri, Extension of the Application of Canonical Forms and Graph Products in Eigen Solutions of Repeated and Regular Problems of Structural Mechanics, Tabriz University, December 2010, Joint Supervisor.(Tabriz-Azad)
- 21 Mazdak Nikbakht, Symmetry and regularity using groups, graphs and linear algebra, IUST, January 2011, Sole Supervisor.(Canda)
- 22 Siamak Talatahari, Extension and hybridization of meta-heuristic algorithms for optimization of large-scale structures, Tabriz University, May 2011, Joint Supervisor.(Tabriz)

- 23 Hadi Fazli, Eigen solution methods for structures with regular properties, IUST, September 2011, Sole Supervisor.(Tehran)
- 24 Babak Alinejad, Graph products and metaheuristic optimization methods in structural analysis and design IUST, June 2012, Sole Supervisor.(Maragheh)
- 25 Karim Laknejadi, Graph theory and meta-heuristic methods for optimal design of structures, IUST, October 2012, Sole Supervisor.(Tehran-Azad)
- 26 Mohammad Saberi, Structural damage identification using enhanced charged system search algorithm, Azad University, June 2014, Sole Supervisor.
- 27 H. Mirhosseini, Graph products and different pattern of structural matrices in analysis using stiffness and force methods, Azad University, 2014, Joint Supervisor.
- 28 Mohammad Sajjad Masoudi, Optimal design of continuous finite element models via force method, IUST, 2014, Sole Supervisor.(Tehran-Azad)
- 29 Mohsen Kalateh-Ahani, Multi-optimization for performance-based design of steel structures, IUST, 2014, Sole Supervisor.(Mahalat)
- 30 Mazyar Farzam, Optimal analysis and design of structures under seismic loading, IUST, 2014, Sole Supervisor.(Maragheh)
- 31 Ali Zolgadr, New meta-heuristic algorithms for optimal design of skeletal structures with dynamic constraints, IUST, October 2015, Sole Supervisor.(Australia)
- 32 Neda Farhoodi, Metaheuristic algorithms for optimal seismic design of structures, IUST, October 2015, Sole Supervisor.
- 33 Taha Bakhshpouri, Steel Structural Optimization with the Approach of Improving Metaheuristic Algorithms, IUST, January 2016. Sole Supervisor.(Gilan)
- 34 Majid Alipour, Scheduling optimization regarding resource limitation and uncertainties in construction projects, IUST, April 2016. Joint Supervisor.
- 35 Hossein Moez, Natural forest regeneration algorithm, a new metaheuristic for optimum design of skeletal structures, Tabriz University, May 2016, Joint Supervisor.
- 36 Vahid Reza Mahdavi, IUST, Development and applications of the colliding bodies optimization algorithm, Sole Supervisor, January 2017.
- 37 Majid Ilchi Ghazaan, IUST, Optimum seismic design of skeletal structures with large number of variables, Sole Supervisor. April 2017.(IUST)
- 38 Sh. Bijari, IUST, Simultaneous optimal analysis and design of Structures, Sole Supervisor, September 2018.(Birjand)
- 39 Pedram Hosseini, Qom University, Improvement and correction of metaheuristic algorithms for direct and inverse optimization for skeletal structures, Joint Supervisor. August 2018.
40. M.H. Ghafari, IUST, Structural design optimization of composite steel-concrete, Sole Supervisor, September 2018.
41. M. Kooshkebaghi, Azad University, completed in September 2019.
42. M.R. Pishghadam, Optimal analysis for topology optimization of repetitive near-regular circulant shell structures, Zanjan University, Joint Supervisor, 2020.
43. Seyed Mohammad Javadi, IUST, Optimal Seismic Design of Skeletal Structures via Metaheuristic Algorithms and Chaos Theory, Sole Supervisor, June 2020.
44. N.K. Khodadadi, IUST, Sole Supervisor currently, Completed in January 2021.(USA)
45. M. Ghobadi, IUST, Sole Supervisor, completed in September 2020.
46. Roya. Mahdipour Moghanni, Sole Supervisor, IUST, February 2021.(Tehran-Azad)
47. M. Rastegar Moghaddam, IUST, Joint Supervisor, 2021.
48. Armin Dadras, Development of Optimal Sensor Placement and Structural Damage Identification Methods Using Graph Theory and Metaheuristic Algorithms IUST, Sole Supervisor, 2022.
49. Fakoor, IUST, Sole Supervisor, 2021.

