

CURRICULUM VITAE



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1. Personal Details

Name: Seyed Jamaledin

Surname: Peighambardoust

Date of birth: 17, June 1979

Place of birth: Marand, East Azerbaijan, Iran

Marital status: Married

Nationality: Iranian

Language Skills: Azeri (Maternal Language), Persian, English, Turkish

2. Educational Qualification

Ph.D. in Chemical Engineering (September, 2011), Iran University of Science and Engineering (IUST), Tehran, Iran

Thesis Title: Fabrication and Evaluation of the Self-humidifying Nanocomposite Proton Exchange Membrane with Improved Ionic Conductivity for PEMFCs

M.Sc. in Chemical Engineering - Polymer (February, 2006), Sahand University of Technology, Tabriz, Iran

Thesis Title: PTC Effect in Semi-Conducting Nylon6-PPy-MMT Nanocomposites

B.Sc. in Chemical Engineering (September, 2003), Sharif University of Technology, Tehran, Iran

Thesis Title: Investigation of the Mass Transfer Limitation in Bioremediation in Porous Media

3. Academic Positions

Jan. 2024 - Present, Professor, Faculty of Chemical and Petroleum Engineering, University of Tabriz

May 2022 – Present, Faculty Dean, Faculty of Chemical and Petroleum Engineering, University of Tabriz

June 2020 – May 2022, Vice-Chancellor for Education and Research, Faculty of Chemical and Petroleum Engineering, University of Tabriz

July 2017 – Oct. 2019, Head of Chemical Engineering Department, Faculty of Chemical and Petroleum Engineering, University of Tabriz

Jan. 2017 - Jan. 2024, Associate Professor, Faculty of Chemical and Petroleum Engineering, University of Tabriz

Sep. 2016 – Sep. 2018, Advisor of Scientific Association of Faculty, Faculty of Chemical and Petroleum Engineering, University of Tabriz

Oct. 2011 – Jan. 2017, Assistant Professor, Faculty of Chemical and Petroleum Engineering, University of Tabriz

4. Research Interests

➤ **Polymer Science and Engineering**

- ✓ **Synthesis and Application of Polymers, Composites and Nanocomposites in Energy and Environmental Systems**
- ✓ **Polymeric Hydrogels for Wastewater Treatments**
- ✓ **Polymeric Hydrogels for Drug Delivery Applications**

- ✓ **Polymeric Hydrogel Scaffolds for Bone Tissue Engineering Application**
- ✓ **Polymeric and Biodegradable Polymeric Films for Food Packaging Applications**
- **Catalytic Systems**
 - ✓ **Catalysts as adsorbents for Adsorption Process**
 - ✓ **Catalysts for Biodiesel Generation**
 - ✓ **Metal-Organic Frameworks (MOF) as Superior Adsorbents**
 - ✓ **Sono-photocatalytic Activity of Catalysts for the Degradation Process of Contaminants**

5. Academic Awards

- Selected as **“The 2% Most Influential Scientists of the World on Stanford Databases”**, June 2022 to Present
- **Excellence in Teaching Award**, Faculty of Chemical and Petroleum Engineering, University of Tabriz, May 2023
- **1st Researcher Award**, Faculty of Chemical and Petroleum Engineering, University of Tabriz, Dec. 2022
- **1st Researcher Award**, Faculty of Chemical and Petroleum Engineering, University of Tabriz, Dec. 2018
- **Excellence in Teaching Award**, Faculty of Chemical and Petroleum Engineering, University of Tabriz, May 2018
- **Brilliant Talent Acceptance in PhD Course of Chemical Engineering**, Faculty of Chemical Engineering, Iran University of Science & Technology (IUST), Feb. 2007
- **Graduated as a Brilliant Talent Student in Chemical Engineering (Polymer)**, Faculty of Chemical Engineering, Sahand University of Technology, Feb. 2006

6. Patents

- 1) **Seyed Jamaledin Peighambardoust**, Seyed Hadi Peighambardoust, Samira Dehghani, Soheila Samadpour Hendvari and Seyedeh Homa Fasihnia, “Production of antimicrobial nanocomposite films for active food packaging” , Iranian Patent Office, 83198, June 2014
- 2) **Seyed Jamaledin Peighambardoust**, Javaneh Sakhaei Niroumand, Abolfazl Shenavar, “Production of flame-retardant polystyrene composites and evaluation of their flammability properties” , Iranian Patent Office, 87712, January 2016
- 3) **Seyed Jamaledin Peighambardoust**, Ali Mahmoudi Yayshahri, Abolfazl Shenavar,

“Industrial production of high impact polystyrene biodegradable blend (HIPS) by melt extrusion using extruder”, Iranian Patent Office, 88781, January 2017

7. Papers Published in Scientific Journals

- 1) Zahra Mahdavi, **Seyed Jamaledin Peighambardoust**, Mahsa Foroughi, Rauf Foroutan, Mehrshad Ahmadi, Bahman Ramavandi, “Enhancing fluoride ion removal from aqueous solutions and glass manufacturing wastewater using modified orange peel biochar magnetic composite with MIL-53”, *Environmental Research*, In Press (2024)
- 2) Zahra Sayyar, Parisa Mohammadzadeh Pakdel, **Seyed Jamaledin Peighambardoust**, “Oral delivery of Sunitinib malate using Carboxymethyl cellulose/poly(acrylic acid-itaconic acid)/Cloisite 30B nanocomposite hydrogel as a pH-responsive carrier”, *BMC Biotechnology*, In Press (2024)
- 3) **Seyed Jamaledin Peighambardoust**, Mahdiyeh Vatankhah, Parisa Mohammadzadeh Pakdel, Rauf Foroutan, Reza Mohammadi, “Carboxymethyl cellulose/activated carbon/hydroxyapatite composite adsorbent for remediation of methylene blue from water media”, *International Journal of Biological Macromolecules*, 276, 133764 (2024)
- 4) **Seyed Jamaledin Peighambardoust**, Shabnam Imani Zardkhaneh, Mahsa Foroughi, Rauf Foroutan, Hamidreza Azimi, Bahman Ramavandi, “Effectiveness of polyacrylamide-g-gelatin/ACL/Mg-Fe LDH composite hydrogel as an eliminator of crystal violet dye”, *Environmental Research*, 258, 119428 (2024)
- 5) Parisa Mohammadzadeh Pakdel, Zahra Sayyar, **Seyed Jamaledin Peighambardoust**, “Remediation of basic dyes using Cloisite 30B embedded carboxymethyl cellulose grafted acrylic acid and itaconic acid nanocomposite hydrogel”, *Polymer Bulletin*, In Press (2024)
- 6) Mahsa Foroughi, **Seyed Jamaledin Peighambardoust**, Bahman Ramavandi, Rauf Foroutan, Naeimeh Sadat Peighambardoust, “Simultaneous degradation of methyl orange and indigo carmine dyes from an aqueous solution using nanostructured WO₃ and CuO supported on Zeolite 4A”, *Separation and Purification Technology*, 344, 127265 (2024)
- 7) Roya Tahmasebpour, **Seyed Jamaledin Peighambardoust**, “Decontamination of tetracycline from aqueous solution using activated carbon/Fe₃O₄/ZIF-8 nanocomposite adsorbent”, *Separation and Purification Technology*, 343, 127188 (2024)
- 8) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed

