

Curriculum Vitae

Personal details

Name : Cavus Falamaki
Date and place of birth : 21. Oct. 1964, Italy
Marital status: Married, wife and two children
Language(s): Farsi, Italian, English, and German
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Education

Ph.D. in Chemical Engineering, Amirkabir University of Technology, Tehran, Iran, 1997
Thesis: *Mathematical modeling and certain aspects of the crystallization of ZSM-5 zeolite*

Ph.D. exchange student, Laboratory of Crystallography, Zeolite Group, Federal Polytechnic of Zurich (ETH), Zurich, Switzerland, 1995-1996

Academic status

Associate Professor (since 2007), **Department of Chemical Engineering, Amirkabir University of Technology**, Ministry of Science, Research and Technology, Tehran, Iran

Associate Professor (2006-2007), **Ceramics Department, Materials and Energy Research Center**, Ministry of Science, Research and Technology, Tehran, Iran

Assistant Professor (1997- 2006), **Ceramics Department, Materials and Energy Research Center**, Ministry of Science, Research and Technology, Tehran, Iran

Awards

Winner of the 2nd Festival of Iran Biotechnology (Biotech 2013), Top Three Products, The Iranian Biotechnology Development Initiative, **Presidency**, 2013, Tehran, Iran.

Silver Award, Cyber International Genius Inventor Fare 2011, Seoul, Korea.

Top Ten National Researchers in Nanotechnology, The Iranian Nanotechnology Initiative, **Presidency**, 2007, Tehran, Iran

Distinguished Researcher, Materials and Energy Research Center , **Ministry of Science, Research and Technology**, Tehran, Iran, 2006.

Positions

Supervisor of Graduate and Postgraduate Education Deputy, Mashshahr Campus, Amirkabir University of Technology, Mahshahr, Iran, (since 2016).

Research Deputy, Mashshahr Campus, Amirkabir University of Technology, Mahshahr, Iran, (since 2015).

Chairman of ISIRI/REMCO, Institute of Standard and Industrial Research of Iran, Tehran, Iran, (2013-2016).

Head of Central Laboratory, Amirkabir University of Technology, Tehran, Iran, (2011-2012).

Member of the Nanotechnology Committee of the Modern Technologies Group, Ministry of Science, Research and Technology (since 2010).

Member of the Board of Director, Iranian Society of Nanomedicine (since 2011-2014).

Member of the Editorial Board, Applied Materials : Processing and Characterization (AMPC) (since 2013).

Member of Petrochemical Center of Excellence, Chem. Eng. Dept., Amirkabir University of Technology, Ministry of Science, Research and Technology (since 2010).

Head of the Technical and Engineering Committee of the Nanotechnology Group, Ministry of Science, Research and Technology, (2009-2010).

Member of the Editorial Board, Iranian Journal of Chemical Engineering (2008-2010).

Deputy Head, Ceramics Department, Materials and Energy Research Center, Tehran, Iran, 2006.

Head of Ceramic Processing Group, Ceramics Department, Materials and Energy Research Center, Tehran, Iran, 2005-2006.