50. Ali Joudaki, IUST, Sole Supervisor, 2022.
51. Milad Hosseini, Sole Supervisor, IUST, 2022.
52. Lida Mottaghian, Imam Khoeini International University, Joint Supervisor, 2022.
53. Aidin Mottahedin, Sizing optimization of symmetrical space frame structures for minimum weight under static compliance using fuzzy logic Kharazmi University, Joint Supervisor, 2023.
54. Kiarash Biabani Hamedani, An effective framework for population-based metaheuristic algorithms and its application to structural optimization, Sole Supervisor, IUST, September 2023.
55. Ata Zaeerza, Sole Supervision, Optimal design of structures using the force method and reliability IUST, September 2023.
56. Parya Salimi, Yazd University, Joint Supervisor, currently.
57. Neda Khavaninzadeh, Sole Supervision, IUST, current.
58. Yasin Vazerinia, IUST, Joint Supervisor, currently.
59. Peghah Amirsoleimani, Sole Supervisor, IUST, currently.
60. Amir Eskandari, Sole Supervision, IUST, current.
61. Mahdi Movassat, Sole Supervision, IUST, current.
62. Massoud Khosravian Rahmani, Sole Supervision, IUST, current.
63. Peyman Beiranvand Sole Supervision, IUST, current..
64. Mahdi Sadrai Firoozabadi. Joint Supervisor, IUST, current.
65. Mohammad Amin Memari, Joint Supervisor, IUST, current

- MSC STUDENTS

- 1 N. Jocardis, Topology of double layer grids, IUST, 1994.
- 2 H. Adeli, Plastic analysis and design using combinatorial optimization and mathematical programming, IUST, 2001.
- 3 H.R. Yourdkhani, The optimum decomposition method for analysis of large-scale hydraulic network, IUST, 1995.
- 4 J. Blouri Bazaz, Optimum design of truss structure, Tarbiat Moddaress University, 1987.
- 5 S.M. Yousefi, Dynamic analysis of domes, BHRC, 1998.
- 6 A.H. Nazarian, Traveling Salesman problem, IUST Industry Engineering Department, IUST, 1993.
- 7 O.R. Shogli, Multi-objective optimization for controlling time-cost-quality, using ant colony algorithms, IUST, 2006.
- 8 S. Mortezaavan, Analysis of large-scale hydraulic systems, 2000.
- 9 D. Bondar, Dynamic analysis of dams, 1990.
- 10 M. Sedehi, Nodal ordering for bandwidth reduction, Tarbiat Moddaress University, 1987.
- 11 M. Saberi, Optimum design of double layer barrel vaults, IUST, 1998.
- 12 S.M. Moussavi, Optimum data generation for space structures, Tarbiat Moddaress University, 1994.
- 13 M.R. Mashayekhi, Optimal analysis of mixed methods using graph theoretical approaches, IUST, 1993.
- 14 M. Ramazan Nejad, Analysis and design of planar frames using graph theory method and genetic algorithm, Azad University of Kerman University, 2003.
- 15 H. Dabbagh, Bandwidth reduction of rectangular matrices for optimal analysis of structures, IUST, 1990.
- 16 R. Ahmadi, Decomposition of large-scale structures, IUST, 1993.
- 17 M.R. Vakili, Analysis and design of trusses using artificial neural networks, Mazadaran University, 1996.

