

Curriculum Vita

Personal:

Last Name: Zarghami
First Name: Reza
Gender: Male
Date of birth: 21/03/1973
Place of birth: Iran-Mashhad
Nationality: Iranian
Marital status: Married
Email address: rzarghami@ut.ac.ir

**Education:**

Ph. D Chemical Engineering, University of Tehran/Iran (2004-2009)
Thesis: Conditional Monitoring of Pressure Fluctuation in Fluidized Bed

M. Sc. Chemical Engineering, University of Tehran/Iran (1995-1997)
Thesis: Pressurizer Transients Dynamic Model

B. Sc. Chemical Engineering, Shiraz University, Shiraz, Iran (1991-1995)

Professional Experience:

Assistant Professor, School of Chemical Engineering, University College of Engineering of University of Tehran, Iran, (2009-)

Executive Experience

Head of Pharmaceutical Engineering Program, School of Chemical Engineering, University College of Engineering of University of Tehran, Iran, (2009-)

Head of Biotechnology, Pharmaceutical Engineering, Energy and Environment Group, School of Chemical Engineering, University College of Engineering of University of Tehran, Iran, (2013-)

Interest /Experience Feedback:

Modeling and Simulation,
Nonlinear Time series Analysis, Chaos, and Fractal in Chemical Engineering,
Nonlinear Dynamics Analysis,
Two Phase Flow Modeling and CFD/DEM (Discrete/Distinct Element Method),
Conditional Monitoring,
Uncertainty Methods,
Sensitivity Methods,
Code Scaling and Scaling of the Accuracy of Thermal-Hydraulic and Fluid Mechanic Advanced Codes,
Nonlinear Control, Plant Wide Control,
Advanced Computer Code Verification and Validation

Academic Activities:

Scientific Consultant in Multiphase Systems Research Lab, Department of Chemical Engineering, University of Tehran

Scientific Consultant in Process Design and Simulation Research Centre, Department of Chemical Engineering, University of Tehran

Developing CFD-DEM (Euler/Lagrange (EL) principle) Computer Code in Process Design and Simulation Research Centre, Department of Chemical Engineering, University of Tehran

Developing C₃ Selective Hydrogenation Model in Process Design and Simulation Research Centre, Department of Chemical Engineering, University of Tehran

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Courses/Seminars

Pharmaceutical Processing and Manufacturing

Powder Technology

Mixing Process

Advance Fluid Mechanics

CFD in Chemical Engineering

Chemical Process Control

Fluid Mechanics

Mass Transfer

Advanced Reactor Engineering

Industrial Project:

Feasibility Study of Hollow Spherical Granular Production, Nasooz Pooshesh Isfahan Company

Monitoring the Quality of the Fluidization, Petrochemical Research and Technology Company

Feasibility Study for Design and Construction of Skid Mounted Process Package (SMPP) in Oil and Gas Industries, MAPNA Company

Selected Publications and Presentations:

Book Chapter:

1. **Zarghami, Reza**, Mostoufi Navid, Sotudeh-Gharebagh Rahmat, and Chaouki Jamal, "Nonlinear Dynamic Characteristic of Bubbling Fluidization," in "Advances in Multiphase Flow and Heat Transfer", Vol.3, 300-331, Edited by L. Cheng and D. Mewes, Bentham Science Publishers, 2012 [April 2012, DOI: <http://dx.doi.org/10.2174/97816080522881120101>, eISBN: 978-1-60805-228-8, ISSN :1879-4467]

Papers:

44. Behzad Babaei, **Reza Zarghami**, Hossein Sedighikamal, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, "Selection of Minimal Length of Line in Recurrence Quantification Analysis", *Physica A: Statistical Mechanics and its Applications*, 395 (x), 112-120, (2014), [Reference: PHYSA 14798, Editorial reference: PHYSA-12520 [<http://dx.doi.org/10.1016/j.physa.2013.10.016>, 1 February 2014]
- 2014
43. Maryam Tahmasebpour, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, "Characterization of Various Structures in Gas-Solid Fluidized Beds by Recurrence Quantification Analysis", *Particuology*, 11 (6), 647-656, (2013) [<http://dx.doi.org/10.1016/j.partic.2012.08.005>, 5 December 2013] **PARTIC_515**
42. Abolghasem Jouyban, Shadi H. Eghrary, **Reza Zarghami**, "Solubility of amiodarone HCl in propylene glycol + ethanol, propylene glycol + water and their ternary solvent mixtures at 25 and 37 °C", *Journal of Molecular Liquids*, 186 (x), 2013, 52–55 [October 2013, <http://dx.doi.org/10.1016/j.molliq.2013.05.014>]
41. Hamid R. Norouzi, Hedayat Azizpour, **Reza Zarghami**, Jamal Chaouki, Navid Mostoufi, "Frequency Domain Analysis of Fluidized Beds with Vibration Time Series of the Bed Wall", *Applied Mechanics and Materials*, 391 (x), 2013, 477-481 [September 2013, <http://dx.doi.org/10.4028/www.scientific.net/AMM.391.477>, September, 2013]
40. Mohammad Amin Hassani, **Reza Zarghami**, Hamid Reza Norouzi, and Navid Mostoufi, "Numerical Investigation of Effect of Electrostatic Forces on the Hydrodynamics of Gas-Solid Fluidized Beds", *Powder Technology*, 246 (x), 2013, 16-25 (POWTEC-D-13-00157R1) [September 2013, <http://dx.doi.org/10.1016/j.powtec.2013.05.007>]
39. Mojgan Abbasi, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, and **Reza Zarghami**, "A Novel Approach for Simultaneous Hydrodynamic Characterization of Gas-Liquid and Gas-Solid Systems", *Chemical Engineering Science*, 100 (x), 2013, 74-82 [30 August 2013, <http://dx.doi.org/10.1016/j.ces.2012.12.031>]
38. Amir Sheikhi, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, **Reza Zarghami**, "Experimental Investigation on the Hydrodynamics of a Gas–Liquid–Solid Fluidized Bed using Vibration Signature and Pressure Fluctuation Analyses", *International Journal of Heat and Fluid Flow*, 42 (x), 2013, 190-199 [August 2013, <http://dx.doi.org/10.1016/j.ijheatfluidflow.2013.03.007>]
37. Mohammad Reza Tamadondar, **Reza Zarghami**, Hedayat Azizpour, Navid Mostoufi, Jamal Chaouki, and Ramin Radmanesh, "Using S-statistic for Investigating the Effect of Temperature on Hydrodynamics of Gas-Solid

Fluidized Beds”, *Particuology*, 11 (3), 2013, 288-293
[<http://dx.doi.org/10.1016/j.partic.2012.05.007>, June 2013]

36. Hossein Sedighikamal, **Reza Zarghami**, “Dynamic Characteristics of Bubbling Fluidization through Recurrence Rate Analysis of Pressure Fluctuations”, *Particuology*, 11 (3), 2013, 282-287
[<http://dx.doi.org/10.1016/j.partic.2012.09.007>, June 2013]
35. Behzad Babaei, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, “Monitoring of Fluidized Beds Hydrodynamics Using Recurrence Quantification Analysis”, *AICHE*, 59 (2), 2013, 399-406 [DOI: <http://dx.doi.org/10.1002/aic.13850>, February 2013]
34. Amir Sheikhi, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, and **Reza Zarghami**, “Frequency Based Characterization of Liquid-Solid Fluidized Bed Hydrodynamics Using the Analysis of Vibration Signature and Pressure Fluctuations”, *Powder Technology*, 235 (x), 2013, 787-796 [DOI: <http://dx.doi.org/10.1016/j.powtec.2012.11.026>, February 2013]
33. Amir Sheikhi, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Navid Mostoufi, and Mehrdad Alfi, “Understanding Bubble Hydrodynamics in Bubble Columns”, *Experimental Thermal and Fluid Science*, 45 (x), 2013, 63-74 [DOI: <http://dx.doi.org/10.1016/j.expthermflusci.2012.10.008>, February 2013]
32. Maryam Tahmasebpour, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, “Study of Transition Velocity from Bubbling to Turbulent Fluidization by Recurrence Plots Analysis on Pressure Fluctuations”, *the Canadian Journal of Chemical Engineering*, 91(2), 368-375, (2013) [DOI: <http://dx.doi.org/10.1002/cjce.21621>, February 2013]
31. Jan Gubis, Hamid R. Norouzi, Navid Mostoufi, and **Reza Zarghami**, “Effect of Internal Tubes on the Flow Structures in Gas-Solid Fluidized Bed”, *Journal of Physics: Conference Series* 423 (2013) 012025, ScieTech 2013, JOP Publishing [<http://dx.doi.org/10.1088/1742-6596/423/1/012025>]
30. Hossein Sedighikamal, **Reza Zarghami**, “Hydrodynamic Characterization of Bubbling Fluidization by Principal Component Analysis of Pressure Fluctuations”, *Particulate Science and Technology*, 31 (1), 2013, 51 – 57 [xxx, 0.402] [DOI: <http://dx.doi.org/10.1080/02726351.2011.643530>, 14 January 2013]
29. Mohsen Shiea, Rahmat Sotudeh-Gharebagh, Hedayat Azizpour, Navid Mostoufi, **Reza Zarghami**, “Predicting Transition Velocities from Bubbling to Turbulent Fluidization by S-Statistics on Vibration Signals”, *Particulate Science and Technology*, 31 (1), 2013, 10 - 15 [DOI: <http://dx.doi.org/10.1080/02726351.2011.606876>, 14 January 2013]