Projects Concluded

1. **Manufacture of colloidal silica**, sponsor: **Materials and Energy Research Center**, terminated 1998.
2. **Manufacture and characterization of silica nano-filters**, sponsor: **Nanotechnology Headquarters of the Presidency**, terminated 2007.
3. **Performance evaluation of a natural clinoptilolite zeolite for the MeOH to DME reaction for up-scaling purposes**, sponsor: **National Petroleum Co.**, Tehran, Iran, terminated 2007.
4. **Microwave assisted sintering of 8YSZ nano-powder**, Internal project, **Materials and Energy Research Center**, terminated 2008.
5. **Fabrication and study of the operation of a sintered ceramic membrane reactor (SCMR) for the OCM reaction**, sponsor: **National Petroleum Co.**, Tehran, Iran, terminated 2009.
6. **Investigation, design and fabrication of a nano-filtration ceramic membrane and study of its operation in a pilot-scale nanofiltration unit for water desalination**, sponsor: **Ministry of Power and Ministry of Science, Research and Technology**, Tehran, Iran, terminated 2014.
7. **Synthesis of clinoptilolite zeolite catalyst for selective catalytic reduction (SCR) of NOx from industrial flue gas**, sponsor: **Iran National Science Foundation** Tehran, Iran, terminated 2014.
8. **Development of the know-how for the manufacture of p-xylene separation molecular-sieve**, sponsor: **Behdash Co.**, Sharake Sanati Lia, Iran, terminated 2016.
9. **Study on the synthesis and optimization of performance of a composite catalyst (HZSM5/Pt/gamma alumina) for the selective isomerization reaction of C₈ aromatics versus para xylene**, sponsor: **BIPC**, Bandar Mahshahr, Iran, terminated 2016.
10. **Study on the accumulation of the 3 and 4 fold catalysts in the gas recycle stream of the tubular LDPE reactor of the Laleh Petrochemical Co.**, sponsor: **Laleh Petrochemical Co.**, Bandar Mahshahr, Iran, Commenced: 2016.

Graduate Courses

Synthesis of Nanostructures and Nanomaterials, Chemical Engineering Department, Amirkabir University of Technology, Tehran, Iran, since 2014.

Characterization of Nanomaterials, Chemical Engineering Department, Amirkabir University of Technology, Tehran, Iran, since 2012.

Advanced Reactor Design, Chemical Engineering Department, Amirkabir University of Technology, Tehran, Iran, since 2013.

Advanced Materials Kinetics, Bandarabbas Campus, Amirkabir University of Technology, Tehran, Iran, since 2014.

Nanofilters and Nanocatalysts, Ceramics Department, Materials and Energy Research Center, Tehran, Iran, 2005-8.

Undergraduate Courses

Kinetics and Reactor Design, Chemical Engineering Department, Department, Amirkabir University of Technology, Tehran, Iran, since 2013.

Mass Transfer, Chemical Engineering Department, Department, Amirkabir University of Technology, Tehran, Iran, 2008-2013.

Chemical Engineering Thermodynamics, Polymer Department, Amirkabir University of Technology, Tehran, Iran, 1996-1998.

Applied Thermodynamics, Polymer Department, Amirkabir University of Technology, Tehran, Iran, 1996-1998.

Chemical Engineering Thermodynamics II, Polymer Department, Amirkabir University of Technology, Tehran, Iran, autumn courses, 1995.

Properties and Application of Transparent Materials, Optics and Laser courses, Instructor Teaching Center, Karadj, Iran, 2004.