- Hadi Peighambardoust, Bahman Ramavandi, "The potential of biochar derived from banana peel/Fe₃O₄/ZIF-67@K₂CO₃ as magnetic nanocatalyst for biodiesel production from waste cooking oils", *Results in Engineering*, 22, 102005 (2024)
- 9) Seyed Jamaledin Peighambardoust, Fateh Karimzadeh Halimi, Parisa Mohammadzadeh Pakdel, Hamid Safarzadeh, "Decontamination of methylene blue from aqueous media using alginate-bonded polyacrylamide/carbon black nanocomposite hydrogel", *Polymers for Advanced Technologies*, 35, e6336 (2024)
- 10) Javaneh Sakhaei Niroumand, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, "Tetracycline decontamination from aqueous media using nanocomposite adsorbent based on starch-containing magnetic montmorillonite modified by ZIF-67", *International Journal of Biological Macromolecules*, 259, 129263 (2024)
- 11) Mahsa Foroughi, **Seyed Jamaledin Peighambardoust**, Bahman Ramavandi, Daria Camilla Boffito, "Simultaneous anionic dyes degradation via H₂O₂ activation using Zeolite 4A/ZnO/Fe₂(MoO₄)₃ nanoparticles in a sono-photocatalytic process", *Advanced Powder Technology*, 35, 104320 (2024)
- 12) Akram Babakhani, **Seyed Jamaledin Peighambardoust**, Ali Olad, "Fabrication of magnetic nanocomposite scaffolds based on polyvinyl alcohol-chitosan containing hydroxyapatite and clay modified with graphene oxide: Evaluation of their properties for bone tissue engineering applications", *Journal of the Mechanical Behavior of Biomedical Materials*, 150, 106263 (2024)
- 13) Mehran Alizadeh, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, "Efficacious adsorption of divalent nickel ions over sodium alginate-g-poly(acrylamide)/hydrolyzed *Luffa Cylindrica*-CoFe₂O₄ bionanocomposite hydrogel", *International Journal of Biological Macromolecules*, 254, 127750 (2024)
- 14) **Seyed Jamaledin Peighambardoust**, Abbas Mostafaei, Parisa Mohammadzadeh Pakdel, Mousa Mohammadpourfard, "Performance of carboxymethyl cellulose and alginate nanocomposite hydrogel containing graphene oxide nanosheets for removal of methylene blue dye", *Journal of applied research in chemistry*, In Press (2023)
- 15) Mahsa Zarei, Taghi Ebadi, Bahman Ramavandi, **Seyed Jamaledin Peighambardoust**, "Photocatalytic decomposition of methylene blue and methyl orange dyes using pistachio biochar/CoFe₂O₄/Mn-Fe-LDH composite as H₂O₂ activator", *Surfaces and Interfaces*, 43, 103571 (2023)

- 16) Narmin Noorani, Behrad Barzegar, Abbas Mehrdad, Hassan Aghdasinia, **Seyed Jamaledin Peighambardoust**, Hossein Kazemian, "CO₂ capture in activated pyrolytic coke/metal oxide nanoparticle composites", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 679, 132554 (2023)
- 17) Behrad Barzegar, **Seyed Jamaledin Peighambardoust**, Hassan Aghdasinia, Rauf Foroutan, "Performance improvement of pyrolytic coke by surface modification for adsorption of copper (II) ions from wastewater", *Environmental Science: Water Research & Technology*, 9, 3417-3434 (2023)
- 18) Ali Akbari, **Seyed Jamaledin Peighambardoust**, Marzieh Lotfi, "Hydrochar Derived from Liquorice Root Pulp Utilizing Catalytic/Non-Catalytic Hydrothermal Carbonization: RSM Optimization and Cationic Dye Adsorption Assessment", *Journal of Water Process Engineering*, 55, 104099 (2023)
- 19) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Solmaz Ghojavand, Mahsa Foroughi, Amir Ahmadi, Farahnaz Bahador, Bahman Ramavandi, "Development of a magnetic orange seed/Fe₃O₄ composite for the removal of methylene blue and crystal violet from aqueous media", *Biomass Conversion and Biorefinery*, 13(11), 1-16 (2023)
- 20) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, "Investigation of kinetics, thermodynamics, and environmental factors of biodiesel generation from sunflower and castor oil using rice husk ash/CuO/K₂CO₃ heterogeneous catalyst", *Environmental Technology & Innovation*, 32, 103307 (2023)
- 21) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Solmaz Ghojavand, Sima Farjadfard, Bahman Ramavandi, "Cadmium elimination from wastewater using potato peel biochar modified by ZIF-8 and magnetic nanoparticle", *Colloid and Interface Science Communications*, 55, 100723 (2023)
- 22) **Seyed Jamaledin Peighambardoust**, Hamid Safarzadeh, "Swelling behavior study of poly(methacrylic acid-co-acrylamide) nanocomposite hydrogel adsorbents containing different nanoparticles", *Desalination and Water Treatment*, 298, 44-52 (2023)
- 23) Behrad Barzegar, **Seyed Jamaledin Peighambardoust**, Hassan Aghdasinia, Rauf Foroutan, "Multi-characteristic optimization and modeling analysis of Cu²⁺ removal from wastewater using activated coke/MnFe₂O₄ magnetic composite", *Journal of Water Process Engineering*, 53, 1-14 (2023)

- 24) Abolfazl Sadeghiazar Sharabiani, **Seyed Jamaledin Peighambardoust**, Aligholi Niaei, Parisa Mohammadzadeh Pakdel, Yilmaz Yildirim, Ali Kemal Topaloglu, "Modification of PVDF and PS flat sheet membranes using perovskite nanoparticles for treatment of humic acid in a submerged membrane system", *Desalination and Water Treatment*, 297, 17-25 (2023)
- 25) Hamid Safarzadeh, **Seyed Jamaledin Peighambardoust**, Seyed Hadi Peighambardoust, "Application of a novel sodium alginate-graft-poly(methacrylic acid-co-acrylamide)/montmorillonite nanocomposite hydrogel for removal of malachite green from wastewater", *Journal of Polymer Research*, 30(4) (2023)
- 26) **Seyed Jamaledin Peighambardoust**, Elmira Ghergherehchi, Parisa Mohammadzadeh Pakdel, Hassan Aghdasinia, "Facile removal of methylene blue using carboxymethyl cellulose grafted polyacrylamide/carbon black nanocomposite hydrogel", *Journal of Polymers and the Environment*, 31(3), 939-953 (2023)
- 27) Hamzeh Khatooni, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Rauf Foroutan, Bahman Ramavandi, "Adsorption of methylene blue using sodium carboxymethyl cellulose-g-poly(acrylamide-co-methacrylic acid)/Cloisite 30B nanocomposite hydrogel", *Journal of Polymers and the Environment*, 31(1), 297-311 (2023)
- 28) Hamidreza Azimi, **Seyed Jamaledin Peighambardoust**, "Characterization and morphological study of biodegradable PVA-Gelatin/CNT composite foams prepared via high-pressure batch foaming method", *Journal of Porous Materials*, In Press (2022)
- 29) Parisa Mohammadzadeh Pakdel, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Nasser Arsalani, Hassan Aghdasinia, "Decontamination of Fuchsin dye by carboxymethyl cellulose-graft-poly(acrylic acid-co-itaconic acid)/carbon black nanocomposite hydrogel", *International Journal of Biological Macromolecules*, 222, 2083-2097 (2022)
- 30) **Seyed Jamaledin Peighambardoust**, Daria Camilla Boffito, Bahman Ramavandi, Rauf Foroutan, "Sono-photocatalytic activity of sea sediment@400/ZnO catalyst to remove cationic dyes from wastewater", *Journal of Molecular Liquids*, 367, 120478 (2022)
- 31) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Daria Camilla Boffito, Bahman Ramavandi, "Sono-Photocatalytic Activity of Cloisite 30B/ZnO/Ag₂O Nanocomposite for the Simultaneous Degradation of Crystal Violet and Methylene

