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Academic Positions

2022-2023	**Dean of Engineering**	**Univ. of Tehran, Iran**
Feb. 2020-March 2021	**Invited Professor**	**Polytechnique de Montreal, Canada**
Oct. 2008-	**Professor**	**Univ. of Tehran, Iran**
Jan. 2002- Dec. 2008	**Adjunct faculty of Bioengineering**	**Univ. of Tehran, Iran**
Jun. 1999- Oct. 2008	**Assistant, Associate Professor**	**Univ. of Tehran, Iran**
Sep. 2006-Aug. 2007	**Visiting Associate Professor**	**Qatar University, Doha, Qatar**
Sep. 1987- Dec. 1991	**Research Assistant ACECR**	**Sharif Univ. of Tech., Iran**

Main achievements

1. I have initiated and managed research Labs, *R&D* partnerships with industry. My work spanned from fundamental to applied research. I am also the key player in multi-disciplinary research.
2. I have taught over 15 different courses at *UT*, Qatar University (*QU)* and Department of Bio Engineering and executed number of industrial projects with industrial and public sector.
3. I have served as a member of the *Recruitment Committee* (2000-2007, 2010-2017), *Graduate Studies Committee* (2000-2007) of the Department of Chemical Engineering, the *Graduate Studies Committee* of the college of Engineering (1999-2002)
4. Chemical Engineering Department *Vice Chairman for Graduate Program* (1999-2002), , Board member of *the Center of Excellence for Oil and Gas* (2005-), Director of *Technical Training Office* of the Department of Chemical Engineering (2003- 2005) and member of the *Research Council of the University* (2008-2010, 2015-2019).
5. Dean of Engineering, University of Tehran.

All works conducted in UT are in close collaboration with Professor Navid Mostoufi and Professor Reza Zarghami.

Courses Taught

1. Process Simulation (Undergraduate)
2. Applied Mathematics for Chemical Engineering (Undergraduate)
3. Chemical Reaction Engineering (Undergraduate)
4. Plant Design and Economics (Undergraduate)
5. Advanced Process Simulation (Graduate)
6. Fluidization Engineering (Graduate)
7. Powder Technology (Graduate)
8. Transport Phenomena (Graduate)
9. Seminar on Data-Driven Governance (PhD courses, School of Management)
10. Scale-up in Chemical Engineering

Curriculum Development and Research Laboratories

1. Founder and Executive Director of *Pharmaceutical Engineering Program* (developed new syllabuses) with college of Pharmacy (2000-2004).
2. Founder of and director of the *Center for Process Design and Simulation*
3. Co-founder of *Multiphase Flow Laboratory*
4. Co-founder of *Pharmaceutical Engineering Laboratory*

International Collaboration

I have also scientific collaborations with various universities worldwide as:

1. Polytechnique de Montreal, Canada
2. University of Technology of Compiègne, France
3. Eindhoven University of Technology, Netherlands
4. Delft University of Technology, Netherlands
5. Pennsylvania State University, USA
6. Qatar University, Doha, Qatar
7. University of Malaya, Malaysia
8. Universiti Sains Malaysia, Malaysia
9. Universiti Teknologi Malaysia, Malaysia
10. Middle East Technical University, Turkey
11. Hacettepe University, Turkey
12. University of Salerno, Italy
13. National University of Ireland, Ireland
14. Vienna University of Technology, Austria
15. Technical University of Denmark, Denmark
16. Nazarbayev University, Astana, Kazakhstan

Selected Industrial Projects

Besides the projects funded by the University of Tehran, I enjoyed collaboration with various industry.

1. C3+ recovery and process audit, National Iranian Gas Co.
2. Design and construction of a cold fluidized bed for studying the hydrodynamics of polyethylene reactors, Petrochemical Research and Technology Co.