Publications

1. "Studies on the crystallization kinetics of zeolite ZSM-5 with 1,6-hexanediol as a structure directing agent", *Cavus Falamaki, Mohammad Edrissi and Morteza Sohrabi*, **Zeolites**, 19,2-5, 1997.
2. "Synthesis of large single crystals of the large-pore aluminophosphate molecular sieve VPI-5", *Javier de Onate Martinez, Cavus Falamaki, Christian Baerlocher and Lynne B. McCusker*, **Microporous and Mesoporous Materials**, 28, 261-269, 1999.
3. "The kinetics and equilibrium of ethanol adsorption from aqueous phase using calcined (Na-1,6-Hexanediol)-ZSM-5", *Cavus Falamaki, Morteza Sohrabi and Goudarz Talebi*, **Chemical Engineering and Technology**, 24, 501-506, 2001.
4. "RBAO membranes/ catalyst supports with enhanced permeability", *Cavus Falamaki, Alireza Aghaie and Navid Razavi Ardestani*, **Journal of European Ceramic Society**, 21, 12, 2267-2274, 2001.
5. "Mass transfer mechanisms in the fixed-bed ion-exchange process for dilute colloidal silica manufacture", *Cavus Falamaki*, **Chemical Engineering and Technology**, 25, 9, 905-910, 2002.
6. "Effect of seeding in the synthesis of B_4C by the magnesiothermic reduction route", *Alireza Aghaie, Cavus Falamaki, Bijan Eftechari Yekta and Mahdi Shafiee Afarani*, **Industrial Ceramics**, 22, 2, 121-125, 2002.
7. "Crystallization of δ - $Na_2Si_2O_5$ -rich layered silicates from sodium silicate solutions: Seeding and temperature programmed δ -phase embryo creation", *Cavus Falamaki*, **Journal of European Ceramic Society**, 23, 5, 697-705, 2003.
8. "Kinetic investigation of the carbothermal reduction of an Iranian clay", *Cavus Falamaki and Touraj Ebadzadeh*, **Ceramics International**, 28, 8, 887-892, 2002.
9. "Initial sintering stage pore growth mechanism applied to the manufacture of ceramic membrane supports", *Cavus Falamaki, Mahdi Shafiee Afarani and Alireza Aghaie*, **Journal of European Ceramic Society**, 24,2285-2292, 2004.
10. "Dual behavior of $CaCO_3$ as a porosifier and sintering aid in the manufacture of alumina membrane/catalyst supports", *Cavus Falamaki, Mahdi Naimi and Alireza Aghaie*, **Journal of European Ceramic Society**, 24, 3195-3201, 2004.
11. " N_2 and O_2 adsorption properties of an Iranian clinoptilolite-rich tuff in the original and pre-exchanged forms", *Cavus Falamaki, Azemat Mohammadi and Morteza Sohrabi*, **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 246/1-3 pp.31-37, 2004.
12. "Dip-coating technique for the manufacture of alumina microfilters using PVA and Na-CMC as binders : A comparative study", *Cavus Falamaki, Mahdi Naimi and Alireza Aghaie*, **Journal of European Ceramic Society**, 26/6, pp 949-956,2006.
13. "Zirconia-zircon composite microfiltration membranes based on porous alumina supports", *Cavus Falamaki, Zahra Khakpour and Alireza Aghaie*, **Journal of Membrane Science**, 263/1-2 pp. 103-112, 2005.
14. "In-situ crystallization of highly oriented silicalite films on porous zircon supports", *Cavus Falamaki, Mahdi Shafiee Afarani and Alireza Aghaie*, **Journal of the American Ceramic Society**, 89 (2) 408-414, 2006.

