

Prof. Gholamhossein Sodeifian



Educational records:

<u>Grade</u>	<u>Degree and orientation</u>	<u>Graduation Date</u>	<u>University</u>	<u>Thesis title</u>
M.S.	Chemical Engineering- Separation	22/9/1997	Tehran University	Experimental study of surfactants on mass transfer in evaporation process
Ph.D.	Chemical Engineering- Polymer Engineering	9/12/2003	Tarbiat Modares University	The study of nonlinear properties immiscible polymer blends in simple shear flow

Research areas:

- 1- Application of supercritical fluids for production of drugs, polymers and pigments
- 2- Utilization and synthesis of photo catalysts in environmental processes
- 3- Molecular dynamic simulations in drug delivery
- 4- Membrane separation processes
- 5- Modeling and simulation of processes
- 6- Rheology of polymer solutions, melts and nanocomposites

Courses:

Advanced Mass Transfer

Supercritical Fluid Technology

Modeling and Simulation in Chemical Engineering

Advanced Physical Chemistry of Polymers

Optimization in Chemical Engineering

Especial Methods of Separation

Rheology of Non-Newtonian and Polymeric Fluids

Mass Transfer

Foundations of Polymer Chemistry

Corrosion in Chemical Engineering

Entrepreneurship

Books:

- 1- Nonlinear rheology of polymer melts
- 2- Principles of corrosion in chemical industries
- 3- Principles and applications of separation processes and mass transfer
- 4- Principles of rheology
- 5- Introduction to nanorheology
- 6- Fluids mechanic
- 7- Educational Entrepreneurship

M.S. Thesis:

- 1- Hamid Nikooamal, "Rheological behavior of epoxy-nanoclay nanocomposites", July 2010.
- 2-Mehri Javadi, "Study of rheological behavior of polymeric associate nanotube", September 2010.
- 3-Sedigheh Mortezaei, "Investigation of rheological behavior of nanomaterials used for cooler systems", September 2011.
- 4-Omid Mehmanparast, "A Suitable Developed Model For Membrane Separation Processes Using Polymeric Membranes", February 2012.
- 5-Fatemeh Soltani, "Viscosity prediction of water emulsions in Iranian crude oils", February 2015.
- 6-Elahe Khosravifard, "Study of nanocomposite of carbon nanotubes-TiO₂ in nanofluid", September 2014.
- 7-Roghayeh Rangbari, "Fiber orientation modeling and rheological behavior investigation of polymeric nanofiber nanocomposite", June 2014.
- 8- Reyhaneh Daroghegy, "Study the behavior of anionic polyacrylamide for applications in the oil swept", June 2014.
- 9- Mojtaba Raji, "Construction and characterization of membrane PU-SAPO-34 to remove of CO₂ from CH₄", February 2014.
- 10- Javad Azizi, "Study and modeling of supercritical extraction for Smyrnum cordifolium Boiss via CO₂ fluid", September 2014.
- 11- Vahid Jafari Rad, "Nanocomposite polymeric modeling using K-BKZ integral constitutive equation",
- 12- Farzad Khosravian, "Mathematical modeling of simultaneous removal of CO₂ and H₂S from natural gas in a hollow fiber membrane contactor", September 2015.
- 13- Mahsa Ghasempour, "Supercritical fluid extraction of omega-3 from Dracocephalum kotschyi seed oil: Process optimization and oil properties", September 2016.
- 14- Seyed Yaser Moosavi, "Extraction of Omega-9 from Pistacia Khinjuk seed oil using supercritical fluid and process optimization", January 2017.

- 15- Amin Rastegary", "Experimental study, modeling and optimization of supercritical extraction of essential oil from Echinophora platylabo DC. with carbon dioxide fluid", September 2016.
- 16- Hossein Rezaee Marnani, " Study of NSAIDs diffusion in lipid bilayer cell membrane using molecular dynamics simulation", November 2016.
- 17-Saghar Ghaseminejad,"Preparation of Polypropylene/short glass fiber composite as fused deposition modeling (FDM) filament", September 2017.
- 18-Maryam Zanganeh, "Preparation and Characterization of microporous carbon materials for application in gas separation membrances", March 2016.
- 19-Atousa Karami, "Preparation of polycarbonate/polyethylene terephtalate/nanoclay nanocomposite as fused deposition modeling (FDM) filament", Februray 2018.
- 20-Vahid Khademi Mahmoud Abad, "Solubility measurement and modeling of ciprofloxacin hydrochloride in supercritical fluid", Februray 2018.
- 21- Arezo Ameri, "Experimental Study on the Impregnation of Polymers from Lansoprazole Nano Drug Using Supercritical Carbon Dioxide Technology", December 2019.
- 22- Mostafa Fathi, "Experimental study of ketoconazole impregnation in Polyvinyl pyrrolidone polymers and hydroxymethyl cellulose using supercritical fluid", December 2019.
- 23- Fariba Mohammadi, "Effect of process parameters on the Impregnation of polymers from nanoparticles Enrofloxacin supercritical Impregnation and process optimization", January 2020.
24. Marziehsadat Ghanaat-Ghamsari, "Nanosizing of Teriflunomide drug by using Ultrasonic assisted Rapid Expansion of a Supercritical Solution into a Liquid SOLVent (US-RESOLV) and process optimization", September 2021.
25. Mohammadamin Abadian, "Measurement and thermodynamic modeling of solubility of neuroprotective agent drug (Riluzole) in supercritical carbon dioxide", October 2021.
27. Milad Ahmadi, "Investigation of cleaning of oil pollution from soil of Farashband gas refinery by supercritical fluid and process optimization", March 2022.

27. Armin Roshanghias, "Preparation of a teflon-based sealing paste and reinforcing of its properties in presence of aluminum oxide nanoparticles and poly vinyl butyral", June 2022.
28. Azin Hosivandi, "Grinding of riluzole pharmaceutical particles using rapid expansion method of supercritical solutions in liquid solvents", February 2023.
29. Hassan Nateghi, A machine learning approach for thermodynamic modeling of the solubility of nilotinib hydrochloride monohydrate (anti-cancer drug) in supercritical CO₂", September 2023.
- 30.