3. Developing the operator training simulator for methanol synthesis plant, Zagross Petrochemical Co.
4. Feasibility study of production of hollow spherical granular powder, Nasooz Poosheh Isfahan Co.
5. Feasibility study on control and recovery of volatile organic compounds (VOC) from crude oil storage tank in Kharg oil terminal, Iranian Oil Terminals Co.
6. Investigating the fluidability of the catalyst used in FCC unit, Abadan Oil Refining Co.
7. Monitoring the quality of fluidization in fluidized beds, Petrochemical Research and Technology Co.
8. MTP process development, Petrochemical Research and Technology Co.
9. Optimization of continuous catalytic reforming process – Arak Oil Refining Co.
10. Safe combustion of natural gas in fluidized beds - In collaboration with Qatar University, Ecole Polytechnique de Montreal, Canada, Qatar National Research Fund-NPRP09 -061-2 - 034, Principle Investigator.
11. Sequential modular simulation of non-ideal reformers using process simulators, Qatar University
12. Simulation of fluidized bed reactor of polyethylene production – Tabriz Pet. Complex
13. Simulation of food grade CO2 production plant, Zamzam Co.
14. Static and dynamic simulation of urea production plant, Khorasan Petrochemical co.
15. Monitoring the quality of the fluidization, Petrochemical Research and Technology Co.
16. Feasibility study for design and construction of skid mounted process package (SMPP) in oil and gas industries, MAPNA Group (www.mapnagroup.com)
17. Feasibility study for sulfur reduction from Mazut oil, MAPNA Group
18. Early agglomeration detection in polyethylene fluidization reactor, Amirkabir Petrochemical Co. (http://akpc.ir/akpc/)

Selected Industrial Workshops

I have conducted over 300 workshops short courses for various industries using industrial and in-house simulators for experts and manager during the past 20 years in the process simulation center I created and managed. Some of these workshops are:

1. Introduction to Aspen Plus
2. Steady Sate Simulation by Aspen Plus
3. Simulation of Chemical Reactors by Aspen Plus
4. Simulation of Separation Units by Aspen Plus
5. Design and Simulation of Heat Exchangers by Aspen Plus and EDR
6. Dynamic Simulation by Aspen Plus
7. Energy Analysis of Chemical Processes by ASPEN Energy Analysis
8. Economic Study of Chemical Processes by ASPEN Economic Evaluation
9. Simulation of Polymeric Processes by ASPEN Polymer
10. Flare System Design by ASPEN Flare System
11. Introduction to HYSYS
12. Introduction to UniSim
13. Steady Sate Simulation by HYSYS
14. Simulation of Chemical Reactors by HYSYS
15. Simulation of Separation Units by HYSYS
16. Design and Simulation of Heat Exchangers by HYSYS and EDR

17. Dynamic Simulation by HYSYS
18. Process Modeling using SPD
19. Steady State Process Simulation
20. Operator Training Simulators (OTS)
21. PC-Based Software for Process Engineers
22. IT for Process Engineers
23. CFD for Chemical Engineering Applications
24. CFD-DEM
25. Fluidization Engineering
26. Application of AI in Oil and Gas Industry
27. Application of AI for Managers

List of my former PhD students with well-established jobs

1. Mohsen Esmaeili, Dean of the College of Agricultural Science and Engineering and Professor of Food Engineering, Urmia University, Iran, m.esmaiili@urmia.ac.ir
2. Reza Zarghami, Head of Department and Professor of Chemical Engineering, University of Tehran, Iran, rzarghami@ut.ac.ir
3. Maryam Tahmasebpour, Associate Professor of Chemical Engineering, University of Tabriz, Iran, tahmasebpoor@tabrizu.ac.ir
4. Mehdi Farhoodi, Associate Professor of Food Engineering, Shahid Beheshti University of Medical Sciences, Tehran, IRAN, farhoodi@sbmu.ac.ir.
5. Mohammad Hajaghazadeh, Associate Professor of Environmental Health Engineering, Urmia university of medical science, Iran, hajaghazadeh@gmail.com
6. Mojgan Abbasi, Head of Center for Proposal Development and Assistant Professor of Chemical Engineering at the University of Tehran, Iran, mojganabbasi@ut.ac.ir
7. Zahra mansourpour, Assistant Professor of Chemical Engineering, University of Tehran, Iran, mansourp@ut.ac.ir
8. Mohammad Mehdi Kamyabi, Assistant Professor of Chemical Engineering, Iran, Vali-e-Asr University of Rafsanjan, mm.kamyabi@vru.ac.ir
9. Chiya Savari, Research Fellow in Chemical Engineering, University of Birmingham, UK, https://www.linkedin.com/in/chiya-savari-06107aa0/
10. Hedayat Azizpour, Assistant Professor of Chemical Engineering, University of Tehran, Iran, h.azizpour@ut.ac.ir

I have supervised 96 postgraduates (postdoctoral fellows, PhD and MSc students) and mentored over 87 senior projects for undergraduate students.

