Amir Reza KHOEI
Distinguished Professor

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Professional Background

Position	Years	Institution
Professor	2008 - …	Civil Engineering Department, **Sharif University of Technology**, Tehran, Iran
Associate Professor	2003 - 2008	Civil Engineering Department, **Sharif University of Technology**, Tehran, Iran
Visiting Associate Professor	2004 - 2005	Mechanical Engineering Department, **University of Maryland, Baltimore County**, Baltimore, MD 21250, USA
Visiting Assistant Professor	2002 - 2003	Laboratoire de Mecanique des Soildes, **Ecole Polytechnique**, 91128 Palaiseau, Cedex, France
Assistant Professor	2000 - 2003	Civil Engineering Department, **Sharif University of Technology**, Tehran, Iran
Research Officer	1998 - 2000	Mechanical Engineering Department, **University of Wales Swansea**, Swansea SA2 8PP, UK
Research Scholar	1994 - 1998	Civil Engineering Department, **University of Wales Swansea**, Swansea SA2 8PP, UK
Lecturer	1992 - 1994	Civil Engineering Department, **Isfahan University of Technology**, Isfahan, Iran

Educational Background

Degree	Years	Institution
PHD	**1995 - 1998**	Civil Engineering Department, **University of Wales Swansea**, Swansea SA2 8PP, UK
MSC	**1989 - 1991**	Civil Engineering Department, **Isfahan University of Technology**, Isfahan, Iran
BSC	**1984 - 1989**	Civil Engineering Department, **Isfahan University of Technology**, Isfahan, Iran

Administrative Positions

Years	Position
2016 - 2022	**Vice-Chancellor for Academics and Research** Sharif University of Technology, International Campus (SUTIC), Kish Island
2019 - 2022	**Dean of International Affairs** Sharif University of Technology, International Campus (SUTIC), Kish Island
2006 - 2016	**Head of Civil Engineering Group** Sharif University of Technology, International Campus (SUTIC), Kish Island
2013 - 2015	**Vice-Chairman of Research and Graduate Studies** Civil Engineering Department, Sharif University of Technology (SUT), Tehran, Iran
2006 - 2008	**Head of the Structural Engineering Division** Civil Engineering Department, Sharif University of Technology (SUT), Tehran, Iran
2003 - 2004	**Vice-Chairman of Education** Civil Engineering Department, Sharif University of Technology (SUT), Tehran, Iran
2001 - 2002	**Vice-Chairman of Education** Civil Engineering Department, Sharif University of Technology (SUT), Tehran, Iran

Member of Scientific Committee

Member of Editorial Board
Finite Elements in Analysis and Design
https://www.sciencedirect.com/journal/finite-elements-in-analysis-and-design
Elsevier (2014 – now)

Member of Editorial Board
European Journal of Computational Mechanics
https://journals.riverpublishers.com/index.php/ejcm
Taylor & Francis (2013 – 2022) - River Publishers (2022 – now)

Associate Editor of
Iranian Journal of Science and Technology, Transactions of Civil Engineering
https://www.springer.com/journal/40996
Springer (2020 – now)

Member of Editorial Board
Computational Methods in Engineering
https://jcme.iut.ac.ir/
Isfahan University of Technology (2017 – now)

Member of Editorial Board
SHARIF, Journal of Science and Technology
http://journal.sharif.ir/
Sharif University of Technology (2006 – now)

Editor-in-Chief
SCIENTICA IRANICA, Transactions A: Journal of Civil Engineering
http://scientiairanica.sharif.edu/
Sharif University of Technology (2008 – 2011)

Distinguished Member
The Academy of Sciences of Iran
http://www.ias.ac.ir/index.php/en/
The Academy of Sciences of Iran (2009 – 2013)

Distinguished Member
National Foundation for Science and Technology
https://bmn.ir/
Iran's National Elites Foundation (2012 – now)

Chairman
International Conference on Sustainable Design and Construction Management
Sharif University of Technology, International Campus (SUTIC)
Kish Island, February 2-3, 2022

Co-chairman
11th International Symposium on Plasticity and Its Current Application
Mechanical Engineering Department, University of Maryland, Baltimore County (UMBC)
Kauai, Hawaii, January 3-8, 2005

Chairman
1st National Congress on Civil Engineering
Sharif University of Technology
Tehran, Iran, May 12-14, 2004

