

Personal
Information

Full name: Morteza Nikravan
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Educational
Background

- (2013-Present) **PhD:** Environmental Engineering, Civil and Environmental Engineering Department, Amirkabir University Of Technology (Tehran Polytechnic), Tehran, Iran
Thesis title: “cementitious-based materials for Stabilization/Solidification of municipal solid waste incineration (MSWI) ash using life cycle assessment (LCA)”
Supervisors: *Prof.*[Aliakbar Ramezani](#)*pour* & *Prof.*[Reza Maknoon](#)
- (2008-2011) **M.Sc :** Environmental Engineering, Civil and Environmental Engineering Department, Amirkabir University Of Technology (*Tehran Polytechnic*), Tehran, Iran (**GPA 17.73 out of 20**)
Thesis title: "*Stabilization/Solidification of hazardous waste (heavy metal) in concrete using nanoparticles technology*" (**Grade of Thesis 19.92 out of 20**)
Supervisors: *Prof.*[Aliakbar Ramezani](#)*pour* & *Prof.*[Reza Maknoon](#)
- (2003-2008) **B.Sc:** Civil engineering, Iran University of Science and Technology, Tehran, Iran, (**GPA 15.18 out of 20**)
- (1999-2003) **Diploma:** Mathematics and physics, National Organization for Development of Exceptional Talents (NODET), Karaj, Iran

Honors and Awards

- 🏆 **Assistant Director/Co-Founder** of Innovative organization at Amirkabir University of technology (AUT) , [AUT's Office of Sustainability](#) (2011-Present)
- 🏆 **Iran Concrete Institute (ICI) Distinguished Master's Thesis Award** (2011), [Poster and Thesis competition in memory of late Dr. Ghalibafian](#)
- 🏆 **Invented design and patent**
 - ✂ “Use of Electric Arc Furnace (EAF) Slag as Aggregates in Concrete” number of patent right: 67255 registration number:389060831 (2010)
 - ✂ “Use of Special bottom ash in Concrete” number of patent right: 73286 registration number:390080297 (2012)
- 🏆 **Iranian Nanotechnology Initiative Council scholarship** ([web](#)): researching on Nano-Silica in concrete (2009-2010)
- 🏆 **“University Leadership and Management Training Programme (UNILEAD), Project Management (PM), Financing and Investment (F&I) and Human Resource Management (HRM)”**, German Academic Exchange Service (DAAD) (DIES program), University of Oldenburg, Germany, 4-21 August 2017
- 🏆 **“International Summer Academy on Spatial Ecotoxicology and Ecotoxicological Risk Assessment - Using an Open Community Approach”**, Institute for Environmental Sciences Landau University of Koblenz-Landau and DAAD, Landau, Germany, 11 - 24 September 2017
- 🏆 **“4th Potsdam Summer School 2017, Human Environments in a Changing World”**, 04-13 September 2017, Institute for Advanced Sustainability Studies (IASS), Potsdam, Germany
- 🏆 **Groningen Energy Summer School (GESS) 2017, ‘Yes In My Backyard’ – Global Energy Transition from Local Perspective**, University of Groningen, Groningen, Netherlands, 17-25 August 2017
- 🏆 **E4D Summer School: Sand: an (in)finite Resource?**, TU Delft and ETH Zürich Engineering for Development Summer School, 4 - 22 July 2016, TU Delft, The Netherlands.
- 🏆 Speaker at **Academia Engelberg 2016 Conference**, 15th Dialogue on Science, Engelberg, Switzerland, October 12 to 14, 2016.
- 🏆 **Green Building Solution 2016**, OeAD, Technical University of Vienna, Boku (University of Natural Resources and Life Sciences), Vienna, July 23 – August 14, 2016.
- 🏆 **YES Course on “Sustainable systems, practices, tools” scholarship**, Swiss Federal Institute of Technology (ETH) and Myclimate Co., Zürich and Interlaken, Switzerland, 25th January-7th February 2015
- 🏆 **YES special Course on “Smart Renewable Energy Systems” scholarship**, EBC Hochschule Bremerhaven, Germany, 8-19 September 2013.
- 🏆 **The Youth Encounter on Sustainability (YES) program scholarship, Hosei University** organized by ACTIS, spin-off organization of the Swiss Federal Institute of Technology (ETH), Tokyo, Japan, 22March–8 April 2013.
- 🏆 **Ranked 3th** among 17 students of environmental engineering, Tehran Polytechnic University in graduate courses (2008-2011)