Ph.D., Thesis:

- 1- Seyed Ali Sajadaian, " Measuring and Modeling the solubility of pharmaceutical substances for the production of nanoparticles using supercritical fluid and ultrasound technology", September 2018.
- 2- Nedasaadat Saadati Ardestani," Solubility measurement and thermodynamic modeling of pigments for the preparation of nano particles using supercritical fluid technique", August 2019.
- 3- Reza Behnood, "Synthesis, characterization and evaluation of ZnO nanophotocatalysts improved with transition metals and carbon dot for organic pollutant removal under visible light irradiation", July 2020.
- 4- Fariba Razmimanesh, "Design and Fabrication of Temperature-sensitive Tocosomal and Magnetic Nanocarriers as Efficient and Intelligent Drug Delivery Systems for The Anticancer Drugs Sunitinib malate and Sorafenib tosylate", March, 2022.
- 5- Sahar Daneshyan, "Synthesis of cyclic polymers in supercritical carbon dioxide green solvent", Feb. 2023.
- 6- Seyed Mojtaba Hazaveie, "Thermodynamic study and drug solubility modeling for the production of nanoparticles using supercritical anti-solvent (SAS) technology", Feb. 2024.

Journal papers:

[Sodeifian, G., Nateghi, H., Razmimanesh, F., Mohebbi Najm Abad, J., "Thermodynamic modeling and solubility assessment of oxycodone hydrochloride in supercritical CO₂: Semi-empirical, EoSs models and machine learning algorithms", Case Studies in Thermal Engineering, 55, 104146, \(2024\).](#)

- 1- [Sodeifian, G., Nateghi, H., Razmimanesh, F., Mohebbi Najm Abad, J., "Thermodynamic modeling and solubility assessment of oxycodone hydrochloride in supercritical CO₂: Semi-empirical, EoSs models and machine learning algorithms", Case Studies in Thermal Engineering, 55, 104146, \(2024\).](#)
- 2- [Sodeifian, G., Nateghi, H., Razmimanesh, F., "Measurement and modeling of dapagliflozin propanediol monohydrate \(an anti-diabetes medicine\) solubility in supercritical CO₂: Evaluation of new model", Journal of CO₂ Utilization, 80, 102687, \(2024\).](#)
- 3- [Sodeifian, G., Bagheri, H., Razmimanesh, F., Bargestan H., "Supercritical CO₂ utilization for solubility measurement of Tramadol hydrochloride drug: Assessment of cubic and non-cubic EoSs", The Journal of Supercritical Fluids, 206, 106185, \(2024\).](#)
- 4- [Sodeifian, G., Surya Alwi, R., Arbab Nooshabadi M., Razmimanesh, F., Roshanghias, A., "Solubility measurement of Triamcinolone acetonide \(steroid medication\) in supercritical CO₂: Experimental and thermodynamic modeling", The Journal of Supercritical Fluids, 204, 106119, \(2024\).](#)
- 5- [Daneshyan, S., Sodeifian, G., "A new approach for synthesis of cyclic poly\(N-isopropylacrylamide\), for applying in biomaterial applications", Polymer Bulletin, 81, 929-989, \(2024\).](#)
- 6- [Sodeifian, G., Garlapati, C., Arbab Nooshabadi M., Razmimanesh, F., Roshanghias, A., "Studies on solubility measurement of codeine phosphate \(pain reliever drug\) in supercritical carbon dioxide and modeling", Scientific Reports, 13, 21020, \(2023\).](#)
- 7- [Razmimanesh, F., Sodeifian, G., "Evaluation of a temperature-responsive magnetosome as a magnetic targeting drug delivery system for sorafenib tosylate anticancer drug", Heliyon, 9, e21794, \(2023\).](#)
- 8- [Sodeifian, G., Arbab Nooshabadi M., Razmimanesh, F., Tabibzadeh, A., "Solubility of buprenorphine hydrochloride in supercritical carbon dioxide: Study on experimental measuring and thermodynamic modeling", Arabian Journal of Chemistry, 16, 105196, \(2023\).](#)
- 9- [Nateghi, H., Sodeifian, G., Razmimanesh, F., Mohebbi Najm Abad, J., "A machine learning approach for thermodynamic modeling of the statically measured solubility of nilotinib hydrochloride monohydrate \(anti-cancer drug\) in supercritical CO₂", Scientific Reports, 13, 12906, \(2024\).](#)
- 10- [Sodeifian, G., Nasri L., Razmimanesh, F., Arbab Nooshabadi M., "Solubility of ibrutinib in supercritical carbon dioxide \(Sc-CO₂\): Data correlation and thermodynamic analysis", The Journal of Chemical Thermodynamics, 182, 107050, \(2023\).](#)
- 11- [Sodeifian, G., Bagheri, H., Arbab Nooshabadi M., Razmimanesh, F., Roshanghias, A., "Experimental solubility of fexofenadine hydrochloride \(antihistamine\) drug in SC-CO₂: Evaluation of cubic equations of state", The Journal of Supercritical Fluids, 200, 106000, \(2023\).](#)
- 12- [Sodeifian, G., Garlapati, C., Arbab Nooshabadi M., Razmimanesh, F., Tabibzadeh, A., "Solubility measurement and modeling of hydroxychloroquine sulfate \(antimalarial medication\) in supercritical carbon dioxide", Scientific Reports, 13, 8112, \(2023\).](#)

- 13- Abadian, M., [Sodeifian, G.](#), Razmimanesh, F., Zarei Mahmoudabadi, S., "[Experimental measurement and thermodynamic modeling of solubility of Riluzole drug \(neuroprotective agent\) in supercritical carbon dioxide](#)", Fluid Phase Equilibria, 563, 113711, (2023).
14. [Sodeifian, G.](#), Hsieh, C.-M., Tabibzadeh, A., Wang, H.-C., Arbab Nooshabadi, M., "[Solubility of palbociclib in supercritical carbon dioxide from experimental measurement and Peng-Robinson equation of state](#)", Scientific Reports, 13, 2172, (2023).
15. Tarashi, S., Nazockdast, H., Bandegi, A., Shafaghsoorkh, S., [Sodeifian, G.](#), Foudazi, R., "[Large amplitude oscillatory shear behavior of thermoresponsive hydrogels: Single versus double network](#)", Journal of Rheology, 67, 15-33, (2023).
16. [Sodeifian, G.](#), Behvand Usefi, M.M., Razmimanesh, F., Roshanghias, A., "[Determination of the solubility of rivaroxaban \(anticoagulant drug, for the treatment and prevention of blood clotting\) in supercritical carbon dioxide: Experimental data and correlations](#)", Arabian Journal of Chemistry, 16, 104421, (2023).
17. [Sodeifian, G.](#), Surya Alwi, R., Razmimanesh, F., Roshanghias, A., "[Solubility of pazopanib hydrochloride \(PZH, anticancer drug\) in supercritical CO₂: Experimental and thermodynamic modeling](#)", The Journal of Supercritical Fluids, 190, 105759, (2022).
18. Daneshyan, S., [Sodeifian, G.](#), "[Utilization of CO₂ in supercritical conditions for the synthesis of cyclic poly \(N-isopropylacrylamide\) via emulsion and homogeneous reactions](#)", Scientific Reports, 12, 17459, (2022).
19. [Sodeifian, G.](#), Garlapati, C., Roshanghias, A., "[Experimental solubility and modeling of Crizotinib \(anti-cancer medication\) in supercritical carbon dioxide](#)", Scientific Reports, 12, 17494, (2022).
20. [Sodeifian, G.](#), Garlapati, C., Razmimanesh, F., Nateghi, H., "[Experimental solubility and thermodynamic modeling of empagliflozin in supercritical carbon dioxide](#)", Scientific Reports, 12, 9008, (2022).
21. [Sodeifian, G.](#), Garlapati, C., Razmimanesh, F., Nateghi, H., "[Solubility measurement and thermodynamic modeling of pantoprazole sodium sesquihydrate in supercritical carbon dioxide](#)", Scientific Reports, 12, 7758, (2022).
22. [Sodeifian, G.](#), Surya Alwi, R., Razmimanesh, F., Sodeifian, F., "[Solubility of prazosin hydrochloride \(alpha blocker antihypertensive drug\) in supercritical CO₂: Experimental and thermodynamic modelling](#)", Journal of Molecular Liquids, 362, 119689, (2022).
23. Daneshyan, S., [Sodeifian, G.](#), "[Synthesis of cyclic polystyrene in supercritical carbon dioxide green solvent](#)", The Journal of Supercritical Fluids, 188, 105679, (2022).
24. Fathi, M., [Sodeifian, G.](#), Sajadian, S.A., "[Experimental study of ketoconazole impregnation into polyvinyl pyrrolidone and hydroxyl propyl methyl cellulose using supercritical carbon dioxide: Process optimization](#)", The Journal of Supercritical Fluids, 188, 105674, (2022).