Awards

2021   **Distinguished Scientist of the Alborz Cultural Foundation**
Alborz Cultural Foundation (Iranian Nobel Prize)

2019   **World top one percent highly-cited scientist**
Highly Cited Researchers - Thomson Reuters

2019   **Distinguished Scientist of the Academy of Sciences of Iran**
The Academy of Sciences of Iran, Tehran, Iran

2018   **Distinguished Professor of Sharif University of Technology**
Sharif University of Technology, Tehran, Iran

2015   **Book Prize Award for the Best Engineering Book** (Research week)
Sharif University of Technology, Tehran, Iran

2014   **Distinguished Professor of Civil Engineering** (Teacher's day)
Sharif University of Technology, Tehran, Iran

2013   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2012   **Distinguished Professor of National Elites Foundation**
National Foundation for Science and Technology (*Iran's National Elites Foundation*), Tehran, Iran

2011   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2010   **Distinguished Professor of Civil Engineering** (Teacher's day)
Sharif University of Technology, Tehran, Iran

2009   **National Distinguished Professor**
Ministry of Science, Research and Technology, Tehran, Iran

2008   **Distinguished Civil Engineering Research Award**
Building and Housing Research Center, BHRC, Tehran, Iran

2008   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2007   **Distinguished Scientist of Iranian Civil Engineering**
Asian Civil Research Institute, Tehran, Iran

2007   **Book Prize Award for the Best Engineering Book**
Asian Civil Research Institute, Tehran, Iran

2007   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2006   **Book Prize Award for the Best Engineering Book**
Ministry of Science, Research and Technology, Tehran, Iran

2005   **National Distinguished Researcher**
Ministry of Science, Research and Technology, Tehran, Iran

2005   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2004   **Khwarizmi International Award**
Iranian Research Organization for Science and Technology, Tehran, Iran

2003   **Distinguished Researcher of Civil Engineering** (Research week)
Sharif University of Technology, Tehran, Iran

2002   **French government's BOURSE**
Laboratoire de Mecanique des Soildes, Ecole Polytechnique, Palaiseau, France

1998	**European Powder Metallurgy Association Thesis Competition** PM98 World Congress, Granada, Spain
1997	**Ninth Robert J. Melosh Medal Competition** School of Engineering, Duke University, North Carolina, USA
1996	**Eighth Robert J. Melosh Medal Competition** School of Engineering, Duke University, North Carolina, USA

Research Projects

2017 - 2019	"Design of an integrated computational software for simulation of mechanical nano-scale devices", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2015 - 2017	"An integrated software (SUT–Multiscale) for multi-scale modeling of nano-scale materials (A reference to powder compaction process)", Office of Research, Civil Engineering Department, **for Sharif University of Technology, Tehran.**
2014 - 2015	"An enriched FEM technique for modeling hydraulically-driven fracture propagation in fractured porous media based on the extended finite element method", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2013 - 2014	"Modeling of crack propagation in saturated/unsaturated porous soil via the extended finite element method", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2012 - 2013	"Modeling and optimization of the cold and warm powder compaction processes using an efficient frictional contact algorithm and a thermal pressure-dependent plasticity model", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2011 - 2012	"Modeling of crack and discontinuity in porous saturated soil with extended finite element method", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2009 - 2011	"Multi-scale modeling of nano-materials using parallel-processing", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2008 - 2009	"Modeling of fracture and crack propagation using adaptive finite element technique", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2006 - 2008	"Modeling of large plasticity deformations and contact problems using XFEM technique", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran National Science Foundation (INSF).**
2006 - 2008	"An integrated computer software for 3D numerical modeling of earth and rockfill dams", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran Water Resource Management Organization (IWRMO).**
2003 - 2005	"A computer software for numerical modeling of earth and rockfill dams", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran Water Resource Management Organization (IWRMO).**
2003 - 2004	"Pre- and post-processing computer software for numerical simulation of powder forming processes", Office of Research, Civil Engineering Department, **for Sharif University of Technology, Tehran.**