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28. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, “A New Method for Validation of a CFD–DEM Model of Gas–Solid Fluidized Bed”, *International Journal of Multiphase Flow*, 47 (x), 2012,

27. Amir Sheikhi, Rahmat Sotudeh-Gharebagh, Mehrdad Alfi, Navid Mostoufi and **Reza Zarghami**, “Hydrodynamic Characterization of Liquid-Solid Two-Phase Fluidized Beds: Vibration Signature and Pressure Fluctuations Analyses”, *the Canadian Journal of Chemical Engineering*, 90 (6), 1646 - 1653, (2012) [December 2012, DOI: <http://dx.doi.org/10.1002/cjce.20676>]
26. Abdolreza Nilchi, Reza Saberi, Hedayat Azizpour, Morteza Moradi, **Reza Zarghami**, M. Naushad, “Adsorption of Cesium from Aqueous Solution using Cerium Molybdate-PAN Composite”, *Chemistry and Ecology*, 28 (2), 2012, 1-17 [December 2012, <http://dx.doi.org/10.1080/02757540.2011.629196>]
25. Hedayat Azizpour; Rahmat Sotudeh-Gharebagh; **Reza Zarghami**; Navid Mostoufi, “Vibration Time Series Analysis of Bubbling and Turbulent Fluidization”, *Particuology*, 10 (3), 2012, 292-297 [June 2012, <http://dx.doi.org/10.1016/j.partic.2011.11.006>]
24. Abdolreza Nilchi, Reza Saberi, Morteza Moradi, Hedayat Azizpour, and **Reza Zarghami**, “Evaluation of AMP-PAN Composite for Adsorption of Cs+ Ions from Aqueous Solution using Batch and Fixed Bed Operations”, *Journal of Radioanalytical and Nuclear Chemistry*, 292 (2), 2012, 609-617 [May 2012, DOI: <http://dx.doi.org/10.1007/s10967-011-1455-6>]
23. Shadi H. Eghrary, **Reza Zarghami**, and Abolghasem Jouyban, “Solubility of Losartan Potassium in Mono-solvents at Different Temperatures”, *Lat. Am. J. Pharm.*, 31(4), 2012, 632-636 [ISSN: 0326-2383, May 2012]
22. Behzad Babaei, **Reza Zarghami**, Hossein Sedighikamal, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, “Investigating the Hydrodynamics of Gas-Solid Bubbling Fluidization using Recurrence Plot”, *Advanced Powder Technology*, 23 (3), 2012, 380–386 [May 2012, <http://dx.doi.org/10.1016/j.apt.2011.05.002>]
21. Mohammad Reza Tamadondar, Hedayat Azizpour, **Reza Zarghami**, Navid Mostoufi, Jamal Chaouki, “Using Particle Trajectory for Determining the Fluidization Regime in Gas–Solid Fluidized Beds”, *Advanced Powder Technology*, 23 (3), 2012, 349–351 [May 2012, <http://dx.doi.org/10.1016/j.apt.2011.04.012>]
20. Farhad Karimi, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Mojgan Abbasi, Navid Mostoufi “Conditional Monitoring of Moisture Content in a Fluidized Bed Dryer by Acoustic Emission Signature”, *Korean J. Chem. Eng.*, 29 (5), 2012, 595-600 [May 2012, DOI: <http://dx.doi.org/10.1007/s11814-011-0216-0>]
19. Shadi H. Eghrary, **Reza Zarghami**, Fleming Martinez, and Abolghasem Jouyban, “Solubility of 2-Butyl-3-benzofuranyl 4-(2-(Diethylamino)ethoxy)-3,5-diiodophenyl Ketone Hydrochloride (Amiodarone HCl) in Ethanol + Water and N-Methyl-2-pyrrolidone + Water Mixtures at Various Temperatures”, *J. Chem. Eng. Data*, 2012, 57 (5), 1544–1550 [Publication