- 18 A.R. Khaleghi, Prediction of the strength of concrete specimen using neural networks, Azad University of Kerman, 1996.
- 19 M. Iranmanesh, Application of neural networks for analysis and design of single layer grids, Azad University of Kerman, 1998.
- 20 T. Asadi far, Analysis and design of Sahid Rajaie 220 meter tower, Arak University, 1998.
- 21 K. Sharif Zadeh, A comparative study of rigid plastic method and elastic-plastic approach for design of planar steel frames. IUST, 1995.
- 22 M. Ebrahimi, Configuration processing for analysis of large-scale space structures, IUST, 1995.
- 23 A. Gorbani Zavie Jaki, Optimal topology design of planar trusses, IUST, 1995.
- 24 A Nassier Oghli Khyabani, Analysis and design of planar trusses using combinatorial force method, IUST, 1998.
- 25 A. Shokohifar, Dynamic system for analysis of housing supply and market demand, IUST, 2000.
- 26 S. Kalantari, A pre-processor for identification of stress concentration in aerospace structures, IUST, 1995.
- 27 R. Asmariyan Nasab, Non-linear behaviour of semi-rigid connections in steel structures, Mazdandaran University, 2000.
- 28 A.R. Rahimi Navassi, Configuration processing of space structures using graph theory, IUST, 2000.
- 29 F. Ghoya, Efficient analysis of structures using substructuring techniques, Sharif University of Technology, 1995.
- 30 M. Hosseini, Plastic analysis and design of frames using concepts of graph theory, BHRC, 2001.
- 31 A. Sabouhi, Spectral methods for nodal ordering using graph models of finite element meshes, IUST, 2004.
- 32 M. Babaie, Geometrically nonlinear analysis of foldable structures with scissor-link elements, IUST, 2003.
- 33 M. Nikbakht, Dynamic and stability analysis of symmetric structures using group theory, IUST, 2006.
- 34 H. Moez, Combinatorial force method for analysis of frames with semi-rigid joints, IUST, 2005.
- 35 V. Kaltjari, Reliability analysis of structural systems and the interaction with optimal design and degrees of static indeterminacy, IUST, 1991.
- 36 S. Mohammad Karimi, A fuzzy optimization model of earthwork allocation with imprecise parameters, IUST, 2005.
- 37 H. Fazli, Graph coloring in structural mechanics, IUST, 2007.
- 38 M. Hadjkarim Kharazi, Analysis and design of space frames using neural networks, IUST, 1998.
- 39 M. Shahrrouzi, Approximate analysis of steel frames using optimum bracing, Sharif University of Technology, 2001.
- 40 R. Najjarzadeh, Frontwidth reduction for efficient finite element analysis, IUST, 1997.
- 41 S.A. Khalife Loo, Optimal plastic analysis and design of frame using force method and graph concepts, IUST, 1991.
- 42 S. Davari Pour, Eigensolution of large-scale structures using sub structuring, IUST, 1996.
- 43 M. Pour Baba, Substructuring method fir analysis of large-scale structures using graph concepts, Babol University, 2001.
- 44 S.M. Bani Hashemi, Hyper-graphs for configuration processing in structural analysis, IUST, 1997.
- 45 A. Hajizadeh, Good starting node for ordering problems in structural analysis, IUST, 1997.
- 46 A. Asadi Rad, Bandwidth optimization for stiffness matrices of finite element meshes using algebraic graph theory, IUST, 1999.
- 47 M. Javanmard, Finite element analysis beams of elastic foundation, IUST, 1987.
- 48 F. Yasrebi, Parametric study for optimal design of space barrel vaults, 1996.