2002 - 2003	"A finite element software for simulation of powder forming processes", Office of Research, Civil Engineering Department, **for Sharif University of Technology, Tehran.**
2001 - 2003	"Localization phenomena in saturated and semi-saturated earth dam", Office of Research, Civil Engineering Department, Sharif University of Technology, Tehran, **for the Iran Water Resource Management Organization (IWRMO).**
2001 - 2002	"Application of quasi-nonlinear analysis in finite element modelling of powder forming processes", Office of Research, Civil Engineering Department, **for Sharif University of Technology, Tehran.**
2000 - 2001	"Numerical modelling of localization phenomena in dynamic loading", Office of Research, Civil Engineering Department, **for Sharif University of Technology, Tehran.**
1998 - 2000	"Characterisation and optimisation of bulk recovery processes", Office of Research, Mechanical Engineering Department, University of Wales Swansea (UK), **for the IMCO Recycling (UK) Ltd.**
1995 - 1998	"Finite element simulation and adaptive remeshing of metal powder forming processes", Office of Research, Civil Engineering Department, **for the University of Wales Swansea (UK).**
1994 - 1995	"Dynamic analysis of fluid-saturated porous media by the boundary element method", Office of Research, Civil Engineering Department, **for Isfahan University of Technology, Isfahan.**

Software Design

SUT_DAM (version 4.0)
An integrated software environment for geotechnical engineering

For more information about the software see the following paper:

A.R. Khoei, **S.A. Gharehbaghi**, **A.R. Azami** and **A.R. Tabarraie**,
'SUT-DAM: An integrated software environment for multi-disciplinary geotechnical engineering',
Advances Engineering Software, **37,** 728-753, 2006.

Technical Reviewer

International Journal for Numerical Methods in Engineering

International Journal for Numerical and Analytical Methods in Geomechanics

International Journal of Solids and Structures

International Journal of Mechanical Sciences

International Journal of Plasticity

Computer Methods in Applied Mechanics and Engineering

Computational Mechanics

Finite Elements in Analysis and Design

European Journal of Computational Mechanics

Engineering Fracture Mechanics

Engineering Computations

Applied Mathematical Modelling

Journal of Materials Processing Technology

Soil Dynamics and Earthquake Engineering

Teaching

Static,	(UG)		
Mechanic of Materials,	(UG)		
Advanced Mechanic of Materials,	(UG)	**2000 - now**	**Sharif University of Technology,** Civil Engineering Department, Tehran, Iran
Finite Element Method,	**(PG)**		
Advanced Finite Elements,	**(PG)**		
Extended–FEM Method	**(PG)**		
Finite Elements in Elasticity and Plasticity	**(PG)**	**2005**	**University of Maryland, Baltimore,** Mechanical Engineering Department, Baltimore, USA

Research Interests

Computational Nano-mechanics

Computational plasticity (**FEM**, **X_FEM** and **Meshless** methods)

Computational Fracture Mechanics

Computational Geomechanics

Large deformation analysis

Error estimation and adaptivity for plasticity problems

Contact and frictional modelling

Strain localization analysis

Graduate Students Supervised

PHD Students Supervised

2023	S.M.S. Mortazavi	Thermo-hydro-mechanical-chemical modeling of fractured porous media using XFEM technique
2023	G. Tolooei Eshlaghi	Multiscale modeling of creep behavior of nickel-based superalloys
2022	S. Saeedmonir	Multiscale modelling of non-isothermal multiphase flow in heterogeneous porous media with computational homogenization approach
2021	R. Yasbolaghi	Multiscale modeling of crack propagation under thermal fatigue in nano-structured materials
2019	N. Hosseini	Numerical modeling of fluid flow and proppant transport in hydraulic fracture using extended finite element method
2018	M.R. Hajiabadi	Hydraulic crack propagation in heterogeneous reservoir based on extended multi-scale finite element method
2017	A. Rezaei Sameti	Hierarchical multi-scale modeling of large plastic deformation with application in powder compaction
2015	M. Vahab	Modeling of hydraulic fracturing in fractured saturated porous media using the extended finite element method
2014	P. Broumand	Extended-FEM modeling of dynamic/cyclic ductile fracture propagation using a coupled visco-plasticity/damage model
2013	H. DorMohammadi	A temperature-dependent multi-scale model for mechanical and thermal properties of Silicon nano-structures