Date (Web): April 10, 2012 (Article) DOI:
<http://dx.doi.org/10.1021/je201268b>

18. Hedayat Azizpour, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, and **Reza Zarghami**, "Characterization of Regime Transition in Fluidized Beds at High Velocities by Analysis of Vibration Signals", *Industrial & Engineering Chemistry Research*, 51 (7), 2012, 2855-2863 [Publication Date (Web): January 24, 2012 (Article) DOI: <http://dx.doi.org/10.1021/ie200863y>]
- 2011
17. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Nonlinear Dynamics of a Gas-solid Fluidized Bed by the State Space Analysis", *Chem. Eng. Sci.*, 66 (20), 2011, 4645-4653 [CES-9807, 2.379] [15 October 2011, <http://dx.doi.org/10.1016/j.ces.2011.06.022>]
16. Hedayat Azizpour, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Mojgan Abbasi, Navid Mostoufi, Mohammad J. Mahjoob, "Characterization of Gas-Solid Fluidized Bed Hydrodynamics by Vibration Signature Analysis", *International Journal of Multiphase Flow*, 37 (7), 2011, 788-793 [DOI: <http://dx.doi.org/10.1016/j.ijmultiphaseflow.2011.02.001>, September 2011]
15. Abdolreza Nilchi, Reza Saberi, Morteza Moradi, Hedayat Azizpour, and **Reza Zarghami**, " Adsorption of Cesium on Copper Hexacyanoferrate-PAN Composite Ion Exchanger from Aqueous Solution", *Chemical Engineering Journal*, 172 (1), 2011, 572-580 [DOI: <http://dx.doi.org/10.1016/j.cej.2011.06.011>, Aug 2011]
14. Farhad Karimi, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Navid Mostoufi "Monitoring the Moisture Content of Solids in Fluidized Bed Dryers by Analysis of Pressure Fluctuations", *Drying Technology*, 29 (14), 2011, 1697-1704 [07373937, 1.662] [DOI: <http://dx.doi.org/10.1080/07373937.2011.598984>, Version of record first published: 29 Aug 2011]
13. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Validation of a DEM Modeling of Gas-Solid Fluidized Bed using the S-statistic in the State-Space Domain", *Int. Jnl. of Multiphysics*, 5 (1), 2011, 79-87 [Tuesday, July 05, 2011, DOI: <http://dx.doi.org/10.1260/1750-9548.5.1.79>, ISSN: 1750-9548 (Print)]
12. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Nonlinear Behavior Identification of a Gas-Solid Fluidized Bed Using S-Statistics", *Journal of Applied Functional Analysis*, 6 (2), 2011, 122-129 [ISSN:1559-1948 (PRINT), 1559-1956 (ONLINE), April 2011]
11. Milad Aghabarnejad, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, "Evaluating the Probabilities of Fluidization Regimes", *Industrial & Engineering Chemistry Research*, 50 (8), 2011, 4245-4251 [DOI: <http://dx.doi.org/10.1021/ie100642b>, Publication Date (Web): March 9, 2011]