25. [Sodeifian, G., Hsieh, C.-M., Derakhsheshpour, R., Chen, Y.-M., Razmimanesh, F., "Measurement and modeling of metoclopramide hydrochloride \(anti-emetic drug\) solubility in supercritical carbon dioxide", Arabian Journal of Chemistry, 15, 103876, \(2022\).](#)
26. Razmimanesh, F., [Sodeifian, G., "Investigation of Temperature-Responsive Tocosomal Nanocarriers as the Efficient and Robust Drug Delivery System for Sunitinib Malate Anti-Cancer Drug: Effects of MW and Chain Length of PNIPAAm on LCST and Dissolution Rate", Journal of Pharmaceutical Sciences, 111, 1937–1951, \(2022\).](#)
27. Roshanghias, A., [Sodeifian, G., Javidparvar, A.A., Tarashi, S., "Construction of a novel polytetrafluoroethylene-based sealant paste: The effect of polyvinyl butyral \(PVB\) and nano-alumina on the sealing performance and construction formulations", Results in Engineering, 14, 100460,\(2022\).](#)
28. Behnood, R., [Sodeifian, G., "Synthesis of Ag4Bi2O5 nanoparticles and evaluation of their photocatalytic activity", Journal of Photochemistry and Photobiology A: Chemistry, 427, 113776, \(2022\).](#)
29. [Sodeifian, G., Alwi, R.S., Razmimanesh, F., "Solubility of Pholcodine \(antitussive drug\) in supercritical carbon dioxide: Experimental data and thermodynamic modeling", Fluid Phase Equilibria, 556, 113396, \(2022\).](#)
30. Tarashi, S., Nazockdast, H., Shafaghshorkh, S., [Sodeifian, G., "A porous monolith polysaccharide-based adsorbent aerogel with enhanced mechanical performance and efficient adsorption capacity", Separation and Purification Technology, 287, 120587, \(2022\).](#)
31. [Sodeifian, G., Nasri, L., Razmimanesh, F., Abadian, M., "CO2 utilization for determining solubility of teriflunomide \(immunomodulatory agent\) in supercritical carbon dioxide: Experimental investigation and thermodynamic modeling", Journal of CO2 Utilization, 58, 101931, \(2022\).](#)
32. [Sodeifian, G., Surya Alwi, R., Razmimanesh, F., Abadian, M., "Solubility of Dasatinib monohydrate \(anticancer drug\) in supercritical CO2: Experimental and thermodynamic modeling", Journal of Molecular Liquids, 346, 117899, \(2022\).](#)
33. [Sodeifian, G., Usefi, M.M.B., "Solubility, Extraction, and Nanoparticles Production in Supercritical Carbon Dioxide: A Mini-Review", ChemBioEng Reviews, \(2022\).](#)
34. [Sodeifian, G., Sajadian, S.A., Derakhsheshpour, R., "CO2 utilization as a supercritical solvent and supercritical antisolvent in production of sertraline hydrochloride nanoparticles", Journal of CO2 Utilization, 55, 101799, \(2022\).](#)
35. [Sodeifian, G., Garlapati, C., Razmimanesh, F., Ghanaat-Ghamsari, M., "Measurement and modeling of clemastine fumarate \(antihistamine drug\) solubility in supercritical carbon dioxide", Scientific Reports, 11, 24344, \(2021\).](#)