2012	O.R. Biabanaki	Polygonal-FEM modeling of large deformation contact-impact problems on non-conformal meshes
2011	T. Mohamadnejad	Extended-FEM modeling of dynamic cohesive crack growth in multi-phase porous media
2010	O.R. Barani	Modeling of cohesive crack propagation in saturated-unsaturated porous media
2009	H. Moslemi	3D modeling of large deformation in crack propagation of brittle and ductile materials
2008	S. Keshavarz	Numerical modeling and shape optimization of cold and hot metal powder forming processes
2008	M. Anahid	Extended arbitrary Lagrangian-Eulerian finite element method in large plasticity deformations of solid mechanics
2007	S.A. Gharehbaghi	3D adaptive finite element analysis in large plasticity deformation of continuum mechanics problems
2002	A. Bakhshiani	Finite deformation of elasto-plasticity of pressure sensitive materials based on endochronic plasticity

MSC Students Supervised

2023	E. Ahmadi	Modeling fluid flow in fractured porous media using phase-field method
2023	M. Tajadodi	An improved dual porosity method in modeling of naturally fractured reservoirs using the time-dependent shape factor
2023	M.R. Vafaei	Warm compaction process of Alumina nano-powders using molecular dynamics method
2023	A. Fallah	Molecular dynamics analysis of Copper/Graphene composite nano-powders under compaction process
2022	M.H. Adeli	Multiscale modeling of chemo-hydro-mechanical analysis of heterogeneous porous media
2022	M. Mousavi	Numerical modeling of density-driven flow in vuggy porous media using extended finite element method
2022	A.M. Orovati	A thermo-mechanical multiscale simulation for the compaction process of the oxide-coated aluminium nano-powders using a cone-cap plasticity model
2022	P. Palahang	Mechanical properties of lubricants in nano-powder compaction process using molecular dynamics and continuum mechanics methods
2021	S.M. Kianezhad	A machine learning-based atomistic-continuum multiscale modeling of perfect and defective Ni-based super-alloys in elastoplastic regions
2021	M. Youzi	Influence of the alloying elements on creep behavior of Ni-based super-alloys using molecular dynamics
2021	O. Rezaie Bedokhti	Modeling of enhanced geothermal systems using XFEM technique
2020	S. Shahoveisi	Modeling the creep behavior of Nickel-based superalloys using molecular dynamics method
2020	R. Ehsani	Numerical modeling of carbon dioxide sequestration in saline aquifers considering the capillary and solubility trapping
2020	M. Ashtari	Multiscale simulation of metallic nano-alloys compaction process using cone-cap plasticity model

2020	P. Pirmoradi	Numerical simulation of cold and hot water injection into naturally fractured reservoirs using the extended finite element method
2020	A. Misaghi	Multiscale modeling of microstructure discontinuities in saturated porous media using XFEM
2019	H. Mofateh	Multi-scale modeling for nonlinear behavior of nano-powder materials in compaction process
2019	H. Sepahvand	Modeling the nonlinear behavior of metallic powder compaction process using the Peridynamics method
2019	D. Amini	Thermo-hydro-mechanical modeling of fractured porous media with phase change
2019	A. Ali Madadi	Coarse grained–atomistic concurrent multi-scale modeling for numerical simulation of mechanical behavior of heterogeneous materials in nano-scale
2019	A. Salehi	Modeling of acid transport in fractured porous media using extended finite element method
2018	S.M.S Mortazavi	Thermo-hydro-mechanical modeling of fractured porous media with two-phase fluid flow using XFEM technique
2018	K. Farnoudi	Extended-FEM modeling of advective-dispersive transport under variable-density flow in heterogeneous fractured porous media
2018	A.R. Reisi	A gradient-enhanced computational homogenization technique for multi-scale modeling of heterogeneous materials with softening behavior
2018	K. Mohammadi	Coarse-grained multi-scale modeling for numerical simulation of nonlinear behavior of materials in nano-scale
2018	S. Shakibi	Multi-scale modeling of mechanical properties of two phase microstructure in Nickle based super-alloys with molecular dynamics and crystal plasticity
2017	Y. Nikravesh	Modeling the nonlinear behavior of nano-materials via hierarchical RVE-based multi-scale method
2017	M. Salahinejad	Multi-scale modelling of cohesive crack growth based on XFEM and damage model
2017	A. Bahrololumi	Coarse-grain multi-scale modeling for numerical simulation of plastic behavior in nano-materials
2017	Z. Bajalan	Modeling of multi-component fluid flow through fractured porous media using XFEM
2017	A.H. Mohammadi	Crack propagation modeling in arched concrete structures reinforced by FRP using XFEM and damage model
2016	M.A. Saadat	Multiscale modeling of cohesive crack growth using XFEM method
2016	R. Akbari	Computational homogenization of interfacial thermal resistance in heterogeneous materials
2016	M. Khorami	Hierarchical multiscale modeling in large and plastic deformations
2016	Y. Navid Tehrani	Fracture behavior modeling of arch concrete strengthened with FRP by XFEM
2015	B. Bahmani	Modeling of secondary crack propagation in thermal fractured porous media using X-FEM
2015	M. Safehian	Modeling of hydraulic fracture propagation in fractured porous media using X-FEM