Selected Executive Positions

Oct. 2022- Oct. 2025	**Member of COMSATS Technical Advisory Committee (TAC) duly and unanimously approved by the COMSATS statutory body.**

1. At present, COMSATS has 27 developing countries as members to its Commission from across three continents, Africa, Asia, and Latin America.
2. The TAC consists of 10 renowned scientists from Iran, China, Jamaica, Nigeria, Benin, Colombia, Jordan, Egypt, and Austria

Dec. 2015- Feb. 2019	**Acting Vice President (*VP*) - Research and Dean of Applied Research Office, University of Tehran (*UT*), IRAN**

Main achievements (reporting to VP and *UT* Board of Administration):

3. Established R&D partnerships with industry, private and public sectors
4. Oversaw and monitored *UT* national and international research contracts (>1000 projects)
5. Managed UT research centers, teams and groups (>80 centers)
6. Provided scientific expertise to public sector
7. Coordinated the corporate scientific development team
8. Monitored United Nations Educational, Scientific and Cultural Organization (*UNESCO)* Chairs and Center of Excellences at UT

University of Tehran is the home of ~2200 faculty members and >50,000 students.

Dec. 2010-Dec. 2014	**Chief Executive Officer (CEO) of Standard Research Institute (*SRI*) affiliated to Iranian National Standards Organization (*INSO*) member of International Organization for Standardization *(ISO)*, Tehran, Iran**

Main achievements (reporting to *SRI* Board of Trustees):

1. Designed and implemented the scientific development strategy and policy.
2. Established *R&D* partnerships and ventures with industry, academia and government.
3. Maintained and monitored *R&D* strategies, policies and initiatives for national and international standards development.
4. Recruited over 65 faculty members for *SRI* scientific departments aiming to develop national and internationals standards.
5. Developed a strong network of influencers in academia on standardization.
6. Supervised and coordinated the corporate scientific development team.
7. Provided scientific expertise for *INSO* programs.
8. Delivered the plenary, and invited lectures country wide as INSO high level representation
9. Represented *INSO* in international *ISO* related events.
10. Chaired various council meetings.
11. Coordinated and followed up on assessments of experts' to ensure quality completion of Individual Development Plans *(IDP)*
12. Managed "Iranian Scientific Laboratories Network" with Ministry of Science, Research and Technology Country-wide.
13. Supervised Reference Laboratories of *INSO*
14. Acted as the member of *INSO* Administration Board

SRI is the home of over 400 highly qualified personals country-wide

Mar. 2008 – Oct. 2010	**Acting Vice President (*VP*) - Research and Dean of Applied Research Office, University of Tehran (*UT*), IRAN**

Main achievements (reporting to *VP* and *UT* Board of Administration):

1. Established *R&D* partnerships and ventures with industry, private and public sectors
2. Oversaw and monitored *UT* national and international research contracts (>800 projects)
3. Managed *UT* research centers, teams and groups (>60 centers)
4. Provided Scientific expertise to public sector
5. Supervised and coordinated the corporate scientific development team
6. Delivered the key note lectures country-wide as high level representation of *UT*
7. Monitored Center of Excellences at *UT*

University of Tehran is the home of ~2200 faculty members and >50,000 students.

Mar. 2002 – Oct. 2004 **Deputy *CEO* – Research, Development and Training, Glucosan, IRAN**

Main achievements (reporting to *CEO* and Board Members):

1. Established *R&D* partnerships and ventures with universities and United Nations Industrial Development Organization (*UNIDO)*
2. Managed all research, development and technology contracts
3. Provided Scientific expertise to Board Members
4. Supervised and coordinated the corporate scientific development team

Diplomas, Certificates and Licenses

1. PhD in Chemical Engineering, Polytechnique de Montreal, Canada (1999)
2. M.Sc. in Chemical Engineering, Polytechnique de Montreal, Canada (1994)
3. B. Sc. in Chemical Engineering, Sharif University of Technology (1987)
4. Certificate in Petroleum Engineering, Petroleum University of Technology joint Program with United Nations Development Program *(UNDP)*, Ahvaz, Iran (1990)
5. Certified Engineer License, Official Expert Organization of Iran– Reg. number: 6927 (2016)