Blue Dyes in Aqueous Media”, *Nanomaterials*, 12(18), 3103 (2022)

- 32) Parisa Mohammadzadeh Pakdel, **Seyed Jamaledin Peighambardoust**, Nasser Arsalani, Hassan Aghdasinia, “Synthesis and performance evaluation of carboxymethyl cellulose nanocomposite hydrogel adsorbent grafted with acrylic acid and itaconic acid copolymer containing carbon black nanoparticles for Fuchsin removal”, *Iranian Journal of Polymer Science and Technology*, 35(1), 39-51, (2022)
- 33) Seiede Samira Hosseini, Ahmad Hamadi, Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Bahman Ramavandi, “Decontamination of Cd^{2+} and Pb^{2+} from aqueous solution using a magnetic nanocomposite of eggshell/starch/ Fe_3O_4 ”, *Journal of Water Process Engineering*, 48, 102911 (2022)
- 34) Hamid Safarzadeh, **Seyed Jamaledin Peighambardoust**, Seyed Hamed Mousavi, Rauf Foroutan, Reza Mohammadi, Seyed Hadi Peighambardoust, “Adsorption ability evaluation of the poly(methacrylic acid-co-acrylamide)/Cloisite 30B nanocomposite hydrogel as a new adsorbent for cationic dye removal”, *Environmental Research*, 212, 113349 (2022)
- 35) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, “Generation of biodiesel from edible waste oil using ZIF-67-KOH modified *Luffa Cylindrica* biomass catalyst”, *Fuel*, 322, 124181 (2022)
- 36) Amir Ahmadi, Rauf Foroutan, Hossein Esmaeili, **Seyed Jamaledin Peighambardoust**, Saeed Hemmati, Bahman Ramavandi, “Montmorillonite clay/starch/ $CoFe_2O_4$ nanocomposite as a superior functional material for uptake of cationic dye molecules from water and wastewater”, *Materials Chemistry and Physics*, 284, 126088 (2022)
- 37) Mehran Alizadeh, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Hamidreza Azimi, Bahman Ramavandi, “Surface magnetization of hydrolyzed *Luffa Cylindrica* biowaste with cobalt ferrite nanoparticles for facile Ni^{2+} removal from wastewater”, *Environmental Research*, 212, 113242 (2022)
- 38) Parisa Mohammadzadeh Pakdel, **Seyed Jamaledin Peighambardoust**, Nasser Arsalani, Hassan Aghdasinia, “Safranin-O cationic dye removal from wastewater using carboxymethyl cellulose-grafted-poly(acrylic acid-co-itaconic acid) nanocomposite hydrogel”, *Environmental Research*, 212, 113201 (2022)
- 39) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Mohamadamin Amarzadeh, Akram Kiani Korri, Naeimeh Sadat Peighambardoust, Awais Ahmad,

Bahman Ramavandi, "Nickel ions abatement from aqueous solutions and shipbuilding industry wastewater using ZIF-8-chicken beak hydroxyapatite", *Journal of Molecular Liquids*, 356, 119003 (2022)

- 40) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, "Cadmium ion removal from aqueous media using banana peel biochar/Fe₃O₄/ZIF-67", *Environmental Research*, 211, 113020 (2022)
- 41) Hamid Safarzadeh, **Seyed Jamaledin Peighambardoust**, Seyed Hamed Mousavi, Reza Mohammadi, Seyed Hadi Peighambardoust, "Adsorption of methyl violet dye from wastewater using poly(methacrylic acid-co-acrylamide)/bentonite nanocomposite hydrogels", *Journal of Polymer Research*, 29, 113 (2022)
- 42) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, "Development of new magnetic adsorbent of walnut shell ash/starch/Fe₃O₄ for effective copper ions removal: Treatment of groundwater samples", *Chemosphere*, 296, 133978 (2022)
- 43) Parisa Meshinchi, Hassan Aghdasinia, **Seyed Jamaledin Peighambardoust**, Mahmoud Zarei, "Investigating the removal efficiency of tetracycline antibiotic from aqueous solutions using nanoclay adsorbent and study of effective parameters, kinetic models and adsorption isotherms", *Environment and Water Engineering*, In Press (2022)
- 44) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, "Application of waste chalk/CoFe₂O₄/K₂CO₃ composite as a reclaimable catalyst for biodiesel generation from sunflower oil", *Chemosphere*, 289, 133226 (2022)
- 45) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Seyed Hadi Peighambardoust, Bahman Ramavandi, "Application of walnut shell ash/ZnO/K₂CO₃ as a new composite catalyst for biodiesel generation from Moringa Oleifera oil", *Fuel*, 311, (2022)
- 46) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Parvaneh Latifi, Amir Ahmadi, Mehran Alizadeh, Bahman Ramavandi, "Carbon nanotubes/ β -cyclodextrin/MnFe₂O₄ as a magnetic nanocomposite powder for tetracycline antibiotic decontamination from different aqueous environments", *Journal of Environmental Chemical Engineering*, 9(6), 106344, (2021)
- 47) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Saeed Hemmati, Hamzeh