- 49 M. Zafari, Finite element nodal ordering using priority functions, IUST, 2000.
- 50 M. Shokouhian, Optimal ordering using graph theory and algebraic graph theory, IUST, 2002.
- 51 H.R. Yortkhani, Optimum decomposition for analysis of large-scale hydraulic networks using graph theory and artificial neural networks, IUST, 1999.
- 52 S. Mortezavand, Optimization of the conditioning for hydraulic networks cycle matrices, IUST 2002.
- 53 HA Rahimi Bondarabady, Non-linear force method of structural analysis, IUST, 1991.
- 54 D. Farhangi, Nodal ordering optimization, IUST, 1992.
- 55 M. Emamjomeh Zadeh, Optimal analysis of hydraulic networks, IUST, 1995.
- 56 M. Daneshvar, Optimal plastic analysis and design of structures, IUST, 1989.
- 57 R. Ghazi, Algebraic combinatorial force method of structural analysis, IUST, 1994.
- 58 M. Najafi Yadegari, Vehicle routing problems using neural networks, IUST, 1999.
- 59 A. Monir Abassi, sequential analysis for distribution of budget, IUST, 2002.
- 60 A. Haddad Razavi, The method of subdomaining for finite element analysis in plasticity, IUST, 1997.
- 61 B. Vakili, Parametric study for optimal design of structural domes, IUST, 1996.
- 62 H. Famoori, Graph theoretical method for profile reduction, 1997.
- 63 M.A. Salati, Element ordering for frontal solution, Tarbiat Moddaress, 1989.
- 64 A. Moulayee, Free vibration analysis of frames using graph theory, algebraic graph theory and genetic algorithm, 2002.
- 65 B. Valli, Iterative solutions for structural analysis, IUST 1996.
- 66 R. Hooshmand, Optimum analysis and design of steel structures using object oriented programming, IUST, 1996.
- 67 A. Mohammadi, Structuring for efficient analysis of space structures, 1996.
- 68 S. Ezzati, Variational theorems for eigensolution in structural mechanics, IUST, 2006.
- 69 H. Khalil Pasha, Optimization of double layer grids by GA with analogy between grids and plates, IUST, 2007.
- 70 M. Sasani, Rigidity of planar trusses using graph theory, Amikabir University of Technology, 1987.
- 71 F. Navid Ehsani, Rigidity of trusses using graph concepts, IUST, 2000.
- 72 H. Servati, Analysis and design of space structures using neural networks, IUST, 1996.
- 73 S.S. Razavi, Determination of project's optimal duration, IUST, 2001.
- 74 R. Rahmani Zarnagh, Algebraic graph theory methods for finite element nodal ordering, IUST, 2001.
- 75 M. Dadvar, Layout optimization for planar trusses, IUST, 1997.
- 76 E. Roostaie, Design of double layer and triple layer grids for covering large areas, IUST, 1996.
- 77 M.B. Majdabady, An efficient program for analysis of plane elasticity problems, IUST, 1987.
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- 79 B Saberi, Analysis and design of barrel vaults using neural networks, BHRC, 2004.
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- 81 D. Fazel Dehkordi, Application of neural networks for moment-rotation relationship of Khorjini joints, Kerman University, 1998.
- 82 M.R. Sabghian, Optimal topology for truss structures, University of Yazd, 2000.
- 83 A. Abdi Tehrani, Optimal Design of Planar Frames Using Genetic Algorithms, Building and Housing Research Center, 2002.
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- 85 B. Salim Bahrami, Application of graph theory in dynamic analysis of symmetri graphs, Babol University, 2003.
- 86 M. Teymouri Gharb, Linear and nonlinear analysis of Foldable structures with scissor link joints, BHRC, 2004.
- 87 M. Khorami Azar, Prediction of Earthquake Source Parameters and attenuated relationship using artificial neural networks, IUST, 2003.
- 88 N. Dayhim, Optimal location finding using graph theory and genetic algorithm, IUST, 2003.
- 89 A. Abde Tehrani, Optimal design of frame using genetic algorithms, IUST, 2002.
- 90 Y. Noori, Prediction of the earth layers using artificial neural networks, Babol University, 2003.
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- 92 F. Masteri Farahani, Estimating the Vulnerability of the Concrete Structures Using Artificial Neural Networks, Building and Housing Research Center, 2005.
- 93 S.M. Dashti Zand, Concrete Properties Containing Recycled Rubber Waste, Building and Housing Research Center, 2006.
- 94 H. Gholami, The Role of Symmetry in Dynamic Behavior of Frames, Building and Housing Research Center, 2006.
- 95 B. Dadfar, Design for controlling the seismic collapse mechanism of frame structures using genetic algorithms, IUST, 2007.
- 96 M. Ebtehaj, Plastic analysis of structures; applications and extensions, IUST, 2007.
- 97 M. Najimi, Variation Theorems for Static and Dynamic Analysis of Structures, Building and Housing Research Center, 2006.
- 98 M.A. Abbaszadeh Mashad, Artificial Neural Network Modeling of Confinement for Axially Loaded Circular Concrete Column Retrofitted by Fiber-Reinforced Polymer Wrapping, Building and Housing Research Center, 2005.
- 99 M. Asadi, Evaluation of Epicentre and Magnitude of Earthquake by Acceleration Data, Building and Housing Research Center, 2004.
- 100 S.R. Pashanejati, Eigen-solution of Tall Building, Building and Housing Research Center, 2004.
- 101 A. Jahanmohammadi, Applicatins of group theory in structural mechanics, University of Yazd, 2007.
- 102 B. Alinejadi, Canonical Forms Expressible as the Sum of Kroneker Products and Application in Free and Forced Vibration of Structures, IUST, 2008.
- 103 E. Ebrahimi, Force Method for Finite Element Analysis, Amol University, 2008.
- 104 A. Massomi, Applications of combined genetic algorithm and ant colony for layout optimization of steel braced frames, BHRC, 2008.
- 105 R. Rezvani Asl, Numerical investigation for the role of partitioning walls in concrete frames, BHRC, 2008.
- 106 P. Sharafi, Ant colony meta-heuristic in combinatorial optimization; Applications in Civil Engineering, BHRC, 2008.
- 107 M.A. Fatolah Pour Kami, Applications of p-median of weighted graphs for finding facility centers using meta-heuristic algorithms, BHRC, 2008.
- 108 Farmanbar, IUST, 2008.
- 109 Hamidi, IUST, 2008.
- 110 K. Laknejadi, Nodal Ordering for Profile Reduction Using a Differential Equation, IUST, 2008.
- 111 N. Farhoodi, Optimal design of steel structures, Khajeh Nassir University, 2008.
- 112 R. Alizadeh, Decomposition and healing for the force method, IUST, 2009.
- 113 M. Hasani , Mixed analysis and design using ant colony optimization, IUST, 2009.
- 114 Sheyda Shoghi, Graph theoretical method for rigidity of planar and space trusses, IUST, 2009.