*** BOOKS:**

- 📖 **M. Nikravan**, A. Azizi, Under supervision of Prof. R. Maknoon, “Leadership in Energy & Environmental Design (LEED)”, Translated into Persian for construction industries, Amirkabir University Press, 139 P., Winter 2012. ISSN: 978-964-463-458-1

*** PAPERS:**

- ✂️ Raeisi, Z., **Nikravan, M.** A Comparative Investigation of Dominant Building Rating Systems and Iranian National Building Codes according to Sustainability Criteria., [architect in hot and dry climate Journal](#), 2016; 4(4): 1-14.
- ✂️ A.A. Ramezaniapour, **M. Nikravan**, R. Maknoon, N. Nasher Ahkami, “*Stabilization and Solidification of incinerator bottom ash using cement and silica fume*”, Journal of Tabriz Civil and Environmental engineering. 2015, spring, Vol 45.1.
- ✂️ S. Panahi, M. Yekkalar, **M. Nikravan**, “*Evaluation of Current Laboratory Waste Management A Step Towards Green Campus at Amirkabir University of Technology*”, Walter Leal Filho, Nandhivarman Muthu, Golda Edwin, Mihaela Sima, Springer, 14 Feb 2015 - Science - 321 page.
- ✂️ M.R Sabour, M Yekkalar, **M Nikravan**, “*Investigation of Effect of Nano-SiO₂ Consumption in Concrete on its Environmental and Economic Functions*”, Journal of Civil Engineering, Vol. 25, No 2: spring and summer, 2014.
- ✂️ A. Ramezaniapour, **M. Nikravan**, R. Maknoon, “*Characterization of Bottom Ash from Petrochemical Waste Incinerator*”, Journal of Residuals Science & Technology, Vol. 8, No. 4, October 2011, pp 189-196.
- ✂️ S. Seraj, **M. Nikravan**, A.A. Ramezaniapour, P. Zendehtdel, “*Evaluation of the application of municipal solid waste incinerator (MSWI) ash in civil engineering using sustainability*”, The sixteenth edition of the Sardinia Symposium, 2-6 October 2017, Forte Village, Italy.
- ✂️ B. Bonakdarpour, A.A. Ramezaniapour, F. Farmani, **M. Nikravan**, “*Use of microbial calcite precipitation for Improvement of strength and durability of concrete*”, *The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014)*, Kish, Iran, 24-27 February, 2014 ([accepted](#))
- ✂️ A. A. Ramezaniapour, A. Kazemian, **M. Nikravan**, A. Mahpur, M. Moghadam, “*Influence of Iranian low-activity slag and silica fume on the fresh properties and durability of high performance self-consolidating concrete*”, International Conference on Sustainable Construction Materials & Technologies (SCMT3), August 2013, Kyoto, Japan. ([accepted](#))
- ✂️ A. A. Ramezaniapour, A. Kazemian, **M. Nikravan**, A. Mahpur, M. Moghadam, “*An experimental study on the workability of High-Performance Self-consolidating Concrete (HPSC)*”, 7th RILEM Conference on Self-Compacting Concrete, Paris, France, 2013 ([accepted](#))
- ✂️ A.A Ramezaniapour, M. Mahdikhani, S. Yousefian Moghaddam, **M. Nikravan**, S. R. Mousavi, “*Mechanical Properties and Durability of Self Consolidating Mortars containing Nano SiO₂*”, 3rd International Symposium on Ultra-High Performance Concrete and Nanotechnology for Construction Materials, March 7-9 2012, Kassel, Germany. ([accepted](#))
- ✂️ A.A. Ramezaniapour, **M. Nikravan**, R. Maknoon, N. Nasher Ahkami, “*Environmental characterization of stabilized/solidified petrochemical incinerator bottom ash with cement, silica fume and Nano-silica*”, 9th International Congress on Civil Engineering, 8-10 May 2012, Isfahan, Iran. ([presented](#))
- ✂️ A.A. Ramezaniapour, **M. Nikravan**, R. Maknoon, “*The assessment of reuse potential for petrochemical incinerator bottom ash as a partial replacement of fine aggregate*”, International Congress on Durability of Concrete, June 18-21, 2012, Trondheim, Norway. ([accepted](#))