- Khatooni, Bahman Ramavandi, "Preparation of clinoptilolite/starch/CoFe₂O₄ magnetic nanocomposite powder and its elimination properties for cationic dyes from water and wastewater", *International Journal of Biological Macromolecules*, 189, 432-442, (2021)
- 48) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Saeed Hemmati, Amir Ahmadi, Ermelinda Falletta, Bahman Ramavandi, Claudia L. Bianchi, "Zn²⁺ removal from the aqueous environment using Polydopamine/Hydroxyapatite/Fe₃O₄ magnetic composite under ultrasonic waves", *RSC Advances*, 11 (44), 27309-27321, (2021)
- 49) **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Seyed Hadi Peighambardoust, Hamzeh Khatooni, Bahman Ramavandi, "Decoration of Citrus limon wood carbon with Fe₃O₄ to enhanced Cd²⁺ removal: A reclaimable and magnetic nanocomposite", *Chemosphere*, 282, 131088 (2021)
- 50) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Amir Ahmadi, Ali Akbari, Sima Farjadfard, Bahman Ramavandi, "Adsorption mercury, cobalt, and nickel with a reclaimable and magnetic composite of hydroxyapatite/Fe₃O₄/polydopamine", *Journal of Environmental Chemical Engineering*, 9(4), 105709 (2021)
- 51) Parvaneh Khalati, Maryam Tahmasebpoor, **Seyed Jamaledin Peighambardoust**, "Removal of lead heavy metal from wastewater by crystallization process and investigation of the effective parameters", *Amirkabir Journal of Mechanical Engineering*, 53(11), 5349-5366 (2021)
- 52) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Seyed Hadi Peighambardoust, Mirian Pateiro, José M. Lorenzo, "Adsorption of Crystal Violet Dye Using Activated Carbon of Lemon Wood and Magnetic Activated Carbon of Lemon Wood/Fe₃O₄ Nanocomposite from Aqueous Solutions: A Kinetic, Equilibrium and Thermodynamic Study", *Molecules*, 26(8), 2241 (2021)
- 53) Seyed Hadi Peighambardoust, Seyedeh Homa Fasihnia, **Seyed Jamaledin Peighambardoust**, Mirian Pateiro, Rubén Domínguez, José M. Lorenzo, "Active Polypropylene-Based Films Incorporating Combined Antioxidants and Antimicrobials: Preparation and Characterization", *Foods*, 10(4), 722 (2021)
- 54) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Seiede Samira Hosseini, Ali Akbari, Bahman Ramavandi, "Hydroxyapatite biomaterial production from chicken (femur and beak) and fishbone waste through a chemical less method for Cd²⁺ removal from shipbuilding wastewater", *Journal of Hazardous Materials*, 413:

125428 (2021)

- 55) Seyed Amir Seyed-Moslemi, Javad Hesari, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Effect of microbial lipase and transglutaminase on the textural, physicochemical, and microbial parameters of fresh Quark cheese”, *Journal of Dairy Science*, 104(7), 7489-7499 (2021)
- 56) Sevda Pashaei-Fakhri, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Nasser Arsalani, Bahman Ramavandi, “Crystal violet dye sorption over acrylamide/graphene oxide bonded sodium alginate nanocomposite hydrogel”, *Chemosphere*, 270: 129419 (2021)
- 57) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, Seyedeh Homa Fasihnia, Nader Karimian Khosrowshahi, Beatriz Gullón, Jose M. Lorenzo, “Optimization of the Amount of ZnO, CuO, and Ag Nanoparticles on Antibacterial Properties of Low-Density Polyethylene (LDPE) Films Using the Response Surface Method”, *Food Analytical Methods*, 14: 98-107 (2021).
- 58) Fariba Bahador, Rauf Foroutan, Ehsan Nourafkan, **Seyed Jamaledin Peighambardoust**, Hossein Esmaeili, “Enhancement of biodiesel production from chicken fat using MgO and MgO@Na₂O nanocatalysts”, *Chemical Engineering & Technology*, 44(1), 77-84 (2021)
- 59) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Reza Mohammadi, Bahman Ramavandi, Daria Camilla Boffito, “One-pot transesterification of non-edible *Moringa oleifera* oil over a MgO/K₂CO₃/HAp catalyst derived from poultry skeletal waste”, *Environmental Technology & Innovation*, 21: 101250 (2021)
- 60) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Zahra Esvandi, Hamzeh Khatooni, Bahman Ramavandi, “Evaluation of two cationic dyes removal from aqueous environments using CNT/MgO/CuFe₂O₄ magnetic composite powder: A comparative study”, *Journal of Environmental Chemical Engineering*, 9(2): 104752 (2021)
- 61) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, Abdulrasoul Oromiehie, Maral Soltanzadeh, Mirian Pateiro, Jose M. Lorenzo, “Properties and Application of Multifunctional Composite Polypropylene-Based Films Incorporating a Combination of BHT, BHA and Sorbic Acid in Extending Donut Shelf Life”, *Molecules*, 25(21): 1-17 (2020)
- 62) Zahra Esvandi, Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, Ali Akbari, Bahman Ramavandi, “Uptake of anionic and cationic dyes from water using

natural clay and clay/starch/MnFe₂O₄ magnetic nanocomposite”, *Surfaces and Interfaces*, 21: 100754 (2020)

- 63)** Seyed Jamaledin Peighambardoust, Sirous Zahed-Karkaj, Seyed Hadi Peighambardoust, Yadollah Ebrahimi, Donatella Peressini, “Characterization of carboxymethyl cellulose-based active films incorporating non-modified and Ag or Cu-modified Cloisite 30B and montmorillonite nanoclays”, *Iranian Polymer Journal*, 29: 1087-1097 (2020)
- 64)** Rauf Foroutan, Seyed Jamaledin Peighambardoust, Hassan Aghdasinia, Reza Mohammadi, Bahman Ramavandi, “Modification of bio-hydroxyapatite generated from waste poultry bone with MgO for purifying methyl violet laden liquids”, *Environmental Science and Pollution Research*, 27: 44218-44229 (2020)
- 65)** Rauf Foroutan, Reza Mohammadi, Seyed Jamaledin Peighambardoust, Setare Jalali Bahman Ramavandi, “Application of nano-silica particles generated from offshore white sandstone for cadmium ions elimination from aqueous media”, *Environmental Technology & Innovation*, 19: 101031 (2020)
- 66)** Parisa Abdolsattari, Seyed Hadi Peighambardoust, Sajad Pirsā, Seyed Jamaledin Peighambardoust, Seyedeh Homa Fasihnia, “Investigating microbial properties of traditional Iranian white cheese packed in active LDPE films incorporating metallic and organoclay nanoparticles”, *Chemical Review and Letters*, 3: 168-174 (2020)
- 67)** Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, Seyed Jamaledin Peighambardoust, Abdulrasoul Oromiehie, Maral Soltanzadeh, Donatella Peressini, “Migration analysis, antioxidant and mechanical characterization of polypropylene-based active food packaging films loaded with BHA, BHT and TBHQ”, *Journal of Food Science*, 85(8): 2317-2328 (2020)
- 68)** Seyed Jamaledin Peighambardoust, Omid Aghamohammadi Babil, Rauf Foroutan, Nasser Arsalani, “Removal of malachite green using carboxymethyl cellulose-g-polyacrylamide/montmorillonite nanocomposite hydrogel”, *International Journal of Biological Macromolecules*, 159: 1122-1131 (2020)
- 69)** Rauf Foroutan, Seyed Jamaledin Peighambardoust, Reza Mohammadi, Mohsen Omidvar, George A. Sorial, Bahman Ramavandi, “Influence of chitosan and magnetic iron nanoparticles on chromium adsorption behaviour of natural clay: Adaptive Neuro-Fuzzy Inference modelling”, *International Journal of Biological Macromolecules*, 151: 355-365 (2020)