- 115 H. Palizvan, Well-structured structural matrices using ant colony algorithms, IUST, 2009.
- 116 Esmael Naseri, Finite element analysis via pure force method, IUST, 2009.
- 117 Somayeh Malakouti Rad, Hybrid of genetic algorithm and particle swarm optimization for the force method-based simultaneous analysis and design of skeletal structures, IUST, 2009.
- 118 R. Khaleghi , Applications of meta-heuristic algorithms for decomposition of graphs and finite element models, IUST, 2009.
- 119 S. Khaligh,, Application of optimization for predicting the yield lines of slabs, IUST, 2009.
- 120 A. Haddadzadeh Group theory for analysis of dome structures, BHRC, 2009.
- 121 Naseri Fard, Meta heuristic for structural optimization, BHRC, 2009.
- 122 Ali Shariat, IUST, 2009.
- 123 Mohammad Kalateh-Ahani, Plastic analysis and design of frames using safe theorem via ant colony optimization, IUST, November 2009.
- 124 Roya Shoghi, Rigidity of planar and space trusses, IUST, November 2009.
- 125 Mohammad Sajjad Masoudi, Finite element force method using graph theoretical and metaheuristic algorithms, IUST, 2010.
- 126 Mohammad Javad Tolou Kian, Dynamic analysis of structures using graph theoretical force method, BHRC, 2010.
- 127 Behzad Eftekhari, Size and geometry optimization of barrel vaults, IUST, 2010.
- 128 Saeed Tahmasebi, Distributed evolutionary multi-objective mesh partitioning algorithm for parallel finite element computations by CSS, IUST, December 2010.
- 129 Hamed Nasr, Facility location finding by genetic algorithm, ant colony and harmony search algorithm, IUST, July 2010.
- 130 Sepehr Beheshti, Graph products for configuration processing, IUST, December 2010.
- 131 Mojtaba Khayatizad, IUST, October 2012.
- 132 Pooya Zakian, IUST, September 2012.
- 133 Mohsen Khoshkebari BHRC, October 2012.
- 134 Babak Ahmadi, IUST, Analysis, design and optimal design of structures using charged system search and force method, January 2013.
- 135 Farnoud Shokohi, IUST, Optimal design castellated beams using charged system search and its enhanced version, January 2013.
- 136 Massoud Mehdad, Bandwidth, profile and wavefront optimization using charged system search, IUST, January 2013.
- 137 Vahid Reza Mahdavi, IUST, Optimal design of arch dams using endurance time acceleration functions, wavelet transform, charged system search and particle swarm optimization, January 2013.
- 138 M. Ilchi Ghazaan, Hybridizing meta-heuristic algorithms for optimum design of skeletal structures with frequency and resistance constraints, IUST, October 2013.
- 139 Mohsen Maniat, Structural Damage Identification in Skeletal Structures via Metaheuristic Algorithms, IUST, June 2013.
- 140 S.M. Javadi, Optimization of structural problems with multiple frequency constraints using a hybrid Ray optimization algorithm, June 2013.
- 141 Mohammad Naiemi, BHRC, 2013, completed.
- 142 Ali Shams Talaei, BHRC, 2013, completed.
- 143 Nafiseh Soleimani, IUST, 2014, completed.
- 144 Sh. Bijary, IUST, 2014, completed.
- 145 Shakiba Hasana, IUST 2014, completed.
- 146 Parvin Asadi, IUST, 2015, completed.
- 147 Sharnaz Ardalani, IUST, 2015, completed.