Languages

1. English, French: Fluent
2. Persian, Azeri: Mother tongue
3. Arabic, Turkish: Basic

Recent Talks (last two years)

1- Various talks on soft skills for engineers and graduates in India, UK, Canada, IRAN, 2020
2- Research Teaming: Opportunities and Challenges for young faculties, 350 attended, With PGU, National Elite Foundation and ISEE, June 2020.
3- Waste to Resource, challenges and opportunities, National chemical engineering conference, Tehran, Iran, January 2019
4- CFD-DEM modeling and simulation, Polytechnique de Montreal, Canada, February 2019
5- Multiphase flow modeling, general view, University of Concordia, Canada, February 2019
6- Student recruitment, challenges and opportunities, Nazarbayev University, Kazakhstan, March 2019
7- Multiphase flow modeling and simulation, Nazarbayev University, Kazakhstan, March 2019
8- Process Simulation, perspectives; challenges and recent advances, Koya University, Iraq, April 2019
9- Estimation of physical properties using EXCEL-UNSIM, Koya University, Iraq, April 2019

Entrepreneurship and Consulting Activities

1. Co-Founder of *KFF* Consultant Inc**.** (*Sep. 2008- Mar. 2018*), *KFF* was involved in technology management, techno-economics analysis and advanced process engineering, Selected customers included *Temad* Co. *Arastoo* Pharmaceutics, *Chagalesh* Co.
2. Top Advisor to *CEO*, *Fouman Chimie* Industrial Co., http://www.foumanchimie.com/en/, (2015-2017)
3. Member of Scientific Committees for Methanol, *Petrochemical Research and Technology* Co. (2000-2003)

Service to the Scientific Community

1. Chairman of Board, Iranian Institute of Accreditation on Engineering Education, (2021-2024).
2. Various consultation activities in NSERC-Total Chair, Polytechnique de Montreal (2020-2021)
3. Various keynote lectures and webinars in 2020 and 2021 on soft skills, good citation practice, engineering education etc.
4. Member of Board of Trustees, *ACECR* Educational Institute (*2016-2019*)
5. Member of Faculty Promotion Council, Iranian Research Organization for Science and Technology, Ministry of Science and Research (2017-to date)
6. Member of Promotion Council, Univ. of Applied Science and Technology (*UAST*) (2017-to date)
7. Chair of Industrial Committee of the Promotion Council, *UAST* (2017-to date)
8. Board member of Iranian Association of Chemical Engineers (*IAChE*), (elected) (2013-2018)
9. Member of Administration Board, Alborz College, University of Tehran, (2013-2015)
10. Member of Promotion Committee, Universiti Malaysia Terengganu, Malaysia, (2010-2013)
11. Chairman of Tehran Universities' Applied Research Council (elected) (2008- 2012)
12. Co-organizer of the process Design Symposium (August 2009, Montreal), 8th World Congress of Chemical Engineering
13. Editorial: Special Issue of 8th World Congress of Chemical Engineering (WCCE 8) Symposium on Process Design, https://doi.org/10.2202/1934-2659.1464
14. Chair of Organization Committee (2016-2018) and Executive Secretary (April 2017), Honoring Ceremony for Mr. Engineer Abbas Mousavi Rahpeyma, University of Tehran, ~1200 participant, largest and most successful event ever organized. (Mr. Mousavi has acquired the land, designed, built and donated the Fouman Faculty of Engineering to the University of Tehran, due to the generous gift to his *alma mater*, this ceremony has been organized by *UT* Foundation, Fanni Foundation, Iranian Association of Chemical Engineers (*IAChE*), Iranian Association of Polymer and Chemical Engineers (*APCHEN*), College of Engineering Alumni, *YAVARI* Cultural Foundation. He is a serial entrepreneur, engineer and executive focused on creating self-sustaining companies and innovative products helping oil and chemical industries since 1962)