- 70) Hamed Hajizadeh, **Seyed Jamaledin Peighambardoust**, Seyed Hadi Peighambardoust, Donatella Peressini, “Physical, mechanical and antibacterial characteristics of bio-nanocomposite films loaded with Ag-modified SiO₂ and TiO₂ nanoparticles”, *Journal of Food Science*, 85(4): 1193-1202 (2020)
- 71) Hassan Aghdasinia, Parisa Meshinchi, **Seyed Jamaledin Peighambardoust**, Mahmoud Zarei, Hossein Rahbari Asiabi, “Review of the adsorption process for removal of pharmaceutical contaminants from aqueous solutions and wastewater”, *Journal of Water and Wastewater Science and Engineering*, 4(4): 34-50 (2020)
- 72) **Seyed Jamaledin Peighambardoust**, Hossein Heshmat Ebrahim Hesari, Abolfazl Shenavar, “Preparation of polystyrene-starch composite by melt extrusion and evaluation of its mechanical, thermal biodegradation properties”, *Amirkabir Journal of Mechanical Engineering*, 52(10): 71-80 (2020)
- 73) **Seyed Jamaledin Peighambardoust**, Seyed Hadi Peighambardoust, Niloufar Pournasir, Parisa Mohammadzadeh Pakdel, “Properties of active starch-based films incorporating a combination of Ag, ZnO and CuO nanoparticles for potential use in food packaging applications”, *Food Packaging and Shelf Life*, 22: 100420 (2019)
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- 104)** Mehdi Amjadi, Soosan Rowshanzamir, **Seyed Jamaledin Peighambardoust**, Saeid Sedghi, “Preparation, Characterization and Cell Performance of Durable Nafion/SiO₂ Hybrid Membrane for High-Temperature Polymeric Fuel Cells”, Journal of Power Sources, 210: 350-357 (2012)
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8. Conference Papers

- Papers Presented in International Conferences

- 1) Shima Abdollahian Aghbolagh, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Reza Mohammadi, "Investigation of the kinetic behaviour of crystal violet dye adsorption process from aqueous solution using bio-charcoal prepared from conifer cone", 21th International Chemistry Congress (ICS), 26-28 July 2022, Azarbaijan Shahid Madani University, Tabriz, Iran
- 2) Fatemeh Ramezani, Rauf Foroutan, Amir Sh. Saljooghi, **Seyed Jamaledin Peighambardoust**, "Removal of MB dye from aqueous solution using biochar prepared from orange peel", 21th International Chemistry Congress (ICS), 26-28 July 2022, Azarbaijan Shahid Madani University, Tabriz, Iran
- 3) Mina Mollazadeh Azari, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Reza Mohammadi, "Investigation of the kinetic behaviour of methylene blue dye adsorption process from aqueous solution using bio-charcoal prepared from tea waste", 21th International Chemistry Congress (ICS), 26-28 July 2022, Azarbaijan Shahid Madani University, Tabriz, Iran
- 4) Mehran Alizadeh, **Seyed Jamaledin Peighambardoust**, "Evaluation of Mechanical and Physical Properties of Luffa Cylindrica Reinforced Bio-composites", The 7th International Conference on Composites : Characterization, Fabrication and Application (CCFA-7), 23-24 December 2020, Sahand University of Technology, Tabriz, Iran
- 5) Rauf Foroutan, Reza Mohammadi, **Seyed Jamaledin Peighambardoust**, "Production of kaolin/MnO₂ composite and evaluation of the effect of time and initial concentration of methylene blue dye on its recovery and removal from aqueous solution", 8th International Conference on Nanostructures (ICNS8), 18-20 November 2020, Sharif University of Technology, Tehran, Iran
- 6) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, Abdolrasoul Oromiehie, "Preparing and investigating the properties of antioxidant active polymeric films containing BHT", 3rd International and 26th National Iranian Food Science and Technology Congress, 17-19 September 2019, Tarbiat Modarres University, Tehran, Iran
- 7) Farshad Adel Alijan, **Seyed Jamaledin Peighambardoust**, "Application of ceramic membranes and pressure sweep adsorption process for production of pure hydrogen", 2nd International Conference of New Research Achievements in Chemistry and Chemical Engineering, 5 May 2016, Amirkabir University of

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- 9) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Preparation and Characterization of LDPE-Organoclay Nanocomposite Films for Food Packaging Applications”, 3rd International Conference on Nanotechnology (ICN 2015), 27-28 August 2015, Istanbul, Turkey
- 10) Mahsa Azimi, **Seyed Jamaledin Peighambardoust**, “Physical properties and proton conductivity measurements of Nafion-heteropoly acid nanocomposite membranes containing nanoclay”, 5th International Congress on NanoScience and Nanotechnology (ICNN 2014), 22-24 October 2014, Tarbiat Modares University, Tehran, Iran
- 11) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, Abolfazl Shenavar, “Antimicrobial studies of nanocomposite films containing Ag, ZnO and CuO nanoparticles for food packaging”, 5th International Congress on NanoScience and Nanotechnology (ICNN 2014), 22-24 October 2014, Tarbiat Modares University, Tehran, Iran
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- 23) Gholamreza Amirkhanlou, Soosan Roshanzamir, **Seyed Jamaledin Peighambardoust**, “Effect of sulfonation degree (DS) on the chemical and thermal stability of sulfonated polyether ether ketone (sPEEK) membranes for fuel cell applications”, 7th International Chemical Engineering Congress & Exhibition, 21-24 November 2011, Kish Island, Iran
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- 26) Reza Fareghi Alamdari, **Seyed Jamaledin Peighambardoust**, “Anti-corrosive properties of the conductive polyaniline-organoclay nanocomposites synthesized via one-pot in situ emulsion polymerization method”, International Conference on Nanotechnology: Fundamentals and Applications, 4-6 August 2010, Ottawa, Ontario, Canada
- 27) Samaneh Rakhshanpouri, **Seyed Jamaledin Peighambardoust**, Soosan Rowshanzamir, “Water Transport in a Seven-Layer Model of PEMFC”, The 5th International Ege Energy Symposium and Exhibition (IEESE-5), 27-30 June 2010, Pamukkale University, Denizli, Turkey

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- 33) Mehdi Amjadi**, Soosan Rowshanzamir, Mohammad Hassan Eikani, Saeid Sedghi, **Seyed Jamaledin Peighambardoust**, “High Temperature Proton Exchange Membrane Fuel Cells: Advantages and Technical Challenges”, 18th International Congress of Chemical and Process Engineering (CHISA 2008), 24-26 August 2008, PRAGUE, CZECH REPUBLIC
- 34) Seyed Jamaledin Peighambardoust**, Behzad Pourabbas, “Preparation and Characterization of Nylon-6/PPy/MMT Nanocomposite Blends”, The 8th International Seminar on Polymer Science and Technology (ISPST 2007), 23-25