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10. Zahra Mansourpour, Seddigheh Karimi, **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, "Insights in Hydrodynamics of Bubbling Fluidized Beds at Elevated Pressure by DEM–CFD Approach", *Particuology*, 8 (5), 2010, 407–414 [<http://dx.doi.org/10.1016/j.partic.2010.03.017>, October 2010]
9. Mojgan Abbasi, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, **Reza Zarghami**, Mohammad J. Mahjoob, "Nonintrusive Characterization of Fluidized Bed Hydrodynamics using Vibration Signature Analysis", *AICHE*, 56 (3), 2010, 597-603 [<http://dx.doi.org/DOI: 10.1002/aic.12046>, March 2010]
8. Reza Saberi, Abdolreza Nilchi, Somayeh Rasouli-Garmarodi, and **Reza Zarghami**, "Adsorption Characteristic of ^{137}Cs from Aqueous Solution using PAN-based Sodium Titanosilicate Composite", *Journal of Radioanalytical and Nuclear Chemistry*, 284 (2), 2010, 461-469 [DOI: <http://dx.doi.org/10.1007/s10967-010-0499-3>, May 2010]

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7. Nasim Salehi-Nik, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, **Reza Zarghami**, Mohammad J. Mahjoob, "Determination of Hydrodynamic Behavior of Gas–Solid Fluidized Beds using Statistical Analysis of Acoustic Emissions", *International Journal of Multiphase Flow*, 35 (11), 2009, 1011–1016 [DOI: <http://dx.doi.org/10.1016/j.ijmultiphaseflow.2009.06.010>, November 2009]
6. **Zarghami, Reza; Mostoufi, Navid; Sotudeh, Rahmat** "Probabilistic Approach to Particle-Wall Contact Time in Fluidized Beds", *Transactions of the ASME, Journal of Heat Transfer*, 131 (9), September, 2009, 094503 (3 pages) [DOI: <http://dx.doi.org/10.1115/1.3139112>, September 2009, 094503]

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5. **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, "Nonlinear Characterization of Pressure Fluctuations in Fluidized Beds", *Ind. Eng. Chem. Res.*, 47 (23), 2008, 9497–9507 [Publication Date (Web): November 4, 2008 (Article), DOI: <http://dx.doi.org/10.1021/ie800460f>]

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4. **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, Jamal Chaouki, "Analysis and Modeling of Particle-Wall Contact Time in Gas Fluidized Beds", *Chem. Eng. Sci.*, 62 (17), 2007, 4573 – 4578 [DOI: <http://dx.doi.org/10.1016/j.ces.2007.05.024>, September 2007]
3. Shayan Karimipour, **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, "Evaluation of Heat Transfer Coefficient in Gas–Solid Fluidized

Beds using Cluster-Based Approach”, *Powder Technology*, 172 (1), 2007, 19–27 [DOI: <http://dx.doi.org/10.1016/j.powtec.2006.10.037>, March 2007]

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2. **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, Jamal Chaouki, “Particle-Wall Contact Time in Fluidized Beds”, *IASME TRANSACTIONS*, 2 (8), 2005, 1468-1473 [October 2005, ISSN: 1790-031X]
1. **Reza Zarghami**, Farhang Jalali, Navid Mostoufi, Rahmat Sotudeh, Kamran Sepanloo, Freidoon Dastjerdi, and Nahid Ahmari, “The Dynamic Modeling of the Pressurizer Surge Tank Transients in the Light Water Reactor Nuclear Power Plants”, *Iranian Journal of Science & Technology, Transaction B, Engineering*, 29 (B5), 2005, 483-491 [ISSN: 1028-6284, October 2005]

Conferences:

29. Fatemeh Alamolhoda, Navid Mostoufia, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Mohd Azlan Hussain, “Conditional Monitoring of Hydrodynamics of Gas-Solid Fluidized Beds”, Proceedings of the 6th International Conference on Process Systems Engineering (PSE ASIA) 25 - 27 June 2013, Kuala Lumpur, Malaysia
28. Mohammad A. Hassani, Hamid R. Norouzi, **Reza Zarghami**, and Navid Mostoufi, "Effect of Electrostatic Forces on the Axial Diffusivity of Solid Particles" in "The 14th International Conference on Fluidization - From Fundamentals to Products", Noordwijkerhout, The Netherlands, May 26-31, 2013, Eds, ECI Symposium Series, Volume (2013), http://dc.engconfintl.org/fluidization_xiv/95
27. Hedayat Azizpour, **Reza Zarghami**, F. Mohammadi, Rahmat Sotudeh-Gharebagh, and Navid Mostoufi, "Attractor Comparison of Vibration Signal to Characterize of Hydrodynamics of Fluidized Beds" in "The 14th International Conference on Fluidization - From Fundamentals to Products", Noordwijkerhout, The Netherlands, May 26-31, 2013, Eds, ECI Symposium Series, Volume (2013), http://dc.engconfintl.org/fluidization_xiv/59
26. Maryam Tahmasebpoor, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, and Navid Mostoufi, "Recurrence Quantification Analysis: A Simple Method for Characterization of Various Structures in Gas-Solid Fluidized Beds" in "The 14th International Conference on Fluidization – From Fundamentals to Products", Noordwijkerhout, The Netherlands, May 26-31, 2013, Eds, ECI Symposium Series, Volume (2013), http://dc.engconfintl.org/fluidization_xiv/61
25. Jan Gubis, Hamid R. Norouzi, Navid Mostoufi, and **Reza Zarghami**, “Effect of Internal Tubes on the Flow Structures in Gas-Solid Fluidized Bed”, Proceeding of International Conference on Science & Engineering in Mathematics, Chemistry, & Physics, Indonesia, Jakarta, January 24-25, 2013,

2012

24. Solmaz Aryafar, N. Mostoufi, Rahmat Sotoudeh-Gharebagh, **Reza Zarghami**, "Investigation of Analogy between Gas-Solid Fluidized-Bed and Gas-Liquid-Solid Slurry Bubble-Column Reactors", Proceeding of 20th International Congress of Chemical and Process Engineering (CHISA 2012), Czech Republic, Prague, August 25-29, 2012.
23. Solmaz Aryafar, Mojgan Abbasi, Navid Mostoufi, Rahmat Sotoudeh-Gharebagh, **Reza Zarghami**, "Application of Time-Series Analyses for Investigating the Analogy between Hydrodynamics of Gas-Solid Fluidized-Beds and Gas-Liquid Bubble-Columns", Proceeding of 20th International Congress of Chemical and Process Engineering (CHISA 2012), Czech Republic, Prague, August 25-29, 2012.
22. Mahdieh Askarian, **Reza Zarghami**, Farhang Jalali, Navid Mostoufi, "Uncertainty Propagation in Condensate Stabilization Column", I.A. Karimi and Rajagopalan Srinivasan (Editors), Proceedings of the 11th International Symposium on Process Systems Engineering, 15-19 July 2012, Singapore
21. Karimi Farhad, Sotudeh-Gharebagh Rahmat, **Zarghami Reza** and Mostoufi Navid, "Comparison between Pressure Fluctuations and Passive Acoustic Emissions in Monitoring of Fluidized Bed Dryer", the 1st Middle-East Drying Conference (MEDC2012), February 19-20, 2012, Mahshahr, Iran

2011

20. Maryam Tahmasebpour, **R. Zarghami**, R. Sotudeh-Gharebagh, N. Mostoufi, "Characterization of Gas-Solid Fluidized Bed Hydrodynamics by Recurrence Plot Analysis", Proceeding of 4th International Recurrence Plot Symposium, Hong Kong Polytechnic University, Hong Kong, December 5-7, 2011.
19. Behzad Babaei, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Identification of Change in Particles Size in Fluidized Beds Using Recurrence Quantification Analysis", Proceeding of 4th International Recurrence Plot Symposium, Hong Kong Polytechnic University, Hong Kong, December 5-7, 2011.
18. Hedayat Azizpour, **R. Zarghami**, Mohsen Shiea, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, "Detecting Regime Transition velocity in the Fluidized Beds Using Attractor Comparison of Vibration Signals", Proceeding of Industrial Fluidization South Africa 2011 (IFSA 2011), Edited by G. Washington & T. Jefferson Johannesburg, Institute of Mining and Metallurgy, Southern African, Johannesburg, November 16-17, 2011.
17. Hossein Sedighikamal, **Reza Zarghami**, Navid Mostoufi, Rahmat Sotudeh-Gharebagh, "Estimating of Peak Dominant Frequency of Chaotic Fluid Bed Systems Using Recurrence Rate", Proceeding of Industrial Fluidization South Africa 2011 (IFSA 2011), Edited by G. Washington & T. Jefferson Johannesburg, Institute of Mining and Metallurgy, Southern African, Johannesburg, November 16-17, 2011.