Fellowships and Awards

1. University of Tehran's International Award, 2015, 2022
2. Nomination for Allameh Award, *Iran National Elite Foundation*, 2015, (Distinguished scientists and the most influential in the country from different fields are nominated annually on a highly competitive basis for this Award, awarded to 140 scientists)
3. Distinguished Researcher, University of Tehran, 2018
4. Distinguished Professorship Award, (APCHEN), 2016.
5. Allameh Tabataba's Research Chair, *Iranian National Science Foundation*, (2015-2018)
6. Fellow of Iranian Elite Foundation (FIEF)
7. Alborz Prize, Alborz Foundation, 2021
8. Teaching Excellence Award, University of Tehran, 2023

PUBLICATIONS

BOOKS

1. Coker A. K. and **R. Sotudeh-Gharebagh,** Chemical Process Engineering Volume 1, Design, Analysis, Simulation, Integration, and Problem Solving with Microsoft Excel-UniSim Software for Chemical Engineers: Computation, Physical Property, Fluid Flow, Equipment & Instrument Sizing, Pumps & Compressors, Mass Transfer., Scrivener-Wiley & Sons Ltd, 2022.

2. Coker A. K. and **R. Sotudeh-Gharebagh,** Chemical Process Engineering Volume 2, Design, Analysis, Simulation, Integration, and Problem Solving with Microsoft Excel-UniSim Software for Chemical Engineers: Heat Transfer and Integration, Process Safety, Chemical Kinetics and Reactor Design, Engineering Economics, Optimization., Scrivener-Wiley & Sons Ltd, 2022.

3. Chaouki J. and **R. Sotudeh-Gharebagh**, Scale-Up Processes: Iterative Methods for the Chemical, Mineral and Biological Industries, In the series De Gruyter STEM, 2021, https://www.degruyter.com/document/doi/10.1515/9783110713985/html.

4. **Sotudeh-Gharebagh R.** and E. Jabbari, Computer-Aided Process Simulation in Chemical Engineering (Persian), University of Tehran Press, 2021.

5. Norouzi H. R., R. Zarghami**, R. Sotudeh-Gharebagh** and N. Mostoufi, Coupled DEM-CFD Modeling: Principle, Implementation and Applications to Multiphase Flows, ISBN: 978-1-119-00513-1, John Wiley & Sons Ltd., October 2016.

6. **Sotudeh-Gharebagh R.** and J. Chaouki, Combustion of Natural Gas in Turbulent Fluidized Beds: *Experiments, Simulation*, *LAMBERT Academic Publishing AG & Co. KG*, Germany, 2009.

7. **Sotudeh-Gharebagh R.**, N. Mostoufi and A. Kiashemshaki, Steady State Process Simulation, *Boshra Publishing Co.*, IRAN, 2006.

8. **Sotudeh-Gharebagh R.** and N. Mostoufi, Process Simulation, *Boshra Publishing Co.*, IRAN, 2005.

BOOK CHAPTERS

1 Laviolette, J-P, **R. Sotudeh-Gharebagh**, R. Mabrouk, G.S. Patience, J. Chaouki, Fluidized Bed Combustion of Natural Gas and Other Hydrocarbons. Edited by M. Lackner, F. Winter, A. K. Agarwal, Handbook of Combustion, 5 (New Technologies), Chapter 9, John Wiley, 2010.

2 Zarghami R., N. Mostoufi, **R. Sotudeh-Gharebagh**, J. Chaouki, Nonlinear Dynamic Characteristics of Bubbling Fluidization, Advances in Multiphase Flow and Heat Transfer, 3, Chapter 9, Bentham Science Publishers, 2012, 300-331.

3 Abbasi M., Z. Mansourpour, N. Mostoufi and **R. Sotudeh-Gharebagh**, Measurement Techniques in Gas-Solid Fluidized Beds, Fluidization Engineering Practice, Second expanded edition, Chapter 7, http://www.arunmujumdar.com/e-books.htm, 2012, 257-286.

4 Foroughi-Dahr M., N. Mostoufi, **R. Sotudeh-Gharebagh**, J. Chaouki, Particle Coating in Fluidized Beds, Reference Module in Chemistry, Molecular Sciences and Chemical Engineering, Elsevier, 1-17, 2017, http://dx.doi.org/10.1016/B978-0-12-409547-2.12206-1.

JOURNALS

1 *Chemical Product and Process Modeling*, Founders and Editors-in-Chief: **R. Sotudeh-Gharebagh**, N. Mostoufi and J. Chaouki, **DE GRUYTER**, 10785 Berlin, Germany, http://www.degruyter.com/view/j/cppm, (2006-

(Collaboration with over 30 Internationally well-known Scientists CPPM editorial board)

2 Journal of Industrial Technology Development, Editor-in-Chief: **R. Sotudeh-Gharebagh**, http://jtd.iranjournals.ir/, (2009-2012).

