

Biography

PhD: Amirkabir University of Technology (Tehran Polytechnic) - 2011

Msc: Amirkabir University of Technology (Tehran Polytechnic) - 2007

Bsc: Iran University of Science and Technology - 2005

Transport Phenomena in Biological Systems

Biochemical Reactor Design

Environmental Biotechnology

Research

Research Interests

Waste-gas Biotreatment

Biodegradation

Multi-phase Bioreactors

Mathematical Modeling of Bioprocesses

Publications

1. Sedighi M., Vahabzadeh F., **Zamir S.M.**, and Naderifar A. (2013), Ethanethiol degradation by *Ralstonia eutropha*, *Biotechnology and Bioprocess Engineering*, **18**, 827-833.
2. Iranmanesh E., Halladj R., and **Zamir S.M.** (2013), Mickrokinetic analysis of *n*-hexane biodegradation by an isolated fungal consortium from a biofilter: Influence of temperature and toluene presence, *Clean-Soil, Air, Water*, In press, DOI: 10:1002/clen.201200318.
3. Salehahmadi R., Halladj R., and **Zamir S.M.** (2012), Unsteady-state mathematical modeling of a fungal biofilter treating hexane vapor at different operating temperatures, *Industrial and Engineering Chemistry Research*, **51**, 2388-2396.
4. **Zamir S.M.**, Halladj R., Sadraei S.M., and Nasernejad B. (2012), Biofiltration of gaseous hexane-toluene mixture under intermittent loading condition, *Process Safety and Environmental Protection*, **90**, 326-332.
5. **Zamir S.M.**, Halladj R., Saber M., Ferdowsi M., and Nasernejad B. (2011), Biofiltration of hexane vapor: Experimental and

neural model analysis, *Clean-Soil, Air, Water*, **39**, 813-819.

6. **Zamir S.M.**, Halladj R., and Nasernejad B. (2011), Removal of toluene vapors using a fungal biofilter under intermittent loading, *Process Safety and Environmental Protection*, **89**, 8-14.
7. **Zamir S.M.**, Halladj R., and Ferdowsi M. (2010), Influence of intermittent loading on the removal of high concentrations of VOCs in a biofilter, *International Review of Chemical Engineering*, **2**, 146-150.
8. Moghbeli M.R., **Zamir S.M.** and Molaee B. (2008), Resultant synergism in the shear resistance of acrylic pressure-sensitive adhesives prepared by emulsion polymerization of n-butyl acrylate/ 2-ethyl hexyl acrylate/ acrylic acid, *Journal of Applied Polymer Science*, **108**, 606-613.

Book Chapter

Lopez M.E, Montes M., Nalakath Abubackar H., **Zamir S.M.** and Rene E.R. (2012) Performance of biological waste gas treatment systems for benzene and other VOCs removal from polluted air, In: *Benzene and Its Derivatives: New Uses and Impacts on Environment and Human Health*, Nova Science Publishers Inc., Hauppauge, NY, USA, ISBN 978-1-69100-108-9

Conference papers

1. Sedighi M., Khatami S. H., Vahabzadeh F., and **Zamir S. M.** (2013), Kinetics of ethanethiol biodegradation using a pure bacterial culture, *International Conference on Environmental Pollution and Remediation*, Toronto, Canada, July 15-17.
2. Salehahmadi R., Halladj R., and **Zamir S.M.** (2011), Dynamic modeling of biofiltration for hexane abatement at different temperatures, *4th Biotechniques for Air Pollution Control*, A Coruña, Spain, October 12-14.
3. **Zamir S.M.**, Halladj R., and Ferdowsi M. (2011), Biofiltration of hexane vapor under intermittent loading: effect of operating temperature and kinetic analysis, *7th Iran International Chemical Engineering Congress*, Kish Island, Iran, November 21-24.
4. Salehahmadi R., Halladj R., and **Zamir S.M.** (2011), Mathematical Model Development For Biofiltration of Hexane at different working temperatures, *7th Iran International Chemical Engineering Congress*, Kish Island, Iran, November 21-24.
5. Iranmanesh E., Halladj R., and **Zamir S.M.** (2011), Kinetic study of n-hexane biodegradation by an isolated fungal consortium from a biofilter, *7th Iran International Chemical Engineering Congress*, Kish Island, Iran, November 21-24.

6. **Zamir S.M.**, Halladj R., Ferdowsi M., and Nasernejad B. (2009), Influence of transient loading on the removal of high concentrations of VOCs in a biological air filter, 6th Iran International Chemical Engineering Congress, Kish Island, Iran, November 16-20.
7. **Zamir S.M.**, Halladj R., and Nasernejad B. (2008), Study of a fungal biofilter treating toluene vapors during intermittent loading, 5th Iran International Chemical Engineering Congress, Kish Island, Iran, January 3-5.

References

1. Dr. Rouein Halladj, Amirkabir University of Technology, Tehran, Iran (halladj@aut.ac.ir)
2. Dr. Babak Bonakdarpour, Amirkabir University of Technology, Tehran, Iran (babakb@aut.ac.ir)
3. Dr. Eldon R. Rene, Uneso-IHE, Institute for Water Education, Delft, The Netherlands (e.raj@unesco-ihe.org)
4. Prof. Christian Kennes, University of La Coruna, La Coruna, Spain (kennes@udc.es)