Publications (continued)

- ✍ M. Yekkalar, M.R. Sabour, **M. Nikravan**, “*The environmental impacts of concrete containing Nano-SiO₂ and typical concrete on global warming and fossil fuel depletion: A comparison*”, Third international Symposium on Life-Cycle Civil Engineering (*IALCCE 2012*), October 3-6, 2012, Vienna, Austria. ([accepted](#))
- ✍ A. A. Ramezaniapour, **M. Nikravan**, R. Maknoon, N. Nasher Ahkami, M. Mahdikhani R. Mousavi, “*Utilization of petrochemical incinerator bottom ash (PI-BA) as partial replacement of fine aggregate*”, 7th Central European Congress on Concrete Engineering, 22-23 September 2011, Balatonfüred, Hungary. ([accepted](#))
- ✍ A.A. Ramezaniapour, R. Mousavi, M. Kalhori, **M. Nikravan**, “*Mechanical properties and durability of concretes containing natural zeolite*”, 7th Central European Congress on Concrete Engineering, 22-23 September 2011, Balatonfüred, Hungary. ([accepted](#))
- ✍ A.A. Ramezaniapour, **M. Nikravan**, M. Jafari Nadoshan, “*Study of The Mechanical Properties and Environmental Characteristics of Concrete with Electric Arc Furnace (EAF) Slag as Aggregates*”, 9th International Congress on Advances in Civil Engineering, 27-30 September 2010, Trabzon, Turkey. ([presented](#))
- ✍ **M. Nikravan**, E. Ghadermarzi, “*Using of Self Compact Concrete (SCC) in the Gate of University of Science and Technology*” 13th Conference of Civil Research, January 2006, Kerman, Iran. (In Persian) ([presented](#))
- ✍ Full list of papers are available in [Google Scholar](#).

* **RESEARCH and PROJECTS**☐ **Co-Advisor of M.S thesis,**

- Water sectors in Green Building , AUT , 2014
- Environmental Life Cycle Assessment of the concrete Containing Nano-SiO₂ (as supplementary cementitious materials) and comparing with typical concrete, K.N.Toosi University of Technology, (2011).

☐ Environmental Impact Assessment (EIA) of Urban Infrastructures Report, Tehran municipality, 2014-present

☐ **Cooperation with Concrete Research team** -Concrete Technology & Durability Research Center, Amirkabir University Of Technology, 2009-present.

☐ Environmental Impact Assessment (EIA) of Urban Infrastructures Report, Tehran municipality, 2014-present

* **TEACHING:**

🔧 “*Seminar*”, A course for engineering, Amirkabir university of Technology, Tehran, Iran, September 2010-present (Assistant of Prof. Maknoon)

🔧 *Technical foreign language for Civil Engineering*, Amirkabir university of Technology, Tehran, Iran, September 2013-present (Assistant of Prof. Ebadi)

🔧 “*Environmental Impact Assessment (EIA)*”, A course for environmental engineering, Amirkabir university of Technology, Tehran, Iran, September 2013-present (Assistant of Prof. Maknoon)

🔧 *GIS for Environmental impact assessment (EIA) of water resource projects, elementary (2 days- course), 2015*

🔧 *Concrete technology laboratory, Robatkaream Azad University, 2014-2015.*

🔧 “*Environmental Impact Assessment (EIA) of construction projects*”, M.Sc., Environmental Engineering, Mehr Alborz, Tehran, Iran, September 2016-present (Assistant of Dr. Kharrazi)