PAPERS

Refereed Papers (222)

1. Food Waste and Loss Management: Opportunities and Challenges (Editorial), **R. Sotudeh-Gharebagh**, J.S. Moghaddas, Iranian Chemical Engineering, 24(139), 2025, 1–163.
2. A novel ML-DEM algorithm for predicting particle motion in rotary drums, S. Kazemi, R. Zarghami, N. Mostoufi, **R. Sotudeh-Gharebagh**, R.I. Al-Raoush, *Engineering Analysis with Boundary Elements*, 177, 2025, 106258.
3. On Digital Twins in Bioprocessing: Opportunities and Limitations, M. Shariatifar, M.S Salimian, **R. Sotudeh-Gharebagh**, R. Zarghami, N. Mostoufi, *Process Biochemistry*, 156, 2025, pp. 274–299.
4. Exploration of electrostatics effect on dispersion and coating mechanisms in dry powder inhalers by discrete element method, P. Saeid, S. Kazemi, R. Zarghami, **R. Sotudeh-Gharebagh**, N. Mostoufi, *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 713, 2025, 136540.
5. Effect of continuous single bubble injection on binary mixtures in a fluidized bed, A. Rabbani, S. Kazemi, **R. Sotudeh-Gharebagh**, N. Mostoufi, R. Zarghami, *Particuology*, 100, 2025, pp. 62–77
6. A Comparative Study of Machine Learning Methods for Pyrolysis Yield Prediction, S.M. Razavi, **R. Sotudeh-Gharebagh**, N. Mostoufi, J. Chaouki, K.D.P. Nigam, *Iranian Journal of Chemical Engineering*, 21(4), 2024, pp. 62–77.
7. Optimized Data Driven Fault Detection and Diagnosis in Chemical Processes, N. Raeisi Ardali, R. Zarghami, **R. Sotudeh Gharebagh**, *Computers and Chemical Engineering*, 186, 2024, 108712.
8. Jet injection and spout formation in a fluidized bed, H. Khakpour, N. Mostoufi, **R. Sotudeh-Gharebagh**, R. Zarghami, *International Journal of Multiphase Flow*, 181, 2024, 104994.
9. On bubble-jet interactions in fluidized beds, A. Rabbani, **R. Sotudeh-Gharebagh**, R. Zarghami, N. Mostoufi, *Industrial and Engineering Chemistry Research*, 63, p. 9275-9284, 2024.
10. CFD-DEM mixing of rod-like and spherical particles in fluidized beds, S. Kazemi, R. Zarghami, N. Mostoufi, **R. Sotudeh-Gharebagh**, J. Chaouki, *Powder Technology*, 442, p. 119847, 2024.
11. A Novel Approach to Reduce Exam Stress and Enhance Learning in Engineering Education, **R. Sotudeh-Gharebagh** and A. H. Derakhshani, *Iranian Journal of Engineering Education* , 25, 99, 2023, p. 27-42.
12. Comparative CFD-DEM study of flow regimes in spout-fluid beds, H. Hoorijani, B. Esgandari, R. Zarghami, **R. Sotudeh-Gharebagh**, N. Mostoufi, *Particuology*, 85, p.323-334, 2024.
13. CFD-DEM investigation of particle breakage in spout-fluidized beds, N. Ghods, S. Golshan, R. Zarghami, **R. Sotudeh-Gharebagh**, N. Mostoufi, *Powder Technology,* 432, p. 119137, 2024.

14. CFD-DEM simulation of heat transfer in spout-fluid beds, H. Hoorijani, B. Esgandari, R. Zarghami, **R. Sotudeh-Gharebagh**, N. Mostoufi, *Chemical Engineering Research and Design*, 200, p.95-106, 2023

15. Predictive modeling of mixing time for super-ellipsoid particles in a four-bladed mixer: A DEM-based approach, H. Hoorijani, B. Esgandari, R. Zarghami, **R. Sotudeh-Gharebagh**, N. Mostoufi, *Powder Technology*, vol. 430, p. 119009, 2023.