36. [Sodeifian, G.](#), Sajadian, S.A., Razmimanesh, F., Hazaveie, S.M., [“Solubility of Ketoconazole \(antifungal drug\) in SC-CO₂ for binary and ternary systems: measurements and empirical correlations”](#), Scientific Reports, 11, 7546, (2021).
37. [Sodeifian, G.](#), Garlapati, C., Razmimanesh, F., Sodeifian, F., [“The solubility of Sulfabenzamide \(an antibacterial drug\) in supercritical carbon dioxide: Evaluation of a new thermodynamic model”](#), Journal of Molecular Liquids, 335, 116446, (2021).
38. [Sodeifian, G.](#), Alwi, R.S., Razmimanesh, F., Tamura, K., [“Solubility of Quetiapine hemifumarate \(antipsychotic drug\) in supercritical carbon dioxide: Experimental, modeling and Hansen solubility parameter application”](#), Fluid Phase Equilibria, 537, 113003, (2021).
39. [Sodeifian, G.](#), Nasri, L., Razmimanesh, F., Abadian, M., [“Measuring and modeling the solubility of an antihypertensive drug \(losartan potassium, Cozaar\) in supercritical carbon dioxide”](#), Journal of Molecular Liquids, 331, 115745, (2021).
40. [Sodeifian, G.](#), Hazaveie, S.M., Sodeifian, F., [“Determination of Galantamine solubility \(an anti-alzheimer drug\) in supercritical carbon dioxide \(CO₂\): Experimental correlation and thermodynamic modeling”](#), Journal of Molecular Liquids, 330, 115696, (2021).
41. [Sodeifian, G.](#), Niazi, Z., [“Prediction of CO₂ absorption by nanofluids using artificial neural network modeling”](#), International Communications in Heat and Mass Transfer, 123, 105193, (2021).
42. [Sodeifian, G.](#), Garlapati, C., Razmimanesh, F., Sodeifian, F., [“Solubility of amlodipine besylate \(calcium channel blocker drug\) in supercritical carbon dioxide: Measurement and correlations”](#), Journal of Chemical and Engineering Data, 66, 119–1131, (2021).
43. [Sodeifian, G.](#), Sajadian, S.A., [“Antioxidant capacity, physicochemical properties, thermal behavior, and oxidative stability of nectarine \(Prunus persica var. nucipersica\) kernel oil”](#), Journal of Food Processing and Preservation, 45, e15198, (2021).
44. Razmimanesh F., [Sodeifian, G.](#), Sajadian S.A., [“An investigation into Sunitinib malate nanoparticle production by US-RESOLV method: Effect of type of polymer on dissolution rate and particle size distribution”](#), The Journal of Supercritical Fluids, 170, 105163, (2021).
45. Behnood R., Sodeifian G., [“Novel ZnCo₂O₄ embedded with S, N-CQDs as efficient visible-light photocatalyst”](#), Journal of Photochemistry and Photobiology A: Chemistry, 405, 112971, (2021).
46. [Sodeifian, G.](#), Ghaseminejad S., Yousefi A.A., [“Preparation of polypropylene/short glass fiber composite as Fused Deposition Modeling \(FDM\) filament”](#), Results in Physics, 12, 205-222, (2019).

47. Sodeifian, G., Ardestani N.S., Razmimanesh F., Sajadian S.A., [Experimental and thermodynamic analyses of supercritical CO₂-Solubility of minoxidil as an antihypertensive drug](#), Fluid Phase Equilibria 522, 112745, (2020).
48. Ameri, A., [Sodeifian, G.](#), Sajadian S.A., "[Lansoprazole loading of polymers by supercritical carbon dioxide impregnation: Impacts of process parameters](#)", The Journal of Supercritical Fluids 164, 104892, (2020).
49. Ardestani N.S., Sodeifian G, Sajadian S.A., "[Preparation of phthalocyanine green nano pigment using supercritical CO₂ gas antisolvent \(GAS\): experimental and modeling](#)", Heliyon 6, e04947, (2020).
50. Hazaveie, S.M., [Sodeifian, G.](#), Sajadian, S.A., "[Measurement and thermodynamic modeling of solubility of Tamsulosin drug \(anti cancer and anti-prostatic tumor activity\) in supercritical carbon dioxide](#)", The Journal of Supercritical Fluids 163, 104875, (2020).
51. [Sodeifian G.](#), Garlapati C., Hazaveie, S.M., Sodeifian, F., "[Solubility of 2, 4, 7-Triamino-6-phenylpteridine \(Triamterene, Diuretic Drug\) in Supercritical Carbon Dioxide: Experimental Data and Modeling](#)", Journal of Chemical & Engineering Data 65, 4406-4416, (2020).
52. Behnood R., [Sodeifian G.](#), "[Synthesis of N doped-CQDs/Ni doped-ZnO nanocomposites for visible light photodegradation of organic pollutants](#)", Journal of Environmental Chemical Engineering 8, 103821, (2020).
53. Behnood R., [Sodeifian G.](#), "[Hydrothermal synthesis of N-doped GQD/CuO and N-doped GQD/ZnO nanophotocatalysts for MB dye removal under visible light irradiation: evaluation of a new procedure to produce N ...](#)", Journal of Inorganic and Organometallic Polymers and Materials, 30, 1266-1280, (2020).
54. [Sodeifian, G.](#), Ardestani N.S., Sajadian S.A., Golmohammadi M.R.,Fazlali A., "[Prediction of solubility of sodium valproate in supercritical carbon dioxide: experimental study and thermodynamic modeling](#)", Journal of Chemical & Engineering Data, 65, 1747-1760, (2020).
55. [Sodeifian, G.](#), Sajadian S.A., Derakhsheshpour R., "[Experimental measurement and thermodynamic modeling of Lansoprazole solubility in supercritical carbon dioxide: Application of SAFT-VR EoS](#)", Fluid Phase Equilibria 507, 112422, (2020).
56. Tarashi, S., Nazockdast H., [Sodeifian G.](#), "[A comparative study on microstructure, physical-mechanical properties, and self-healing performance of two differently synthesized nanocomposite double network hydrogels based](#)", Polymer 188, 122138, (2020).

57. [Sodeifian, G., Razmimanesh F., Ardestani N.S., Sajadian S.A.,](#) ["Experimental data and thermodynamic modeling of solubility of Azathioprine, as an immunosuppressive and anti-cancer drug, in supercritical carbon dioxide"](#), Journal of Molecular Liquids 299, 112179, (2020).
58. [Sodeifian, G., Razmimanesh F., Sajadian S.A., Hazaveie, S.M.,](#) ["Experimental data and thermodynamic modeling of solubility of Sorafenib tosylate, as an anti-cancer drug, in supercritical carbon dioxide: Evaluation of Wong-Sandler mixing rule"](#), The Journal of Chemical Thermodynamics 142, 105998, (2020).
59. [Sodeifian, G., Razmimanesh F., Sajadian S.A.,](#) ["Prediction of solubility of sunitinib malate \(an anti-cancer drug\) in supercritical carbon dioxide \(SC-CO₂\): Experimental correlations and thermodynamic modeling"](#), Journal of Molecular Liquids 297, 111740, (2020).
60. [Sodeifian, G., Detakhsheshpour R., Sajadian S.A.,](#) ["Experimental study and thermodynamic modeling of Esomeprazole \(proton-pump inhibitor drug for stomach acid reduction\) solubility in supercritical carbon dioxide"](#), The Journal of Supercritical Fluids 154, 104606, (2019).
61. Tarashi, S., Nazockdast H., Sodeifian G., ["Reinforcing effect of graphene oxide on mechanical properties, self-healing performance and recoverability of double network hydrogel based on κ-carrageenan and polyacrylamide"](#), Polymer 183, 121837, (2019).
62. [Sodeifian, G., Hazaveie, S.M., Sajadian S.A., Ardestani N.S.,](#) ["Determination of the solubility of the repaglinide drug in supercritical carbon dioxide: experimental data and thermodynamic modeling"](#), Journal of Chemical & Engineering Data 64, 5338-5348, (2019).
63. [Sodeifian, G., Ardestani N.S., Sajadian S.A.,](#) ["Solubility measurement of a pigment \(Phthalocyanine green\) in supercritical carbon dioxide: Experimental correlations and thermodynamic modeling"](#), Fluid Phase Equilibria 494, 61-73, (2019).
64. - [Sodeifian, G., Hazaveie, S.M., Sajadian, S.A., Razmimanesh, F.,](#) ["Experimental investigation and modeling of the solubility of oxcarbazepine \(an anticonvulsant agent\) in supercritical carbon dioxide"](#), Fluid Phase Equilibria, 493, 160-173, (2019).
65. [Sodeifian, G., Sajadian, S.A.,](#) ["Experimental measurement of solubilities of sertraline hydrochloride in supercritical carbon dioxide with/without menthol: Data correlation"](#), The Journal of Supercritical Fluids, 149, 79-87, (2019).