Experiences

Experiences (continued)

🏠 “Sustainable Construction”, M.Sc, Project management Engineering, Dr. Kharrazi, Mehr Alborz, Tehran, Iran, September 201-present (Assistant of Dr. Kharrazi)

*** SELECTED LECTURES AND PRESENTATIONS**

- 🏠 "Hazardous solid wastes, management and method of disposal", Amirkabir university of technology (AUT), December 2008
- 🏠 "Life cycle assessment (LCA) of building materials", AUT, June 2009
- 🏠 "The key role of sustainability office at AUT" , AUT, September 2011
- 🏠 “LEED and Green building” Isfahan 5th International conference 2012, Mashahad national conference 2013, Gorgan 2014.
- 🏠 "Sustainable construction and introduction of LEED for rating green building", [1st National Conference on Sustainable Construction](#), Amirkabir University of Technology, March 2013
- 🏠 "Sustainable construction and green building", [Academy of Sciences of Iran](#), 22 May 2014

*** JOB:**

- ✂ Assistant director of office of sustainability, Amirkabir University of technology (2011-Present)
- ✂ Conference Organizer of 1st Conference on sustainable construction, Feb 2013, Amirkabir University of Technology.
- ✂ Work in Tahkimkav Consultant Engineering Office (2007-2009). (Company of Consulting of Civil Projects- Concrete Department)
- ✂ 6th steel-frame building, Tehran
- ✂ Material expert, Azad Dam in Kordestan State 2008
- ✂ Work in Environmental research center at Amirkabir University of technology on Establish a guideline of Environmental Impact Assessment (EIA) for urban in Tehran-Metropolitan (2013-2015)
- ✂ Green building project LEED project (Tehran wastewater research center), head of material and water section. (2016-present)
- ✂ YES (Youth Encounter on Sustainability) Iran coordinator, Myclimate Switzerland, (2015-Present)

*** MEMBERSHIP:**

- **Iranian Society of Environmentalist (IRSEN)** –www.irsen.org–
- **Iranian Concrete Institute (ICI)** –www.ici.ir–
- **Environmental committee, Alborz Engineering Society**

Computer Skills

- 🖥 MATLAB, Mathematical Engineering Software
- 🖥 LINGO, Optimization Software
- 🖥 ArcGIS 9.2, Geographic Information Systems (GIS)
- 🖥 SAP2000, ETABS2000, Structure Design Software
- 🖥 SewerCAD, WaterCAD SWMM, Water and Runoff Management Design
- 🖥 Sefaira, for high-performance building design

Language Skills

- * Farsi: Native Language
- * English: Fluent in Writing and Speaking, TOEFL iBT, 85
- * Spanish: Elementary proficiency

References

- ✉ Reza Maknoon, | Prof. of Civil and Environmental Engineering & Head of Office of Sustainability
Amirkabir University Of Technology (Tehran Polytechnic)
EMAIL: maknoon@aut.ac.ir - rmaknoon@yahoo.com
URL: civil.aut.ac.ir/rmaknoon-english
- ✉ Ali Akbar Center Ramezaniapour, | Prof. of Civil and Environmental Engineering & Head of Concrete Research
Amirkabir University Of Technology (Tehran Polytechnic)
EMAIL: aaramce@aut.ac.ir
URL: civil.aut.ac.ir/aaramce-english
- ✉ Roger Baud , PhD | Director of Youth Encounter on Sustainability (YES) program
ETH Zurich
EMAIL: roger.baud@actis-education.ch
URL: <http://www.actis-education.ch/the-team>
- ✉ Taghi Ebadi , PhD | Prof. of Civil and Environmental Engineering
Amirkabir University Of Technology (Tehran Polytechnic)
EMAIL: tebadi@aut.ac.ir
URL: civil.aut.ac.ir/tebadi-english
- ✉ Lida Ezzedinloo | Assistant Director of Environmental laboratory, Civil and Environmental Eng
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EMAIL: l.ezzedinloo@unsw.edu.au
URL: civil.aut.ac.ir/environmental_lab