2015	M. Asadi	Modeling of hydraulic fracture propagation in multi-material saturated porous media using X-FEM
2015	S. Zarea	Mechanical properties of calcium silicate hydrate with molecular dynamics analysis
2014	A. Imani	A temperature-dependent multi-scale modeling of fatigue crack growth in nano-materials
2014	A. Shafieyoon	Multi-scale modeling of heterogeneous nano-materials using a representative volume element
2014	H. Karimi	Dynamic multi-scale modeling of dislocations in nano-crystalline materials
2014	E. Abedian	Numerical modeling of two-phase hydraulic fracture propagation in fractured reservoirs using X-FEM technique
2014	N. Hosseini	Modeling of cohesive crack propagation in fractured reservoirs with two-phase fluid flow using X-FEM method
2014	H. Akhondzadeh	Modeling stress singularities in isotropic composite materials with X-FEM technique
2013	O. Alizadeh	A concurrent multi-scale method for crack growth simulation with the X-FEM method
2013	M.R. Hirmand	Modeling of hydraulic fracture propagation in fractured porous media using the X-FEM method
2013	R. Mohammadi	Modeling of hydraulic fracture propagation in fractured non-isothermal saturated porous media with X-FEM
2013	M. Babaei	Molecular dynamic modeling of nano-powder compaction
2013	F. Hosseinzadeh	Molecular dynamics simulation of gold nano-particles with clustered and colloid models in the aquatic environments
2013	F. Shirazian	Quantum effects of electro-magnetic fields on Gold nano-particles for biomedical applications
2012	F. Jahanbakhshi	A concurrent multi-scale method in modeling of heterogeneous nano-structures
2012	M. Babazadeh	Modeling the dynamic cohesive crack growth with the XFEM technique in saturated porous media
2012	R. Yasbelaghi	Modeling of crack propagation without remeshing based on the polygonal finite element method
2011	A. Aramoon	A concurrent multi-scale method in modeling the mechanical behavior of crystalline nano-structures
2011	M. Eghbalian	Modeling the dynamic crack growth in ductile materials with the continuum damage model and adaptive mesh refinement
2011	S. Moallemi	Modeling of crack propagation in non-isothermal saturated porous media using XFEM
2011	H. Saffar	Thermo-mechanical modeling of contact–impact bodies in large deformations with the Taylor–Galerkin method

2010	P. Ghahremani	A temperature-dependent hierarchical multi-scale method in modeling of surface effects in nano-materials
2010	M. Sharifi	3D cohesive fracture modeling of non-planar crack growth with the adaptive finite element technique
2010	M. Vahab	Crack growth modeling in saturated porous media using X-FEM technique
2010	L. Farrokhpour	Modeling two-phase fluid porous media using X-FEM technique
2010	R. Eslahi	A nonlinear contact constraint method in modeling the contact-impact problems
2010	M. Zeinali	Modeling of frictional contact-impact in large finite element deformations
2009	S. Mohajeri	Dynamic modeling of large deformation contact problems using X-FEM
2009	P. Broumand	XFEM modeling of elasto-plastic deformation in crack propagation using coupled plasticity-damage model
2009	E. Haghighat	Modeling of saturated-unsaturated porous media using XFEM technique
2009	M.H. Poormatin	Modeling of crack propagation in brittle material under dynamic loading
2009	P. Banihashemi	Implementation of parallel processing method in molecular dynamics analysis of nano-composites
2008	M.J.A. Qomi	Multi-scale hierarchical modeling of surface effect in crystalline nano-structures via Cauchy-Born hypothesis
2008	M. HajiBabai	Implementation of couple damage-plasticity model in non-linear fracture mechanics
2008	M. Soleymani	Application of neural network in adaptive finite element analysis
2008	M. TaheriMusavi	Implementation of augmented-Lagrangian formulation in large deformation contact problems
2008	P. MirKhosravi	Implementation of mixed u-p formulation in XFEM analysis of incompressible material
2007	H. Azadi	Modeling of crack propagation via adaptive finite element method
2007	K. Karimi	XFEM modeling of shear band localization using Cosserat theory
2007	I. Yadegaran	Modeling of contact problems using XFEM technique
2007	M. Zarrinfar	Numerical analysis of partially saturated soils
2007	O.R. Biabanaki	3D modeling of contact problems using XFEM technique
2006	S. Yadegari	3D modeling of shear band localization using Cosserat theory
2006	H. DorMohammadi	A single cap plasticity model for isotropic-kinematic material behavior