15. "Comparative study of different routes of particulate processing on the characteristics of alumina functionally-graded microfilter/membrane supports", *Cavus Falamaki and Jamileh Veysizadeh*, **Journal of Membrane Science**, 280 (2006) 899-910.
16. "A new inorganic membrane: TiO₂ ultrafilter based on functionally graded porous alumina", *Cavus Falamaki and Jamileh Veysizadeh*, **Materials Science Forum**, 533 (2007) 239-244.
17. "Contact atomic force microscopy (C-AFM) as an indispensable auxiliary tool for the measurement of nano-film thickness by the XRF absorption spectroscopy technique", *Ghasem Kavei, Mohammad Hassan Sarrafi and Cavus Falamaki*, **Measurement Science and Technology**, 18 (2007) 1441-1446.
18. "New insights of the glycine-nitrate process for the synthesis of nano-crystalline 8YSZ", *Mahdyar Valefi, Cavus Falamaki, Touraj Ebadzadeh and Mehran Solati Hashjin*, **Journal of the American Ceramic Society**, 90 [7] (2007) 2008-2014.
19. "Methanol dehydration to dimethyl ether using modified clinoptilolite", *Sayed Javid Royae, Morteza Sohrabi and Cavus Falamaki*, **Materials Science-Poland**, 25 (2007) 761-773.
20. "Taguchi design of experiments approach to the manufacture of one-step alumina microfilter/membrane supports by the centrifugal casting technique", *Cavus Falamaki and Jamileh Veysizadeh*, **Ceramic International**, in press (2007).
21. "A new Langmuir-Hinshelwood reaction mechanism for the MTD reaction over clinoptilolite catalyst", *Sayed Javid Royae, Cavus Falamaki, Morteza Sohrabi and Sayed Siamak Ashraf Taleh*, **Journal of Applied Catalysis A : General**, 338 (2008) 114-120.
22. "Reconciliation between experimental and Monte Carlo-based simulation of the pore size distribution in mesoporous silicon", *Jalil Khajepour Tadvani and Cavus Falamaki*, **Nanotechnology**, 19 (2008) 295701 (8pp).
23. "N,N-bis-(2-hydroxyethyl) oleamide: Synthesis, kinetic analysis, kinetic study and yield optimization", *Mohammad Edrissi, Cavus Falamaki and Farrokhbak Moradi*, **Tenside Surfactant Detergents**, 46 (2009) 2.
24. "Slip casting process for the manufacture of tubular alumina microfiltration membranes", *Cavus Falamaki and Maryam Beyhaghi*, **Materials Science-Poland**, 27, 2 (2009) 427-441.
25. "Microwave sintering of nano-crystalline 8YSZ: Effect of heating schedule on microstructure, ionic conductivity and mechanical properties", *Mahdyar Valefi, Cavus Falamaki, Ahad Fattahi and Touraj Ebadzadeh*, **International Journal of Nanoscience**, 8, 3 (2009) 293-298.
26. "A new nano-(2Li₂O/MgO) catalyst/porous alpha alumina composite for the oxidative coupling of methane reaction", *Behrouz Fallah and Cavus Falamaki*, **AIChE J**, 56 (3), (2010) 717-728.
27. "Use of nano-silica carriers for the fabrication of detached Li₂O/MgO catalyst nanoparticles on the surface of alpha-alumina supports", *Behrouz Fallah and Cavus Falamaki*, **Micro & Nano Letters**, 4, 3 (2009) 166-171.
28. "In situ reaction synthesis of Al₂O₃-SiC nanostructure using different carbon sources", *Touraj Ebadzadeh, Medi Heydarzadeh Tari and Cavus Falamaki*, **Advances in Applied Ceramics**, 108, 6 (2009) 369-372.

29. "A new route for the direct synthesis of Al₂O₃/SiC nano-powder mixtures by the carbothermal reduction of parent oxides", *Cavus Falamaki, Medi Heydarzadeh Tari and Touraj Ebadzadeh*, **AICHE J.**, 56 (5), 2010, 1372-1382.
30. "Fabrication of asymmetric alumina membranes I. Effect of SrO addition on thermal stabilization of transition aluminas", *Hadi Firouzghalb and Cavus Falamaki*, **Materials Science and Engineering B**, 166 (2010) 163-169.
31. "Comparative study of the initial-stage sintering behavior of micro and nano-size dense spherical silica particles", *Sabaheh Barikbin, Cavus Falamaki, Farzaneh Vahabzadeh, and Foad Poosti*, **Micro & Nano Letters**, 6, 1 (2011) 5-8.
32. "Sucrose hydrolysis by invertase immobilized on functionalized porous silicon", *Mehrnoosh Azodi, Cavus Falamaki and Afshin Mohsenifar*, **Journal of Molecular Catalysis B: Enzymatic**, 69 (2011) 154-160.
33. "The effect of reliable prediction of final pressure during pressure equalization steps on the performance of PSA cycles", *Milad Yavari, Habib Ale-Ebrahim and Cavus Falamaki*, **Chemical Engineering Science**, 66 (2011) 2587-2595.
34. "Removal of aqueous Fe⁺⁺ using MnO₂-Clinoptilolite in a batch slurry reactor: Catalyst synthesis, characterization and modeling of catalytic behavior", *Reihaneh Pashmineh Azar and Cavus Falamaki*, **Journal of Industrial and Engineering Chemistry**, in press (2011).
35. "Kinetic study of the hydrogenation of p-nitrophenol to p-aminophenol over micro-aggregates of nano-Ni₂B catalyst particles", *Firoozeh Taghavi, Cavus Falamaki, Alimemad Shabanov, Leila Bayrami and Amir Roumianfar*, **Journal of Applied Catalysis A : General**, 407, (2011) 173-180.
36. "Functionalized porous silicon for targeted-drug-delivery", *Ozra Tabasi, Cavus Falamaki and Zahra Khalaj*, **Colloids and Surfaces A: Biointerfaces**, 98 (2012) 18-25.
37. "Zero valent nano-sized iron/clinoptilolite modified with zero valent copper for reductive nitrate removal", *Fatemeh Sadat Fateminia and Cavus Falamaki*, **Process Safety and Environmental Protection**, 91 (4) (2013) 304-310.
38. "Micro-EDXRF as a powerful complementary technique for the analysis of bimetallic Au/Ag/glass nano-layer composites used in SPR sensors", *Mohammad Ghorbanpour and Cavus Falamaki*, **Applied Optics**, 51 (2012) 7733-7738.
39. "An effective method for increasing the activity of nickel boride catalyst nano-particles in hydrogenation reactions: Low-temperature hydrogen treatment", *Firouzeh Taghavi, Cavus Falamaki, Alimemad Shabanov, Leila Bairami and Mina Seyyedi*, **Journal of Applied Catalysis A : General**, 453 (2013) 334-340.
40. "Clinoptilolite, kieselguhr and α-alumina supported nano-nickel boride catalysts for the production of high purity p-aminophenol through p-nitrophenol hydrogenation: A comparative study", *Firouzeh Taghavi, Cavus Falamaki, Alimemad Shabanov, Leila Bairami and Mina Seyyedi*, **Reaction Kinetics, Mechanisms and Catalysis**, DOI 10.1007/s11144-013-0539-4 (in press 2013).
41. "Synthesis of some baria-modified γ-Al₂O₃ for methanol dehydration to dimethylether", *Hoda Safaee, Morteza Sohrabi and Cavus Falamaki*, **Research Journal of Chemical Sciences**, 31 (1) (2013) 57-62.