16. Mitigation of Fouling in Refinery Heat Exchanger, O. Hasannezhad, **R. Sotudeh-Gharebagh**, E. Bagherzadeh Homaei, *Iranian Journal of Chemical Engineering*, 22, 128, p.97-109, 2023, https://doi.org//10.22034/ijche.2023.338876.1202.

17. 2D-CFD Analysis of Diffusers Used to Discharge Brine into Water Bodies, I. Moshiri-Tabrizi , M-H. Sarrafzadeh , R. Sotudeh-Gharebagh**,** *Journal of Chemical and Petroleum engineering*, 57, 2,2023, 303- 319.

18. Editorial: Urgent Need to Address the Shortage of Scientific Books in Chemical Engineering, **R. Sotudeh-Gharebagh**, J. Moghaddas, *Iranian Journal of Chemical Engineering*, 22, 128, 2023, p.6

19. Big Data Analytics Opportunities for Applications in Process Engineering, M. S. Lavasani, N. Raeisi-Ardali, **R. Sotudeh-Gharebagh**, R. Zarghami, J. Abonyi, N. Mostoufi, *Reviews in Chemical Engineering, 39,3, 2023,* https://doi.org/10.1515/revce-2020-0054.

20. Editorial: Soft Skills for Chemical Engineers, **R. Sotudeh-Gharebagh**, J. Moghaddas, *Iranian Journal of Chemical Engineering*, 21, 125, p.6, 2023.

21. Experimental Investigation of Bubble Growth in in a Half-Cylindrical Gas-Solid Fluidized Bed, N. Nikjou, **R. Sotudeh-Gharebagh**, N. Mostoufi, R. Zarghami, *Iranian Journal of Chemical Engineering*, 21, 122, p.69-78, 2022, https://doi.org/10.22034/ijche.2022.320305.1164.

22. Editorial: Necessity of Creating Industrial Chairs with renowned Scientists in Universities, **R. Sotudeh-Gharebagh**, J. Moghaddas, *Iranian Journal of Chemical Engineering*, 21, 122, p.6, 2022.

23. On Solvent Losses in Amine Absorption Columns, F. Yazdipour, M. Amouei Torkmahalleh, MM Kamyabi, **R Sotudeh-Gharebagh**, *ACS Sustainable Chem. Eng*., 10, 34, 2022, p.11154–11164, https://doi.org/10.1021/acssuschemeng.2c02179.

24. Vibrational analysis of pipes based on the drift-flux two-phase flow model, A. Ebrahimi-Mamaghani, N. Mostoufi, **R. Sotudeh-Gharebagh**, R. Zarghami, Ocean Engineering, 249 110917, 2022, p.1-12, https://doi.org/10.1016/j.oceaneng.2022.110917.

25. Thermo-mechanical stability of axially graded Rayleigh pipes, A. Ebrahimi-Mamaghani, **R. Sotudeh-Gharebagh**, N. Mostoufi, R. Zarghami, *Mechanics Based Design of Structures and Machines*,2022, 50, 2, 2021, p. 412–441, https://doi.org/10.1080/15397734.2020.1717967.

26. Editorial: Promoting open and innovative international cooperation and science diplomacy (Persian), **R. Sotudeh-Gharebagh**, J. Moghaddas, *Iranian Journal of Chemical Engineering*, 20, 117, p.1, 2021.

27. CFD-DEM analysis of the spouted fluidized bed with non-spherical particles, B. Esgandari, Sh. Golshan, R. Zarghami, **R. Sotudeh-Gharebagh**, J. Chaouki, *The Canadian Journal of*

Chemical Engineering, 99, 11, p.2303-2319, 2021, https://onlinelibrary.wiley.com/doi/abs/10.1002/cjce.24142.

28. Special issue in honour of Professor Jamal Chaouki, **R. Sotudeh-Gharebagh**, X. Bi, *The Canadian Journal of Chemical Engineering*, 99, 7 p.1443-1446, 2021, https://onlinelibrary.wiley.com/doi/abs/10.1002/cjce.24086.
29. An experimental study and 3D simulation of a cast iron rotary furnace, *Journal of fuel and combustion* (Persian), B. Bayramlou, S. M. Mirnajafi, **R. Sotudeh-Gharebagh**, 14, 2 ,35, 2021, p.1-19.
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