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- 36) Behzad Pourabbas, **Seyed Jamaledin Peighambardoust**, “Preparation and Electrical Properties of Nylon-6/PPy/MMT Nanocomposites”, 3rd International Conference on Times of Polymers and Composites (TOP 2006), 18-22 June 2006, Ischia, Italy
- 37) Behzad Pourabbas, **Seyed Jamaledin Peighambardoust**, “PTC Effect and electrical properties in polymeric composites prepared from carbon blacks modified with Ni and Au particles”, 8th International Symposium on Polymers for Advanced Technologies (PAT 2005), 13-16 September 2005, Budapest, Hungary
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- 2) Mehran Alizadeh, **Seyed Jamaledin Peighambardoust**, Rauf Foroutan, Hamidreza Azimi Zonouzi, “Comparison of the kinetic behavior of heavy metal ion adsorption by carbonized *Luffa Cylindrica* biowaste”, 17th Iran National Congress of chemical Engineering, 9-11 November 2021, Ferdowsi University of Mashhad, Mashhad, Iran
- 3) Rauf Foroutan, **Seyed Jamaledin Peighambardoust**, “Production of kaolin/MnO₂ composite and investigation of the effect of contact time and initial concentration of methylene blue dye on its removal from aqueous solution”, 17th Iran National Congress of chemical Engineering, 9-11 November 2021, Ferdowsi University of Mashhad, Mashhad, Iran

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- 6) Ahmadreza Mohammadian Soodmand, Behrad Barzegar, Hassan Aghdasinia, Farhad Gadianlu, Amir Saeidizad, **Seyed Jamaledin Peighambardoust**, Mortaza Gholizadeh, “Physical and chemical activation methods of pyrolytic coke as industrial dye adsorbents”, The first national conference on waste green management, 9-11 June 2021, University of Mohaghegh Ardabili, Ardebil, Iran
- 7) Omid Aghamohammadi Babil, **Seyed Jamaledin Peighambardoust**, Nasser Arsalani, Parisa Mohammadzadeh Pakdel, “Synthesis and evaluation of nanocomposite hydrogels based on carboxymethyl cellulose grafted polyacrylamide-containing nanoclay for wastewater treatment”, The 16th Iranian National Congress of Chemical Engineering, 19-21 January 2019, Amirkabir University of Technology, Department of Chemical Engineering, Tehran, Iran
- 8) Arezou Pourloftali, **Seyed Jamaledin Peighambardoust**, Nasser Arsalani, Parisa Mohammadzadeh Pakdel, “Nanocomposite hydrogel based on carboxymethyl cellulose grafted poly(methacrylic acid) containing Fe₃O₄ nanoparticles for removal of metallic copper ions”, The 16th Iranian National Congress of Chemical Engineering, 19-21 January 2019, Amirkabir University of Technology, Department of Chemical Engineering, Tehran, Iran
- 9) Parisa Meshinchi, Ahmadreza Mohammadian Soudmand, Hassan Aghdasinia, **Seyed Jamaledin Peighambardoust**, “Statistical optimization using by central composite design (CCD) for adsorption process of ciprofloxacin by using of α -cellulose/clay nanocomposite”, The 16th Iranian National Congress of Chemical Engineering, 19-21 January 2019, Amirkabir University of Technology, Department of Chemical Engineering, Tehran, Iran
- 10) Parisa Meshinchi, Hassan Aghdasinia, **Seyed Jamaledin Peighambardoust**,

Mahmoud Zarei, "Evaluation of the adsorption kinetics of the antibiotic ciprofloxacin by nano-clay", The National Conference on Treatment of Water, Air and Soil (TWAS2018), 3 July 2018, Chemistry and Chemical Engineering Research Center of Iran, Tehran, Iran

- 11) Asma Rezaei, **Seyed Jamaledin Peighambardoust**, Hassan Aghdasinia, Saeid Asgharizadeh, "Efficiency improvement in polymeric solar cells with nano-structured Indium Tin oxide electrodes", 23th Iranian Conference on Optics and Photonics (ICOP 2017) and 9th Iranian Conference on Photonics Engineering and Technology (ICPET 2017), 31 January - 2 February 2017, Tarbiat Modares University, Tehran, Iran
- 12) Niloufar Pournasir, **Seyed Jamaledin Peighambardoust**, "Fabrication and evaluation of antibacterial nanocomposite films-based biopolymer containing metallic nanoparticles for food packaging applications", Second International Conference in New Research on Chemistry & Chemical Engineering, 5 May 2016, Amirkabir University of Technology, Tehran, Iran
- 13) Farshad Adel Alijan, **Seyed Jamaledin Peighambardoust**, "The process of refining paraffin oils via hydrogenation method", 1st National Symposium on Refinery Processes, 17 February 2016, Sahand University of Technology, Tabriz, Iran
- 14) Mahsa Azimi, **Seyed Jamaledin Peighambardoust**, "Selectivity of Nafion-heteropolyacid nanocomposite membranes containing nanoclay for direct methanol fuel cell applications", 3rd Hydrogen & Fuel Cell Conference, 12-13 May 2015, Iranian Research Organization for Science and Technology (IROST), Tehran, Iran
- 15) Mahsa Azimi, **Seyed Jamaledin Peighambardoust**, "Investigation of proton Conductivity in modified Nafion-MMT-CsPW Nanocomposite membranes", 2nd National Congress and Workshop on Nanoscience and Nanotechnology (NCWNN), 20-21 May 2015, Kharazmi University, Tehran, Iran
- 16) Abdolkhaled Mohammadi, **Seyed Jamaledin Peighambardoust**, Ali Akbar Entezami, "Synthesis of polyaniline-functionalized graphene nanocomposites and evaluation of their electrochemical properties", 2nd National Congress and Workshop on Nanoscience and Nanotechnology (NCWNN), 20-21 May 2015, Kharazmi University, Tehran, Iran
- 17) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, "Investigation of the Metallic Nanoparticles' Application in Nanocomposite Films as Active Films in Food Packaging", 22th National Iranian Food Science and Technology Congress, 30-31 August 2013,

Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran

- 18) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Antimicrobial Food Packaging by Natural Antimicrobial Materials as Active Packaging”, 22th National Iranian Food Science and Technology Congress, 30-31 August 2014, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran
- 19) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “The application of chitosan in the preparation of food antimicrobial packaging films”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 20) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “A review of Active Antimicrobial Packaging in the Food Industries”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 21) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Investigation of the use of organo-modified clay nanoparticles in preparation of antimicrobial nanocomposite films for food packaging applications” 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 22) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “A review of recent advances in starch-based polymer compositions, polyvinyl alcohol, nanocomposites, and their biodegradability”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 23) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Applications of active and intelligent packaging systems for meat and muscle products”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 24) Soheila Samadpour Hendvari, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “A review of different types of biodegradable polymers for food packaging and their improved efficiency methods by adding nanoparticles”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 25) Soheila Samadpour Hendvari, Seyed Hadi Peighambardoust, **Seyed Jamaledin**