42. “Intensive mechanical pre-treatment of hydrogel in zeolite synthesis: X zeolite synthesis system case study”, *Elham Yousefi and Cavus Falamaki*, [Chemical Engineering Journal](#) , 221 (2013) 247-253.
43. “ A novel method for the production of highly adherent Au layers on glass substrates used in surface plasmon resonance analysis: Substitution of Cr or Ti intermediate layers with Ag layer followed by an optimal annealing treatment”, *Mohammad Ghorbanpour and Cavus Falamaki*, [Journal of Nanostructure in Chemistry](#), 3:66 (2013).
44. “Improvement of H-ZSM5 performance by alkaline treatments: Comparative catalytic study in the MTG reactions”, *Sohrab Fathi, Morteza Sohrabi and Cavus Falamaki*, [Fuel](#) , 116 (2013) 529-537.
45. “Clinoptilolite zeolite as a potential catalyst for propane-SCR-NO_x: Performance investigation and kinetic analysis”, *Naser Ghasemian, Cavus Falamaki and Mansur Kalbasi*, [Chemical Engineering Journal](#) , 236 (2014) 464-470.
46. “A novel method for the fabrication of ATPES silanized SPR sensor chips: Exclusion of Cr or Ti intermediate layers and optimization of optical/adherence properties”, *Mohammad Ghorbanpour and Cavus Falamaki*, [Applied Surface Science](#) , 301 (2014) 544-550.
47. “A novel method for the synthesis of nano-magnetite particles”, *Maryam Ghodrati Siahnamzgi, Cavus Falamaki and Abbas Sahebghadam Lotfi*, [Advances in Nano Research](#), 2 (2014) 89-98.
48. “Adsorption of ethyl, iso-propyl, n-butyl and iso-butyl mercaptans on AgX zeolite: Equilibrium and kinetic study”, *Rreza Barzamani, Cavus Falamaki and Rahman Mahmoudi*, [Fuel](#), 130 (2014) 46-53.
49. “Enhancement of the Catalytic Performance of H-Clinoptilolite in Propane-SCR-NO_x Process through Controlled Dealumination”, *Naser Ghasemian, Cavus Falamaki, Mansur Kalbasi and Monirh Khosravi*, [Chemical Engineering Journal](#) , 252 (2014) 1129-119.
50. “The effect of number of pressure equalization steps on the performance of pressure swing adsorption process”, *Milad Yavari, Habib AleEbrahim and Cavus Falamaki*, [Chemical Engineering and Processing: Process Intensification](#), 87 (2015) 35-44.
51. “An efficient algorithm for modeling the thermodynamics of multi-solute adsorption from liquids”, *Seyed Mohammad Seyed Hosseini and Cavus Falamaki*, [Fluid Phase Equilibria](#), 390 (2015) 34-41.
52. “Study on the kinetics and mechanism of the catalytic oxidation reaction of Mn²⁺ using clinoptilolite supported δ-MnO₂ nano-catalyst”, *Maryamossadat Kazemi and Cavus Falamaki*, [Process Safety and Environmental Protection](#) , 94 (2015) 65-71.
53. “Preparation of multiple-doped TiO₂ nanotube arrays with nitrogen, carbon and nickel with enhanced visible light photoelectrochemical activity via single-step anodization”, *Majid Mollavali, Cavus Falamaki and Sohrab Rohani*, [International Journal of Hydrogen Energy](#), 40 (2015) 12239-12252.
54. “High performance NiS-nanoparticles sensitized TiO₂ nanotube arrays for water reduction”, *Majid Mollavali, Cavus Falamaki and Sohrab Rohani*, [International Journal of Hydrogen Energy](#), 41 (2016)5887-5901.
55. “Ni²⁺- ion-exchanged dealuminated clinoptilolite: A superior adsorbent for deep desulfurization”, *Rahman Mahmoudi and Cavus Falamaki*, [Fuel](#), 173 (2016) 277-284.