- 148 Sara Nazarpour, IUST, 2015, completed.
- 149 Ali Bolandgerami, IUST, 2015, completed
- 150 Mehran Moradveisi, Optimal design of double-layer grids Using CBO and ECBO algorithms considering Nonlinear Behaviour, BHRC, 2016.
- 151 Shadi Fatabadi, IUST, 2015.
- 152 Masoud Rezaei, BHRC, 2016, completed.
- 153 Soroush Mahjoub, Optimal Design of Steel Shear Walls Using Lion Pride Optimization Algorithm, June 2017.
- 154 Atena Shabazi, Optimal design of steel frames with semi-rigid connections using metaheuristic algorithms, IUST, June 2017.
- 155 Amir Hassanzadeh Molkabadi, Optimal design of concrete frames using CBO, ECBO, TWO and PSO, June 2017.
- 156 Samin Khavandghar, Application of VPS Algorithm for Optimal Design of Special Shear Walls, June 2017.
- 157 Mohammad Kamalinejad, Optimal Design of the Pitched Rigid Frames Using CBO. and ECBO. Optimization Algorithms, June 2017.
- 158 Amir Hussein Montazeran, Optimal Design Of Double Layer Barrel Vaults Using RO, IRO, PSO and DPSO Algorithms, October 2017.
- 159 Meysam Abedi, Optimal design of foldable structures, March 2018,
- 160 Marzie Hamidi, Optimization of steel floor system, March 2018.
- 161 Mohammad Farhadmanesh, Optimal design of steel shear wall with low and high seismic loads via metaheuristic algorithms, 2017.
- 162 Armin Dadras, Metaheuristic Methods and their applications in Structural Mechanics 2017.
- 163 Mohammadmehdi Motasadi, 2018
- 164 Nazanin Farsi, Optimal plastic design of 2D frames using VPS, May 2018.
- 165 Sepehr Sabeti, Optimal Design of Offshore Wind Turbine Structures, 2018
- 166 Yasin Vazirinia, 2019.
- 167 Farid Rahimi, 2019.
- 168 Babak Kamyar, Optimum design of double layer space structures harnessed with steel cables using metaheuristics, May 2019
- 169 Morteza Abbasi, Reliability-based design optimization of Steel frame using meta-heuristic Algorithms, November 2019.
- 170 Aydin Mogannian, A comparative optimal design of double and triple layer grids, 2019.
- 171 Mohammad Reza Seddighian, Simultaneously Multi-Material Layout, and Connectivity Optimization of Truss Structures via Black Hole Mechanics Optimization, September 2020,
- 172 Parmida Rahmani, Damage detection, August 2020.
- 173 Mohammad Sadeghi, Configuration Processing for Structures November 2019
- 174 Farbod Fazaeli Javan, 2020.
- 175 Ataollah Zaerreza, A new meta-heuristic algorithm for engineering optimization problems, September 2020
- 176 Eydin Etemad
- 177 Elnaz Ghanbarpour, Multi-Objective Optimization of Two and Three Dimensional Trusses Based on Topology, Size, Material, and Geometry of Members and, Reliability Index of Structure, October 2020.
- 178 Arash Asadi, 2020.
- 179 Nabi Khazee, Analysis of Symmetric, Regular and Near regular Structures Using Linear Algebra and Graph Theory, IUST, May 2023.
- 180 Ali Shabani Rad, IUST, September 2023,