66. [Sodeifian, G., Razmimanesh, F. , "Diffusional interaction behavior of NSAIDs in lipid bilayer membrane using molecular dynamics \(MD\) simulation: Aspirin and Ibuprofen", Journal of Biomolecular Structure and Dynamics", 37, 1666-1684, \(2019\).](#)
67. [Sodeifian, G., Sajadian, S.A., Saadati Ardestani, N., Razmimanesh, F., "Production of Loratadine drug nanoparticles using ultrasonic-assisted Rapid expansion of supercritical solution into aqueous solution \(US-RESSAS\)", The Journal of Supercritical Fluids, 147, 241-253, \(2019\).](#)
68. [Sodeifian, G., Saadati Ardestani, N., Sajadian, S.A., "Extraction of seed oil from Diospyros lotus optimized using response surface methodology", Journal of Forestry Research, 30, 709-719, \(2019\).](#)
69. [Sodeifian, G., Razmimanesh, F., Sajadian, S.A., "Solubility measurement of a chemotherapeutic agent \(Imatinib mesylate\) in supercritical carbon dioxide: Assessment of new empirical model", The Journal of Supercritical Fluids, 146, 89-99, \(2019\).](#)
70. [Sodeifian, G., Saadati Ardestani, N., Sajadian, S.A., Soltani Panah, H., "Experimental measurements and thermodynamic modeling of Coumarin-7 solid solubility in supercritical carbon dioxide: Production of nanoparticles via RESS method", Fluid Phase Equilibria, 483, 122-143, \(2019\).](#)
71. [Sodeifian, G., Ghaseminejad, S., Yousefi, A.A., "Preparation of polypropylene/short glass fiber composite as Fused Deposition Modeling \(FDM\) filament", Results in Physics, 12, 205-222, \(2019\).](#)
72. [Sodeifian, G., Sajadian, S.A., "Utilization of ultrasonic-assisted RESOLV \(US-RESOLV\) with polymeric stabilizers for production of amiodarone hydrochloride nanoparticles: Optimization of the process parameters", Chemical Engineering Research and Design, 142, 268-284, \(2019\).](#)
73. [Sodeifian, G., Raji, M., Asghari, M., Rezakazemi, M., Dashti, A., "Polyurethane-SAPO-34 mixed matrix membrane for CO₂ /CH₄ and CO₂ /N₂ separation", Chinese Journal of Chemical Engineering", 322-334, \(2019\).](#)
74. [Sodeifian, G., Sajadian, S.A., Daneshyan, S., "Preparation of Aprepitant nanoparticles \(efficient drug for coping with the effects of cancer treatment\) by rapid expansion of supercritical solution with solid cosolvent \(RESS-SC\)", The Journal of Supercritical Fluids, 140, 72-84, \(2018\).](#)
75. [Sodeifian, G., Sajadian, S.A., Razmimanesh, F., Ardestani, N.S., "A comprehensive comparison among four different approaches for predicting the solubility of pharmaceutical solid compounds in supercritical carbon dioxide", Korean Journal of Chemical Engineering, 35, 2097-2116, \(2018\).](#)
76. [Sodeifian, G., Razmimanesh, F., Sajadian, S.A., Soltani Panah, H., "Solubility measurement of an antihistamine drug \(Loratadine\) in supercritical carbon dioxide: Assessment of qCPA and PCP-SAFT equations of state", Fluid Phase Equilibria, 472, 147-159, \(2018\).](#)

77. [Sodeifian, G., Ardestani, N.S., Sajadian, S.A., Moghadamian, K., "Properties of Portulaca oleracea seed oil via supercritical fluid extraction: Experimental and optimization "](#), *The Journal of Supercritical Fluids*, 135, 34-44, (2018).
78. [Sodeifian, G., Sajadian, S.A., Honarvar, B., "Mathematical modelling for extraction of oil from Dracocephalum kotschy seeds in supercritical carbon dioxide"](#), *Natural Product Research*, 32, 795-803, (2018).
79. [Sodeifian, G., Sajadian, S.A., "Solubility measurement and preparation of nanoparticles of an anticancer drug \(Letrozole\) using rapid expansion of supercritical solutions with solid cosolvent \(RESS-SC\)"](#), *The Journal of Supercritical Fluids*, 133, 239-252, (2018).
80. [Sodeifian, G., Saadati Ardestani, N., Sajadian, S.A., Panah, H.S., "Measurement, correlation and thermodynamic modeling of the solubility of Ketotifen fumarate \(KTF\) in supercritical carbon dioxide: Evaluation of PCP-SAFT equation of state"](#), *Fluid Phase Equilibria*, 458, 102-114, (2018).
81. [Sodeifian, G., Sajadian, S.A., Razmimanesh, F., "Solubility of an antiarrhythmic drug \(amiodarone hydrochloride\) in supercritical carbon dioxide: Experimental and modeling"](#), *Fluid Phase Equilibria*, 450, 149-159, (2018).
82. [Sodeifian, G., Behnood, R., "Application of microwave irradiation in preparation and characterization of CuO/Al₂O₃ nanocomposite for removing MB dye from aqueous solution"](#), *Journal of Photochemistry and Photobiology A: Chemistry*, 342, 25-34, (2017).
83. [Sodeifian, G., Sajadian, S.A., "Investigation of essential oil extraction and antioxidant activity of Echinophora platyloba DC. using supercritical carbon dioxide"](#), *The Journal of Supercritical Fluids*, 121, 52-62, (2017).
84. [Sodeifian, G., Sajadian, S.A., Ardestani, N.S., "Determination of solubility of Aprepitant \(an antiemetic drug for chemotherapy\) in supercritical carbon dioxide: Empirical and thermodynamic models"](#), *The Journal of Supercritical Fluids*, 128, 102-111, (2017).
85. [Sodeifian, G., Sajadian, S.A., Saadati Ardestani, N., "Experimental optimization and mathematical modeling of the supercritical fluid extraction of essential oil from Eryngium billardieri: Application of simulated annealing \(SA\) algorithm"](#), *The Journal of Supercritical Fluids*, 127, 146-157, (2017).
86. [Sodeifian, G., Sajadian, S.A., Saadati Ardestani, N., "Supercritical fluid extraction of omega-3 from Dracocephalum kotschy seed oil: Process optimization and oil properties"](#), *The Journal of Supercritical Fluids*, 119, 139-149, (2017).