56. “A systematic study on the effect of desilication of clinoptilolite zeolite on its deep-desulfurization characteristics”, *Rahman Mahmoudi and Cavus Falamaki*, **International Nanochemistry Research**, in press (2016).
57. “Experimental Parametric Study of Frequency and Sound Pressure Level on the Acoustic Coagulation and Precipitation of PM2.5 Aerosols”, *Mohsen Amiri, Asghar Sadighzadeh and Cavus Falamaki*, **Aerosol and Air Quality Research**, in press (2016).
58. “Competitive adsorption equilibrium isotherms of CO, CO₂, CH₄ and H₂ on activated carbon and zeolite 5A for hydrogen purification”, *Milad Yavari, Habib AleEbrahim and Cavus Falamaki*, **Journal of Chemical & Engineering Data**, in press (2017).

Papers published in Iranian journals

“Calcination kinetics of ZSM-5 zeolite”, *Cavus Falamaki, Mohammad Edrissi and Morteza Sohrabi*, **Amirkabir Journal**, 9, 34, 99, 1997.

Invited Speaker

“Magnetic fields and chemical reactions: New horizons”, [Collaborative Conference on Materials Research \(CCMR\) 2017](#), Jeju island, South Korea, 26-30 June 2017.

“APTES silanization of nano-metal layers in the fabrication of SPR sensors: The new horizons”, [The International Conference on Small Science \(ICSS 2014\)](#), Hong Kong, Hong Kong, 8-11 Dec. 2014.

International Patents

“Process for growing colloidal silica”, *Cavus Falamaki*, [EU Patent](#) 1375426, 2006.

Iranian Patents

“Manufacture of a catalyst for the dimethylether from methanol conversion process via a natural zeolite from the HEU structure type”, *Cavus Falamaki, Morteza Sohrabi, Seied Javid Rouiaie, Seied Siamak Ashraf Taleh and University of Amirkabir*, [Iranian Patent 38 098](#), 2006.

“Manufacture of zirconia-zircon microfilter membranes”, *Zahra Khakpour, Cavus Falamaki and Alireza Aghaie*, [Iranian Patent 32 664](#), 2006.

“Hydrothermal treatment method for growing nanometer size colloidal silica using microwave energy”, *Cavus Falamaki*, [Iranian Patent](#) 28 079, 2002.

