## **Curriculum vitae**

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# **Personal Data:**

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# **Education:**

**2001-** Degree of Philosophy Doctor in *Physical Chemistry* at Isfahan University of Technology.(Supervisor: G. A. Parsafar)

**1994**- Degree of M. S. in *Physical Chemistry* at Tehran University. (Supervisor: M. Mehrafarin)

**1991**- Degree of B. S. in *Chemistry* at Shahid Beheshti University.

## **Employment:**

July 2004 – Present Assistance Professor, Chemistry Department, Teacher Training

University, Tehran, Iran

1994 – 1998 Research Assistant, Chemistry Department, Kashan University,

Kashan, Iran.

# **Publications:**

1- Mehrafarin, M. and Ghaemi, M. "Non-integrable mappings and fluctuating irreversible processes" *J. Phys. A: Math. Gen.* **1995**, 28, 6435.

- 2- Ghaemi, M.; Parsafar, G. A. and Ashrafizaadeh, M. "Calculation of Critical Temperature for 2- and 3-Dimensional Ising Models and for 2-Dimensional Potts Models ..." *J. Phys. Chem. B*, **2001**, *105*, 10355
- 3- Ghaemi, M.; Ghannadi, M.; and Mirza, B. "Calculation of The Critical Temperature for Anisotropic Two-Layer Ising Model Using The Transfer Matrix Method" *J. Phys. Chem.B.* **2003**, *107*, 829-831
- 4- Ghaemi, M. and Parsafar, G. A. "Size Reduction of The Transfer Matrix of Two-Dimensional Ising and Potts Models" *Iran. research Phys.* **2004**, *4*, 1-10
- 5- Ghaemi, M.; Mirza,; and Parsafar, G. A. "Constructing the Critical Curve for a Symmetric Two-Layer Ising Model" *J. Theo. Comp. Chem.* **2004**, *3*, 217-224
- 6- Asgari, Y.; Ghaemi M.; and Mahjani, M. G. "Calculation of The Critical Point for Two-Layer Ising and Potts Models Using Cellular Automata" *Lecture Notes in Computer Science*, 2004, 3305, 709-718
- 7- Ghaemi, M.; Rezaei-Ghaleh, N.; and Sarbolouki, M. N. "Directed Ligand Passage Over the Surface of Diffusion-Controlled Enzymes: A Cellular Automata Model" *Lecture Notes in Computer Science*, **2004**, *3305*, 719-724
- 8- Mardani, T.; Mirza, B.; and Ghaemi, M. "Calculation of the shift exponent for the two-layer three-state Potts model using the transfer matrix method" *Phys. Rev. E*, **2005**, 72, 026127

## **Seminars**

- 1- Ghaemi, M. and Parsafar, G. A. "Critical Temperature in 2- and 3-Dimensional Ising Models and Transfer Matrices " 4<sup>th</sup> Physical Chemistry Iranian Seminar, 2000.
- 2- Ghaemi, M. and Parsafar, G. A. "Size Reduction of The Transfer Matrix of Two-Dimensional Ising and Potts Models" 5<sup>th</sup> Physical Chemistry Iranian Seminar, **2001.**
- 3- Ghaemi, M.; Shahrokhi, A. and Asgari, A. " Simulation of Avascular Cancer Growth by Cellular Automata" *first Iranian seminar on the Bioinformatics*. University of Tehran, **2003.**
- 4- Asgari, Y.; Ghaemi, M.; and Mahjani, A. "Application of Cellular Automata in Pattern Formation" *first Iranian seminar on the Bioinformatic*. University of Tehran, **2003.**
- 5- Asgari, Y.; Ghaemi M.; and Mahjani, M. G. "Calculation of The Critical Point for Two-Layer Ising and Potts Models Using Cellular Automata" *14<sup>th</sup> Iranian Chemistry & Chemical Engineering Congress*. Teacher Training University, Tehran, **2004.**

- 6- Asgari, Y.; Ghaemi M.; and Mahjani, M. G. "Calculation of The Critical Point for Two-Layer Ising and Potts Models Using Cellular Automata" *Sixth International conference on Cellular Automata for Research and Industry (ACRI 2004)*. University of Amsterdam, 2004.
- 7- Ghaemi, M.; Rezaei-Ghaleh, N.; and Sarbolouki, M. N. "Directed Ligand Passage Over the Surface of Diffusion-Controlled Enzymes: A Cellular Automata Model" *Sixth International conference on Cellular Automata for Research and Industry* (ACRI 2004). University of Amsterdam, **2004.**
- 8- Asgari, Y.; Ghaemi M.; and Mahjani, M. G. "Simulation of FitzHugh Nagumo Models as a Reaction-Diffusion System Using Cellular Automata" 7th Iranian Physical Chemistry Seminar, Iran, Isfahan University of Technology (8-10 March), 2005.
- 9- Asgari, Y.; Ghaemi M.; and Mahjani, M. G. "Calculation of the Critical Point for Two-Layer Ising Model Using Cellular Automata" 7th Iranian Physical Chemistry Seminar, Iran, Isfahan University of Technology (8-10 March), 2005.
- 10- Ghaemi M.; and Hamrang, A. "Investigation of the Critical Properties of Two-Dimensional Ising Model on Square Lattice Using Cellular Automata" 7th Iranian Physical Chemistry Seminar, Iran, Isfahan University of Technology (8-10 March), 2005.
- 11- Rezaei-Ghaleh N., Ghaemi M., and Sarbolouki M. N. "Random walk of ligand over the random surface of enzyme: implications for diffusion-controlled enzymes" *The European Conference on Mathematical and Theoretical Biology; ECMTB* 2005 *July* 18-22, *Dresden*, *Germany*) 2005.