87. [Sodeifian, G., Sajadian, S.A., Saadati Ardestani, N., "Optimization of essential oil extraction from *Launaea acanthodes* Boiss: Utilization of supercritical carbon dioxide and cosolvent"](#), The Journal of Supercritical Fluids, 116, 46-56, (2016).
88. [Sodeifian, G., Saadati Ardestani, N., Sajadian, S.A., Ghorbandoost, S., "Application of supercritical carbon dioxide to extract essential oil from *Cleome coluteoides* Boiss: Experimental, response surface and grey wolf optimization methodology"](#), The Journal of Supercritical Fluids, 114, 55-63, (2016).
89. [Sodeifian, G., Ghorbandoost, S., Sajadian, S.A., Saadati Ardestani, N., "Extraction of oil from *Pistacia khinjuk* using supercritical carbon dioxide: Experimental and modeling"](#), The Journal of Supercritical Fluids, 110, 265-274, (2016).
90. [Sodeifian, G., Sajadian, S.A., Saadati Ardestani, N., "Evaluation of the response surface and hybrid artificial neural network-genetic algorithm methodologies to determine extraction yield of *Ferulago angulata* through supercritical fluid"](#), The Journal of the Taiwan Institute of Chemical Engineers", 60, 165-173, (2016).
91. [Sodeifian, G., Sajadian S.A., and Saadati Ardestani N., "Extraction of *Dracocephalum Kotschy* Boiss Using Supercritical Carbon Dioxide: Experimental and Optimization"](#), The Journal of Supercritical Fluids, 107, 137-144, (2016).
92. [Sodeifian, G., Ramazani S.A. A., Ranjbari R., "Rheological Modeling of Suspensions of Fibrous Nanoparticles in Polymeric Viscoelastic media"](#), Journal of Non-Newtonian Fluid Mechanics, 223, 240-248, (2015).
93. [Sodeifain G., Daroughegi R., and Aalaie H., "Study of Adsorptive Behavior of Sulfonated Polyacrylamide onto Carbonate Rock Particles to Enhance Oil Recovery"](#), The Korean Journal of Chemical Engineering", 32(12), 2484-2491, (2015).
94. [Sodeifain G., Azizi J., and Ghoreishi S.M., "Response Surface Optimization of *Smyrniun Cordifolium* Boiss \(SCB\) Oil Extraction via Supercritical Carbon Dioxide"](#), The Journal of Supercritical Fluids, 95, 1-7, (2014).
95. [Sodeifian G., Nikooamal H.R., and Yousefi A.A., "Molecular Dynamics Study of Epoxy/Clay Nanocomposites: Rheology and Molecular Confinement"](#), Journal of Polymer research, 19, 9897, (2012).
96. [Sodeifian G., Niknam M.N., "Application of a kinetic model for studying of impurities effect on crystallization of NaCl, KBr, ADP and sucrose solutions"](#), Iranian Journal of Chemical Engineering, 9, 1-12, (2012).

- [97. Sodeifian G., Ansari K., "Optimization of Ferulago Angulata Oil Extraction with Supercritical Carbon Dioxide", The Journal of Supercritical Fluids, 56, 110- 116, \(2011\).](#)
- [98. Sodeifian G., Ansari K., Bamoniri, A., Mirjalili B., "Study of chemical composition of the essential oil of Ferulago Angulata \(Schelcht\) Boiss. from Iran using supercritical fluid extraction and nanoscale injection", Digest Journal of Nsnomaterials and Biostructure, 6, 161-168, \(2011\).](#)
- [99. Sodeifian G., Golkho F., "The studies of the effective parameters on leaching of sphalerite concentrate", International Journal of Science and Technology Amirkabir, 20, 11-18 \(2009\).](#)
- [100. Sodeifian G., Nikooamal H.R., Keshavarz A.R., "Modeling and determination of mass transfer coefficient during osmotic dehydration of Carrot", Iranian Journal of IACHE, 42, 45-51, \(2010\).](#)
- [101. Sodeifian G., "Comparison between absorption techniques and permeable membranes for recovery of carbon dioxide from post-combustion processes", Iranian Journal of IACHE, 49, 52-61, \(2010\).](#)
- [101. Sodeifian G., Hgahtalab A., "Discrete relaxation spectrum and K-BKZ constitutive equation for PVC, NBR and their blends", Journal of Applied Rheology, 14, 181-189 \(2004\).](#)
- [102. Haghtalab A., Sodeifian G., "Determination of the discrete relaxation spectrum for polybutadiene and polystyrene by a non-linear regression method", Iranian Polymer Journal, 11, 107-113 \(2002\).](#)
- [103. Moosavian M.A., Sodeifian G., "The effect of surfactants materials on water vaporation", Journal of Faculty of Engineering, University of Tehran, 32, 83-88, \(1999\).](#)
- [104. Sodeifian G., Rajaei AR., "The novel Mitsubishi method and its comparing with other conventional methods for recycling pet", Iranian Journal of IACHE, 3, 42-48, \(2004\).](#)
- [105. Sodeifian G., "The importance of extensional flows in process ability of polymer melts", Iranian Journal of IACHE, 3, 29-37, \(2005\).](#)
- [106. Sodeifian G., "Geothermal energy", JAM Journal, 44, 29-37, \(1995\).](#)
- [107. Bahari B., Behraves A., Sodeifian G., "Physical modelling of co-rotating twin extruder to determine minimum mixing length," Modarres Technical and Engineering Journal", 20, 83-90, \(2005\).](#)
- [108. Sodeifian G., "Evaluation of Novel and Developed Technologies on Synthesis Gas Production for Gas-to-liquid \(GTL\)", Iranian Journal of IACHE, 5, 25-32, \(2005\).](#)
- [109. Sodeifian G., "Study of crystallization conditions effect on crystal growth rate of potassium sulphate", Journal of Faculty of science, University of Tehran, 5, 32, 1-8, \(2007\).](#)
- [110. Sodeifian, G., Abdollahifard M., Abdollahi M., "Characterization of nanopores ordering in anodic alumina with image processing techniques", Iranian Journal of IACHE, 11, 46-53, \(2012\).](#)

Conference papers:

- 1- Sodeifian Gh., and Haghtalab A., “Determination of the discrete relaxation spectrum from dynamic moduli using a nonlinear regression method”, Australian-Korean Rheology Conference, September 19-21, Melbourne (2001).
- 2- Sodeifian Gh., and Sharifi_Bidgoli H “On the modeling of PVC/NBR blend in simple shear flow using the PTT constitutive model”, The XIVth International Congress on Rheology, August 22-27, Seoul, Korea (2004).
- 3- Sodeifian Gh., and Haghtalab A., “Calculation of the discrete relaxation spectrum for polymeric materials using a nonlinear regression method”, The Society of Rheology 73rd Annual Meeting, Bethesda, October 21-25, Maryland (2001).
- 4- Sodeifian Gh., Haghtalab A. and Abollah A., “A high shear rate sliding plate rheometer for nonlinear viscoelasticity”, American Society of Mechanical Engineering (ASME) International Mechanical Engineering Congress and Exposition, November 17-22, New Orleans (2002).
- 5- Sodeifian Gh., and Haghtalab A., “A new sliding plate rheometer for polymer melts”, 7th National Iranian Chemical Engineering Congress, October 28-31, Tehran (2002).
- 6- Sodeifian Gh., and Sharifi_Bidgoli H., "Prediction of K-BKZ constitutive equation for PVC/NBR blend, Annual European Rheology Conference, September 11-13, Guimaraes, Portugal (2003).
- 7- Sodeifian Gh., and Khamsenezhad A., “Adaptive simulated annealing for determination of discrete relaxation spectra”, 9th Iranian Chemical Engineering Congress”, November 23-25, Tehran (2004).
- 8- Haghtalab A. and Sodeifian Gh., “Discrete relaxation spectrum and K-BKZ constitutive equation for PVC, NBR and their blends”, The Eighth Iranian National Chemical Engineering Congress”, October 20-24, Mashad, Iran (2003).
- 9- Sodeifian Gh. And Bahari B., "The role of injection modeling process parameters on PP/WC composite properties", Annual European Rheology Conference, April 21-23, Grenoble, France (2005).

- 10- Sodeifian Gh "The importance of van Gorp-Palmen plot for analyzing polymer properties", The Society of Rheology 77rd Annual Meeting, Vancouver, British Columbia, October 16-20, Canada (2005).
- 11- Sodeifian Gh., "Evaluation of emulsion model for polymer blends: PS/PMMA and PS/PEMA", The 4rd International Seminar on Polymer Science and Technology (ISPST 2005), September 27-29, Tehran (2005).
- 12- Moosavian M.A. and Sodeifian Gh., "The effect of surfactant on water vaporization", The 3rd National Congress on Chemical Engineering, March, 8-10, Ahwaz (1998).
- 13- Sodeifian Gh. and Rajaei A.R., " The novel Mitsubishi method and its comparing with other conventional methods for recycling pet", The First National Seminar on Recycling and Waste Management on Process industries, September, 20-21, Tehran (2004).
- 14- Sodeifian Gh., Ahmadnezhad F. Rastegar S., "Design and economical evaluation of carbon active process using chemical method with phosphoric acid", The First National Seminar on Recycling and Waste Management on Process industries, September, 20-21, Tehran (2004).
- 15- Sodeifian Gh., "Design and manufacturing of a chemical machine by jet propulsion mechanism", Tehran International Congress on Manufacturing Engineering", December, 12-15, Tehran (2005).
- 16- Sodeifian Gh. and Sepehri S., " Application of Inverse Technique for assessment to Moisture-dependent Diffusion Coefficient in Wood ", The 11 Iranian Chemical Engineering Congress ", November, 28-30, Tehran (2006).
- 17- Sodeifian Gh., " Investigation of important parameters on rate of crystal growth of potassium sulphate in a fluidized bed crystallizer ", The 11 Iranian Chemical Engineering Congress ", November, 28-30, Tehran (2006).
- 18- Sodeifian Gh. and Sadeghi., " Study of osmotic membrane distillation and influence of process parameters on mass transfer ", The 11 Iranian Chemical Engineering Congress ", November, 28-30, Tehran (2006).
- 19- Sodeifian Gh., " Nano-particles effect on rheological behavior of two polymer ", The 8 International Seminar on Polymer Science and Technology, ", October, 23-25, Tehran, (2007).
- 20- Sodeifian Gh., " Study of nano particle effects on rheological behavior of immiscible polymer blends ", Annual European Rheology Conference, April 12- 14, Napoli, Italy (2007).

- 21- Sodeifian Gh., " Evaluation of the pom-pom constitutive equation for two polymer melts", The Society of Rheology 78rd Annual Meeting, October 8-12, Portland, USA (2006).
- 22- Sodeifian Gh., " Evaluation of viscous behavior for immiscible polymer blends ", The Society of Rheology 78rd Annual Meeting, October 8-12, Portland, USA, (2006).
- 23- Sodeifian Gh., Ansari,K., " Supercritical carbon dioxide extraction of Ferulago 397 Angulata essential oil, in: The 6th International Chemical Engineering Congress 398 &Exhibition, 16–20 November, 2009, Kish Island, I.R. Iran, 2009,
- 24- Shekari A., Sodeifian Gh., and Khodadadi M., "The relationship between educational approaches foster academic entrepreneurship skills", The National Conference on Entrepreneurship, University of Kashan, February 23-24, 2010.
- 25- Shekari A., Arfaei F., Sodeifian Gh., and Khodadadi A., "Comparison of the performance entrepreneurship curriculum for Optimizing Content for students of different fields of vocational" The National Conference on Entrepreneurship, University of Kashan, February 23-24, 2010.
- 26- Sodeifian Gh., and Arbab-Nooshabadi M., "Species of entrepreneurship and economic growth", The National Conference on Entrepreneurship, University of Kashan, February 23-24, 2010.
- 27- Sodeifian Gh., and Arbab-Nooshabadi M., "Potential for investment and economic growth", The National Conference on Entrepreneurship, University of Kashan, February 23-24, 2010
- 28- Sodeifian Gh., and Arbab-Nooshabadi M., " How investors can choose entrepreneur ", National Conference on Entrepreneurship, University of Kashan, February 23-24, 2010.
- 29- Sodeifian Gh., Arbab-Nooshabadi M., and Khajemherizi M.K., " Entrepreneurship in small firms", Conference on Entrepreneurship, University of Kashan, February 23-24, 2010.
- 30- Sodeifian Gh., Javadi M., Nikoamal H.R., Arbab Nooshabadi M., "Investigation of rheological behavior of polymeric nanotube aggregate suspensions", May, 10-14, Suzdal, Russia, (2011).
- 31- Sodeifian Gh., Nikoamal H.R, Yousefi A.A., Arbab Nooshabadi M., "Molecular dynamic study of epoxy/clay nanocomposites:Rheology and longest rouse relaxation time", May, 10-14, Suzdal, Russia, (2011).
- 32- Sodeifian Gh., and Javadi M., "Rheological behavior of aggregate suspensions of nanotube carbon in epoxy resin", 13 th National Iranian Chemical Engineering Congress & 1th

International Regional Chemical and Petroleum Engineering Conference", October 25-28, Razi University, Kermanshah, Iran (2010).