- Peighambardoust**, “Antimicrobial properties of polyethylene nanocomposite films containing silver modified clay nanoparticles in food packaging”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 26) Soheila Samadpour Hendvari, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Antimicrobial properties of polyethylene nanocomposite films containing copper modified clay nanoparticles in food packaging”, 21th National Iranian Food Science and Technology Congress, 29-31 October 2013, Shiraz University, Shiraz, Iran
- 27) Samira Dehghani, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Investigation of antimicrobial properties of polyethylene active nanocomposite films containing Ag, ZnO and CuO nanoparticles”, 14th Nanotechnology Student Conference, 25-26 December 2013, Tehran University of Medical Science, Tehran, Iran
- 28) Javaneh Sakhaei Niroumand, **Seyed Jamaledin Peighambardoust**, Abolfazl Shenavar, “Preparation of flame-retardant polystyrene nanocomposites and evaluation of their flammability and thermal Properties”, 14th Nanotechnology Student Conference, 25-26 December 2013, Tehran University of Medical Science, Tehran, Iran
- 29) Seyedeh Homa Fasihnia, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Antimicrobial properties of polyethylene active nanocomposite films containing Organo-modified clay nanoparticles”, 14th Nanotechnology Student Conference, 25-26 December 2013, Tehran University of Medical Science, Tehran, Iran
- 30) Soheila Samadpour Hendvari, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Antimicrobial properties of polyethylene active nanocomposite films containing copper ions modified clay nanoparticles”, 14th Nanotechnology Student Conference, 25-26 December 2013, Tehran University of Medical Science, Tehran, Iran
- 31) Soheila Samadpour Hendvari, Seyed Hadi Peighambardoust, **Seyed Jamaledin Peighambardoust**, “Antimicrobial properties of polyethylene active nanocomposite films containing metallic silver modified clay nanoparticles”, 14th Nanotechnology Student Conference, 25-26 December 2013, Tehran University of Medical Science, Tehran, Iran

- 32) Mahsa Azimi, **Seyed Jamaledin Peighambardoust**, Mir Ghasem Hosseini, "Modification of Nafion Membranes with Different Clays for Direct Methanol Fuel Cell Applications", 6th Iranian Fuel Cell Seminar, 12-13 March 2013, Shahid Rajaei Teacher Training University (SRTTU), Tehran, Iran
- 33) Soosa Rowshanzamir, **Seyed Jamaledin Peighambardoust**, Gholamreza Amir Khanlou, "Chemical and Oxidative Stability of Self-humidifying Membranes Based on sPEEK for Proton Exchange Membrane Fuel Cell Applications", 6th Iranian Fuel Cell Seminar, 12-13 March 2013, Shahid Rajaei Teacher Training University (SRTTU), Tehran, Iran
- 34) **Seyed Jamaledin Peighambardoust**, Soosan Rowshanzamir, Mir Ghasem Hosseini, "Fabrication and evaluation of the self-humidifying nanocomposite proton exchange membrane based on sPEEK and proton conducting for polymeric fuel cells", 11th Nanotechnology Student Conference, 22-23 February 2012, AmirKabir University of Technology, Tehran, Iran
- 35) **Seyed Jamaledin Peighambardoust**, Soosan Rowshanzamir, Mohammad Hassan Eikani, Mehdi Amjadi, "Study and investigation of different types of polymeric proton exchange membranes as PEM fuel cell electrolytes", The First National Conference on Hydrogen & Fuel Cell, 20-21 January 2009, Iran University of Science and Technology (IUST), Tehran, Iran
- 36) **Seyed Jamaledin Peighambardoust**, Soosan Rowshanzamir, Mohammad Hassan Eikani, Mehdi Amjadi, "Evaluation of modification and enhancement efficiency of PEM fuel cell proton exchange polymer membranes", The First National Conference on Hydrogen & Fuel Cell, 20-21 January 2009, Iran University of Science and Technology (IUST), Tehran, Iran
- 37) Mehdi Amjadi, Soosan Rowshanzamir, Mohammad Hassan Eikani, **Seyed Jamaledin Peighambardoust**, "Modification of proton exchange membranes with metal oxides by sol-gel and casting Methods", 12th Iranian National Chemical Engineering Congress, 20-23 October 2008, Sahand University of (IUST), Tabriz, Iran
- 38) **Seyed Jamaledin Peighambardoust**, Behzad Pourabbas, "Polypyrrole-clay nanocomposites: evaluation of synthesis via chemical oxidation method, morphology and their electrical-thermal properties", 1st Iranian Petrochemical Conference (IPC 2008), 22-23 July 2008, Iran National Petrochemical Company, Tehran, Iran
- 39) Mehdi Amjadi, Soosan Rowshanzamir, **Seyed Jamaledin Peighambardoust**,

“High temperature polymeric proton exchange membrane fuel cells: advantages and challenges”, National Conference on fuel, energy and environment, 27-29 May 2008, Materials and Energy Research Center (MERC), Tehran, Iran

40) Mehdi Amjadi, Soosan Rowshanzamir, **Seyed Jamaledin Peighambardoust**, “The advantages and challenges of high temperature polymer electrolyte fuel cells”, The First Conference on Oil, Gas and Petrochemical, National Conference on fuel, energy and environment, 21 May 2008, Islamic Azad University Gachsaran Branch, Gachsaran, Iran

41) **Seyed Jamaledin Peighambardoust**, Behzad Pourabbas, “Investigation of morphology and electrical properties of Polypyrrole conductive polymer synthesized via chemical oxidation method”, 11th Iranian National Chemical Engineering Congress, 28-30 November 2006, Tarbiat Modares University, Tehran, Iran

9. Completed and Current Research Projects

1) “Production of heterogeneous catalysts based on natural and synthetic materials for applications in sonophoto-catalytic process to remove dye contaminants in wastewater”, International Research Cooperation Program of University of Tabriz (TabrizU-300) in Collaboration with the Polytechnic University of Montreal in Canada, Sponsored by Vice chancellors in research and technology, University of Tabriz, 2021-2022 (Completed).

2) “Modification of fluorinated proton exchange membranes by clay nanoparticles for improved performance (enhanced selectivity) of direct methanol fuel cell (DMFC)”, Sponsored by Vice chancellors in research and technology, University of Tabriz, 2013-2014 (Completed).

3) “Fabrication of nanocomposite polymeric films and their application in food packaging”, Sponsored by Vice-Presidency for Science and Technology, 2011-2012 (Completed).

4) “Fabrication and characterization of non-fluorinated self-humidifying proton exchange composite membranes with the aim of improving ion conductivity for PEM fuel cells”, Sponsored by Iran National Science foundation (INSF), 2010-2011 (Completed).

5) “Fabrication of semiconductor nanocomposites based on conductive polypyrrole (PPy) and investigation of their PTC behaviour”, Sponsored by Iran Nanotechnology Innovation Council (INIC), 2004-2005 (Completed).

6) “Fabrication of nylon 6-clay nanocomposites for food packaging applications”, Sponsored by Vice chancellors in research and technology, Sahand University of technology, 2004-2005 (Completed).

7) “Fabrication of repeating current limiters based on Positive Temperature Coefficient (PTC) polymeric resistors”, Sponsored by Tavanir Organization, Ministry of Energy, 2003-2004 (Completed).