2006	K. Shahim	Implementation of ALE modeling in XFEM technique
2005	A.R. Forghani	Implementation of XFEM in modeling of cohesive crack propagation
2004	M. Nikbakht	Application of XFEM in numerical modeling of contact problems
2004	A. Shamloo	Application of XFEM in numerical modeling of double-surface plasticity model
2004	M. Samimi	Application of RKPM in numerical simulation of pressure-sensitive material using cap plasticity model
2003	M. Anahid	Application of arbitrary Lagrangian-Eulerian methods in large elasto-plastic deformation
2003	A. Riahi	Error estimation and adaptivity in plasticity problems
2003	S. Azizi	3D numerical simulation of powder forming processes using a cap plasticity model
2003	R. Alizadeghan	Computational modeling of elasto-plastic behavior using meshless methods
2003	N. Jamali	Modeling of saturated soils under cyclic loading with isotropic and kinematic hardening models
2003	S. Abrishami	Numerical modeling of unsaturated geotechnical structures based on three-phases solid-fluid-air behavior
2002	A.R. Tabarraie	Finite element modeling of plastic deformation in strain localization
2002	S. Keshavarz	Pre- and post-processing computer software for modeling of large elasto-plastic deformation problems
2002	H.R. Irannejad	Mathematical and FE modeling of mechanical interaction of FRP rods with concrete
2002	A.R. Azami	Dynamic analysis of rockfill dams using a double-surface plasticity model in saturated and semi-saturated media
2001	A.R. Salimi	Computational of elastic field for interfacial cracks with element-free-Galerkin method

Amir R. Khoei

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Academic and Research Background

1989-1991   I completed my M.Sc. studies in the Civil and Structural Engineering Department at Isfahan University of Technology, in 1991. I ranked first in my graduate college of the university. I conducted my M.Sc. thesis under the supervision of Professor A.M. Kaynia, on the '**Dynamic Analysis of Fluid-Saturated Porous Media by the Boundary Element Method'**.

1992-1994   After M.Sc. graduation, I joined the teaching staff of the Isfahan University of Technology in 1992. As a *Lecturer* in IUT, I was responsible for all aspects of under-graduate courses on *Static*, *Mechanics of Materials* and *Steel Structure Design,* including: instruction and grading as well as group tutorial, and project and lab supervision.

1994-1995   Before starting my Ph.D. program in the University of Wales Swansea (UK), I developed my studies on the '**Prediction of Localization Phenomena using the Finite Element Method'** under Professor O.C. Zienkiewicz's supervision. This work was selected as one of the finalist papers at the *Eighth Robert J. Melosh Medal Competition, USA*.

1995-1998   During my Ph.D. program in UWS, I developed my studies on the **Finite Element Simulation and Adaptive Remeshing of Metal Powder Forming Processes**, under the supervision of Professor R.W. Lewis. My research in this area was selected for the second time as one of the finalist papers at the *Ninth Robert J. Melosh Medal Competition, USA*. My Ph.D. thesis was also selected as a runner-up between 28 entries at the **European Powder Metallurgy Association EPMA's 1998 PM Thesis Competition** to be held at the *PM98 World Congress in Granada, Spain*.