181 Seyed Abdurrahma Hosseini, IUST, 2023

182 Honarvar AH, Well-Conditioning of Flexibility Matrices of Frame Structures, Followed by Sensitivity Analysis, 2023.

PROJECTS

- Rigidity of Structures, BHRC, 1998.
- Plastic Analysis and Design of Frame Structures, BHRC, 2000.
- Applications of Graph Theory in Optimal Analysis, Part 1, IUST, 2002.
- Applications of Graph Theory in Optimal Analysis, Part 2, IUST, 2002.
- Applications of Graph Theory in Optimal Analysis, Part 3, IUST, 2003.
- Applications of Graph Theory in Optimal Analysis, Part 3, IUST, 2004.
- Symmetry in Structural Mechanics, INSF, 2005.
- Applications of Graph Theory in Optimal Analysis of Structures. INSF and IUST, 2006.
- Optimal Analysis and Design Using Genetic and Ant Colony Algorithms, INSF and IUST, 2007.
- Optimal Analysis and Design of Structures, INSF and IUST, 2008.
- Applications of Graph Theory and Meta-heuristic Algorithms in Optimal Analysis and Design, INSF and IUST, 2009.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 1, INSF and IUST, 2010.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 2, INSF and IUST, 2011.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 3, INSF and IUST, 2011.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 4, INSF and IUST, 2012.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 5, INSF and IUST, 2012.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 6, INSF and IUST, 2013.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 7, INSF and IUST, 2013.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 8, INSF and IUST, 2014.
- Meta-heuristic Algorithms in Optimal Analysis and Design of Structures, Part 9, INSF and IUST, 2015.
- Optimal Analysis and Design of Structures, Part 1, IUST, 2016.
- Optimal Analysis and Design of Structures, Part 2, IUST, 2017.
- Optimal Analysis and Design of Structures, Part 3, IUST, 2018.

ADMINISTRATIVE ACTIVITIES

- Research Vice Chancellor of the Building and Housing Research Centre (1 Year)

- Head of Centre of Excellence for Studies in Structural Engineering (12 Years)
- Head of Department of Engineering, Iranian Academy of Sciences (2 Years)
- Head of Civil Engineering Branch of the Iranian Academy of Sciences (4 Years)
- Member of the committee for Research, Iranian Academy of Sciences (3 Years)
- Member of the committee for Foresight, Iranian Academy of Sciences (1 Years)
- Member of the Engineering Committee of Journal Publications, Iranian Ministry of Science, Technology and Research (6 Years).
- Member of the Engineering Committee for Centers of Excellences, Iranian Ministry of Science, Technology and Research (4 Years).
- Member of the Promotion Committee in Engineering, Iranian Ministry of Science, Technology and Research (8 Years).
- Head of Structural Section, Iran University of Science and Technology (12 Years).
- Head of Civil Engineering Department, Iran University of Science and Technology (1/2 Years).
- Head of the Office for Research, Iran University of Science and Technology (1 Year).

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