“Faratarava apparatus for the measurement of permeability and pore size distribution of ceramic microfilters in the form of disks with a diameter of 20 mm and maximum thickness of 3 mm for a pore size range of 0.2 –15.0 microns”, *Cavus Falamaki, Alireza Aghaie and Navid Razavi Ardestani*, [Iranian Patent 26 446](#), 2000.

Book Chapters

“Ceramic membranes”, Chapter 5 in: [Introduction to advanced ceramics](#), Publisher: [Iran University of Science and Technology](#), 2014.

Books (translation)

“Theoretical and Practical learning of Glass Manufacture and Lens Grinding”, *Cavus Falamaki*, Translation into Farsi, [Djihad Daneshgahi Publishing Organization](#), 549 pages, ISBN 964-6022-73-1, 2000.

Proceedings

“Effect of initial hydrogel milling on Na-ZSM-5 synthesis”, Proceedings of the 13th International Zeolite Conference, Montpellier, France, 8-13 July, 2001; *Cavus Falamaki, Mohammad Edrissi and Morteza Sohrabi*, [Studies in Surface Science and Catalysis](#), 135, 186, 2001.

“Microwave hydrothermal particle growth of colloidal silica”, *Frontiers in Solid State Chemistry*, Proceedings of the International Symposium on Solid State Chemistry in China, Changchun, China, 9-12 August, 2002, *Cavus Falamaki*, [World Scientific Publishing](#), 501, 2002.

“A novel method for the synthesis of nano-magnetite: The use of carboxymethylcellulose as structure directing agent”, International conference on bio-nanotechnology: Future prospects in the Emirates, Al-Ain, Emirates, 18-21 November, 2006, *Cavus Falamaki, Mariam Ghodrati and Abbas*

Sahebghadam Lotfi, **United Arab Emirates University, Publication Department, ISBN 9948-02-135-5**, 144-148.

Abstracts

“**Synthesis of large single crystals of VPI-5**”, *Cavus Falamaki, Javier de Onate Martinez, Christian Baerlocher and Lynn B. McCusker*, Abstracts, **British Zeolite Association Meeting**, Edinburgh, Scotland, July 21-26, 1996.

Membership of Scientific Committees of International Conferences

IICNN2008 (2nd International conference on Nanotechnology), Member of scientific committee, Tabriz University, Tabriz, Iran, 2008.

IZC’08 (1st Iranian International Zeolite Conference), Member of scientific committee, Amirkabir University, Tehran, Iran, 2008.

Workshops organized

“**Short Course on Enzymes: Science, Technology and Nanotechnology**”, performers: Mose Rossi and Sabato D’Auria, organizer: Cavus Falamaki, 18-20 Feb. 2006, Materials and Energy Center, Tehran, Iran,

Acting as a referee for international journals such as

AIChE Journal
Journal of European Ceramic Society
Microporous and Mesoporous Materials
Journal of the American Ceramic Society
Journal of Applied Catalysis A and B
Journal of Membrane Science
Chemical and Engineering Technology
Micro and Nano Letters
Industrial and Engineering Chemistry and Research

Employment's

Process Engineer, Aivazian and Co., Tehran, Iran, 1991-1993.

Member of academic staff (associate and assistant professor), *Ceramics Department, Materials & Energy Research Center, Tehran, Iran, 1997-2007 (Head of X-ray Laboratory, 1998-2004).*

Consultant of Behdad Chemical Industries (Tage), 2000-2006.

Consultant of Mahde Taban Investment Co. (Tage), 2009-2010.

Consultant of Pars Zeolite Co., since 2012-2013.

Consultant of Behdash Chemical Industries, 2013-2016.

Main Research Fields

Zeolites , pseudozeolites and MOF's : Synthesis, crystallization modeling, new applications in separation and catalytic processes

Ceramic membranes (micro, ultra and nanofilters, pervaporation membranes) : Manufacture, characterization and application in separation and catalytic processes

Oxide and non-oxide ceramic powders (e.g. alumina, zirconia, silicon and boron carbide) : Synthesis and sintering

Bio-sensors: Surface Plasmon Resonance optical sensors development and technology