33- Sodeifian Gh., and Ansari K., "Optimizing the extraction of supercritical essential oil of *Ferulago Angulata* by CO₂ ", 13 th National Iranian Chemical Engineering Congress & 1th International Regional Chemical and Petroleum Engineering Conference", October 25-28, Razi University, Kermanshah, Iran (2010).

34- Sodeifian Gh., and Mortazaei S., "Realization of application of superposition time-temperature principle for polymer materials", 13 th National Iranian Chemical Engineering Congress & 1th International Regional Chemical and Petroleum Engineering Conference", October 25-28, Razi University, Kermanshah, Iran (2010).

35- Sodeifian Gh., and Balaghi M.H., "Application of rheological techniques for determining of polymers molecular weight distribution", 5th Annual European Rheology Conference April 15-17, Cardiff - United Kingdom, (2009).

36- Sodeifian Gh., Nikooamal H.R., and Yousefi A.A., Investigation of Epoxy/Nanoclay Nanocomposites", 6th Annual European Rheology Conference April 7-9, Göteborg - Sweden, (2010).

37- Sodeifian Gh, Mortezae S, Rheological Behavior of CNT Nanofluids, The XVIth International Congress on Rheology , August 5-10, Lisbon, Portugal (2012).

38- Sodeifian Gh, Mortezae S, Thermal Conductivity and Viscosity of Short Carbon Nanotubes (Sct) Nanofluids, The XVIth International Congress on Rheology, August 5-10, Lisbon, Portugal (2012).

39- Sodeifian Gh, Nikooamal H.R, The Rheological Study and Thermal Behavior of CuO In Ethylene Glycole - Water Nanofluids, The XVIth International Congress on Rheology, August 5-10, Lisbon, Portugal (2012).

40- Sodeifian Gh, Nikooamal H.R, "Employing the Casson Model to Study the Rheological Behavior of Nanoparticle Fluids", The 8th International Chemical Engineering Congress and Exhibition (IChEC 2014).

41- Sodeifian Gh., Azizi J., Ghoreishi S.M., and Ansari K., "Response Surface Optimization of Linolenyl Alcohol Extraction via Supercritical Carbon Dioxide", The 15th Iranian National Congress of Chemical Engineering (IChEC 2015), Febraury 17-19, University of Tehran, Tehran, Iran.

- 42- Sodeifian Gh., Masoodiyeh F., “Investigation of Membranes Properties Effects on Direct Contact Membrane Distillation Performance”, The 15th Iranian National Congress of Chemical Engineering (IChEC 2015), Febraury 17-19, University of Tehran, Tehran, Iran.
- 43- Sodeifian Gh., Daroughegi R., Aalaie Jamal and Hemmati Mahmood, “Sulfonated Polyacrylamide Adsorption onto Carbonate Reservoir Rock at High Temperature”, The 15th Iranian National Congress of Chemical Engineering (IChEC 2015), Febraury 17-19, University of Tehran, Tehran, Iran.
- 44- Sodeifian Gh., Monjazi Z., “Modeling the Effect of Thermal Diffusvity and Particle Aggregation on Thermal Conductivity and Viscosity of Nanofluids”, The 15th Iranian National Congress of Chemical Engineering (IChEC 2015), Febraury 17-19, University of Tehran, Tehran, Iran.
- 45- Sodeifian Gh., Raji M., and Asghari M., “Study of the Effect of SAPO-34 Nano-Crystals on the Permeability of Carbon Dioxide within the Polyurthane Membranes”, The 15th Iranian National Congress of Chemical Engineering (IChEC 2015), Febraury 17-19, University of Tehran, Tehran, Iran.
46. Tabibzadeh A., Sodeifian Gh., “Comparison of essential oil of *Perovskia abrotanoides* Karel. obtained from hydro-distillation and supercritical carbon dioxide extraction methods”, The 5th National Conference of Medicinal Plants and Traditional Medicine, October, 12, University of Torbat Heydarieh, Torbat Heydarieh, Iran, (2023).
47. Roshanghias A., Sodeifian Gh., “Preparation of formulation and manufacture of Teflon polymer paste and nanomaterials, for sealing pipe threads and fittings”, The 7th Seminar on Polymer, November 15-16, Golestan university, Golestan, Iran, (2023).
48. Sodeifian Gh., Razmimanesh F., “Grinding of Riluzole pharmaceutical particles using rapid expansion method of supercritical fluid in polymer solution”, The 7th Seminar on Polymer, November 15-16, Golestan university, Golestan, Iran, (2023).
49. Razmimanesh F., Sodeifian Gh., ”Nanosizing of Teriflunomide drug by using Ultrasonic assisted Rapid Expansion of a Supercritical Solution into a Liquid SOLVent (US-RESOLV) and process optimization”, The 12th International Chemical Engineering Congress & Exhibition (IChEC 2023), December 13-15, Tehran, Iran, (2023).

50. Sodeifian Gh., Tabibzadeh A., “Investigation of supercritical carbon dioxide extraction of petroleum hydrocarbons from contaminated soil”, The 12th International Chemical Engineering Congress & Exhibition (IChEC 2023), December 13-15, Tehran, Iran, (2023).
51. Sodeifian Gh., Tabibzadeh A., Ahvazi M., “Supercritical fluid extraction of essential oil from *Nepeta racemosa*: Optimization and biological properties”, The 12th International Chemical Engineering Congress & Exhibition (IChEC 2023), December 13-15, Tehran, Iran, (2023).
52. Sodeifian Gh., Tabibzadeh A., Arbab Nooshabadi M., “Wide applications of supercritical carbon dioxide as a cooling agent in various energy systems and nuclear reactors”, The 12th International Chemical Engineering Congress & Exhibition (IChEC 2023), December 13-15, Tehran, Iran, (2023).
53. Nateghi, H., Sodeifian Gh., Razmimanesh F., Sodeifian Gh., Mohebbi Najm Abad J., “Applications of artificial intelligence and neural network in predicting pharmaceuticals solubility in supercritical CO₂”, The 12th International Chemical Engineering Congress & Exhibition (IChEC 2023), December 13-15, Tehran, Iran, (2023).