1998-2000   After PhD graduation, I was appointed as a *Senior Research Assistant* in the Mechanical Engineering Department at University of Wales Swansea. During my *Post-Doct* position, I was working on the **Characterisation and Optimisation of Bulk Recovery Processes** which was funded by EPSRC (Engineering and Physical Sciences Research Council) and IMCO Recycling (UK) Ltd.

2000-2003   I was appointed as an *Assistant Professor* in the Civil Engineering Department at Sharif University of Technology in January 2000*.* Since then, I have been teaching a number of under-graduate courses, including: *Mechanics of Materials* and *Advanced Mechanics of Materials,* and graduate courses, including: *Finite Element Method* and *Advanced Finite Element Method*. I have also developed my research on the computational plasticity with reference to powder compaction simulation and strain localization analysis. I have designed an integrated software environment, named PCS_SUT, for computational simulation of powder compaction processes. In September 2002, I was awarded the BOURSE by the French government (Centre Francais Pour L'Accueil et les Echanges Internationaux) to continue my research activities in the Laboratoire de Mecanique des Soildes at Ecole Polytechnique, France. In August 2003, I published my monograph, entitled: '**Computational Modeling of Powder Compaction Processes**' with CIMNE Press, Spain.

2004-2007   In January 2004, I was promoted to Associate Professor of Civil Engineering Department at Sharif University of Technology. Based on my scientific achievements, I was awarded a fellowship by Sharif University of Technology to continue my research activities on the sabbatical leave in

Mechanical Engineering Department at the University of Maryland, Baltimore County (USA). As the co-editor, I published the proceeding of the 11th International Symposium on Plasticity and Its Current Application to be held in Kauai, Hawaii, Jan 3-8, 2005. Furthermore, I held teaching position at UMBC with the course of 'Finite Elements in Elasticity and Plasticity'. In August 2005, my book entitled: '**Computational Plasticity in Powder Forming Processes**' was published by **Elsevier** (UK). I was also selected as the silver medal winner of Khwarizmi International Award (2005), organized by the Iranian Research Organization for Science and Technology, for the design and development of an integrated software environment (SUT_DAM) for multi-disciplinary geotechnical engineering.

2008 - now   In January 2008, I was promoted to the Professor of Civil Engineering Department at Sharif University of Technology. During 2008–2011, I was the editor of *Scientica Iranica, Transaction A, Journal of Civil Engineering*, published by the Sharif University of Technology. I am also the member of *Editorial Boards* in the **Finite Elements in Analysis and Design** published by Elsevier (2014–now), and **European Journal of Computational Mechanics** published by Taylor & Francis (2013–2022) and then River Publishers (2022–now), and also the *Associate Editor* of the **Iranian Journal of Science and Technology, Transactions of Civil Engineering** published by Springer (2020 – now). In 2015, my second book entitled: '**Extended Finite Element Method, Theory and Applications**' was published by **John Wiley** (UK). Since its publication, the book has gained more than 450 citations by various researchers according to **Google Scholar**. Since 2003, I have selected several times as the '**Annual Distinguished Researcher**' and '**Annual Distinguished Professor**' of the Civil Engineering Department at Sharif University of Technology. In addition, I was selected as the '**National Distinguished Researcher**' in 2005 and '**National Distinguished Professor**' in 2009 organized by the Ministry of Science, Research and Technology (Iran). Moreover, I was selected as the '**Distinguished Professor of National Elites Foundation**' organized by National Foundation for Science and Technology (Iran National Elites Foundation) in 2012, and also the '**Distinguished Scientist of the Academy of Sciences**' organized by the Academy of Sciences of Iran in 2019. I have been also selected among the **World top one percent highly-cited scientists** reported by Thomson Reuters. I have published more than 300 papers in the reputed international journals and conference proceedings. Since 2000 at SUT, I have supervised the theses of 18 PhD students and more than 90 MSc students; most of them are now working as faculty members and research scholars at the top rank universities around the world (To name a few, I can refer to **Dr. A. Tabarraei** at University of North Carolina at Charlotte, US; **Dr. M.J.A. Qomi** at University of California, Irvine, US; **Dr. M. Taheri-Mousavi** at Carnegie Mellon University, US; **Dr. S. Keshavarz** at NIST, US; **Dr. M. Vahab** at University of New South Wales, Australia; **Dr. O.R. Biabanaki** at Continental Reifen Deutschland GmbH, Germany).