16. Maryam Tahmasebpoor, Rahmat Sotudeh-Gharebagh, **Reza Zarghami**, Navid Mostoufi, "Recurrence Plots Analysis of Pressure Fluctuations in Fluidized Beds", IV International Conference on Computational Methods for Coupled Problems in Science and Engineering, Coupled Problems 2011, island of Kos, Greece, June 20-22, 2011.
15. Hedayat Azizpour, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Dynamic Characteristics of Bubbling and Turbulent Fluidization Using a Hurst Analysis Technique", International Conference on Circulating Fluidized Beds and Fluidization Technology - CFB-10, Oregon, USA, May 1 - 5, 2011

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14. Behzad Babaei, **Reza Zarghami**, Hossein Sedighi-Kamal, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, "Fluidized Bed Hydrodynamic Recognition Using Recurrence Plot", Multiphysics, Book of Abstracts, Kumamoto, Japan, 8-10 December, 2010
13. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Validation of a DEM Modeling of Gas-Solid Fluidized Bed using the S-statistic in the State-Space Domain", Multiphysics, Book of Abstracts, Kumamoto, Japan, 8-10 December, 2010
12. Farhad Karimi, Rahmat Sotudeh-Gharebagh, Navid Mostoufi and **Reza Zarghami**, "On-Line Condition Monitoring of Moisture Contents in a Fluidized Bed Dryer by Acoustic Emission Signatures", Proceedings of the 5th International Conference on Innovations in Food and Bioprocess Technology (IFBT), Bangkok, Thailand, 7-9 December, 2010.
11. Hedayat. Azizpour, Maryam Karimi, **Reza Zarghami**, Navid Mostoufi, Reza Sotudeh-Gharebagh, Mojgan Abbasi, "Investigation of Nonlinear Behavior of Vibration and Pressure Signals using S-statistic", Proceeding of the 10th China-Japan Symposium on Fluidization, Tokyo, Japan, November 17-19, 2010.
10. Maryam Karimi, Navid Mostoufi, **Reza Zarghami**, Reza Sotudeh-Gharebagh, "Nonlinear Behavior Identification of a Gas-Solid Fluidized Bed Using S-Statistics", List of Abstracts of the 3rd International Interdisciplinary Chaos Symposium on Chaos and Complex Systems (CCS), Istanbul, Turkey, (51), 21-24 May 2010
9. Mojgan Abbasi, Nasim Salehi-Nik, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, Navid Mostoufi, "Comparison of Various Measurement Techniques for Characterizing the Hydrodynamics of Gas-Solid Fluidized Beds", Proceedings of the 13th International Conference on Fluidization - New Paradigm in Fluidization Engineering, S. D. Kim, Y. Kang, J. K. Lee, Y. C. Seo (eds.), Gyeong-ju (South Korea), 16-21 May 2010, 113-120.

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8. Mojgan Abbasi, Reza Sotudeh-Gharebagh, **Reza Zarghami**, Navid Mostoufi, "Detection of particle size in fluidized beds using vibration signals", Industrial Fluidization South Africa (IFSA 2008), 392-404. Edited by T. Hadley and P. Smit, Cradle of Humankind, Johannesburg, South Africa, Institute of Mining and Metallurgy, 19-20 November 2008
7. Nasim Salehi-Nik, Reza Sotudeh-Gharebagh, **Reza Zarghami**, Navid Mostoufi, "Hydrodynamic Characterization of Gas-Solid Fluidized Beds Using Acoustic Emission Signals", Industrial Fluidization South Africa (IFSA 2008), 392-404. Edited by T. Hadley and P. Smit, Cradle of Humankind, Johannesburg, South Africa, Institute of Mining and Metallurgy, 19-20 November 2008
6. Zahra Mansourpour, Navid Mostoufi, **Reza Zarghami**, Rahmat Sotudeh-Gharebagh, "Numerical Investigation of Solids Mixing in Gas Fluidized Beds Using the Discrete Element Method", Proceedings of the 18th International Conference on Chemical and Process Engineering, Prague, Czech, 24-28 August 2008

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