10. Thesis Supervised

a) PhD Thesis Supervising

1) “Synthesis and evaluation of the biopolymer-based nanocomposite hydrogels including acrylic acid and itaconic acid copolymers to remove dyes from wastewater”, Parisa Mohammadzadeh Pakdel, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

2) “Preparation of nanocomposites based on biopolymer containing nanoclay modified by metal-organic frameworks (MOF) for application in controlled release of anti-cancer drugs”, Javaneh Sakhaei Niroumand, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

3) “Improvement of the properties of nanocomposite hydrogel scaffolds containing Hydroxyapatite (HAP) via nanoclay for bone tissue engineering application”, Akram Babakhani, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

4) “Preparation and improvement of heterogeneous catalysts from agricultural wastes for biodiesel production from edible and non-edible oils”, Rauf Foroutan, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

5) “Synthesis and evaluation of magnetic adsorbents based on carbon modified by ZIF-8 metal - organic framework for the removal of antibiotic pharmaceutical contaminants from aqueous solutions”, Roya Tahmasebpour, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

6) “Investigation of the performance of sonophotocatalytic activity of synthetic zeolite composite containing metal oxides in the degradation process of dyes”, Mahsa Foroughi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

b) PhD Thesis Advising

1) “Production and studying of nanocomposites packaging films based on low density polyethylene (LDPE) in food industry”, Faranak Beigmohammadi, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

2) “Improvement of the yield, quality and shelf life of quark cheese”, Seyed Amir Seyed Moslemi, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

3) “Preparation of polypropylene-based active packaging films with antioxidant and antimicrobial materials for increasing doughnut shelf life”, Seyedeh Homa Fasihnia, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

4) “Optimizing the effective parameters on the integrated photocatalytic adsorption/degradation process in the removal of selected dyes using composites of layered double hydroxides (LDH) - carbon obtained from agricultural waste”, Mahsa Zarei, Faculty of Civil and Environment, Amirkabir University of Technology (Completed)

5) “Active edible coating of de-hulled hazelnut by panning for application as chocolate center fill: investigating process parameters and the type of coating on hazelnut and chocolate quality”, Mehdi Ahanin Jan, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completing)

6) “Production and modification of the fungus *Fusarium oxysporum* biomass using magnetic nanoparticles and metal-organic framework compounds and their use in removing heavy metals from aqueous solution, investigation on antifungal effects and the ability to stimulate the immune system in small laboratory mice”, Simin Khosravi, Falavarjan branch of Islamic Azad University (Completing)

7) “Biomass production of the fungus *Mucor hiemalis* and its modification with magnetic nanoparticles and layered double hydroxides (LDH) nanoparticles to remove cationic dyes and some pathogenic fungi from aqueous solution: investigation on antifungal effects and the ability to stimulate the immune system in small laboratory mice”, Solmaz Ghojavand, Falavarjan branch of Islamic Azad University (Completing)

c) MSc Thesis Supervising

1) “Preparation of nanocomposite films based on LDPE-organically modified nanoclay and investigating their physical, mechanical and antimicrobial properties as active films for food packaging”, Seyedeh Homa Fasihnia, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

2) “Preparation of nanocomposite films based on LDPE-metallic nanoparticles and investigation of their antimicrobial properties as active films for food packaging”, Samira Dehghani, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

3) “Fabrication of nanocomposite films based on LDPE and HDPE-clay modified containing metallic nanoparticles and investigating their antimicrobial properties as

active films for food packaging”, Soheila Samadpour Hendvari, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

4) “Preparation of flame-retardant polystyrene nanocomposites and evaluation of their flammability properties”, Javaneh Sakhaei Niroumand, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

5) “Study of thermodynamic properties of moist air in high temperatures and pressures and propose a predictive model”, Ehsan Amiri, Islamic Azad University Ahar Branch (Completed)

6) “Simulation and improvement process conditions of hydrogen plant's reformer of Tabriz oil refinery by Aspen-Hysys simulation software”, Mahsa Azimi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

7) “Preparation of flame-retardant polystyrene via in-Situ bulk polymerization method and evaluation of its flammability properties”, Ramin Faridvand, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

8) “Preparation of biodegradable polymer blends based on high impact polystyrene (HIPS) and evaluation of their properties”, Ali Mahmoudi Yayshahri, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

9) “Preparation of biodegradable polymer blends based on general purpose polystyrene (GPPS) and evaluation of their properties”, Hossein Heshmat Ebrahim Hesari, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

10) “Synthesis of graphene-polyaniline nanocomposites and evaluation of their electrochemical properties”, Abdolkhaled Mohammadi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

11) “Preparation and evaluation of antimicrobial properties of nanocomposite films based on natural polymers containing metal nanoparticles in food packaging”, Niloufar Pournasir, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

12) “The effect of clay nanoparticle on antimicrobial properties of nano-composite films based on natural polymer for food packaging”, Rohollah Khodaeimehr, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

13) “Preparation and evaluation of antimicrobial properties of nanocomposite films based on natural polymers containing metal oxide nanoparticles (MO_2) for food packaging”, Hamed Hajizadeh, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

- 14) "Preparation and evaluation of electrical properties of nanocomposite adhesive based on epoxy resin with using the electrically conductive nanofiller", Hamed Rikhtegar, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 15) "Preparation and investigation of antimicrobial properties of nanobiocomposites films based on carboxymethyl cellulose for food packaging", Yadollah Ebrahimi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 16) "Preparation of nanobiocomposites based on carboxymethyl cellulose (CMC) and evaluation of their antimicrobial properties", Sirous Zahed Karkaj, Islamic Azad University Ahar Barach (Completed)
- 17) "Preparation and evaluation of the polymeric drug delivery system based on PLA-PEG block copolymer containing carbon nanotubes and iron nanoparticles for controlled release of Docetaxel", Farshid Hosseinpanahi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 18) "Investigation on effect of carbon black modification on electrical properties of nanocomposite adhesive based on epoxy resin", Neda Masaebi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 19) "Swelling behavior evaluation of nanocomposite hydrogels containing nanomaterials", Maryam Abdolhosseinzadeh, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 20) "Investigation of graft acrylonitrile butadiene styrene (g-ABS) latex coagulation process by different coagulants and comparison of resulting polymers' properties", Babak Zadmoheeni, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 21) "Evaluation and production of antistatic properties in acrylonitrile butadiene styrene polymer (ABS) based on using additives", Farhad Shaghaghi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 22) "Design and simulation plasmonic effect of Ag and Au nanoparticles on performance of polymer solar cells", Asma Rezaei, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 23) "A study on the removal of antibiotic materials from aqueous solutions by using the adsorbent systems containing nano clay", Parisa Meshinchi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 24) "Synthesis and evaluation of carboxymethyl cellulose grafted methacrylic acid/Fe₃O₄ - based nanocomposite hydrogels for removal of Cu (II) from aqueous solutions", Arezou

Pourlotfali, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

25) “Synthesis and evaluation of nanocomposite hydrogels based on carboxymethyl cellulose grafted polyacrylamide-containing nanoclay for wastewater treatment”, Omid Aghamohammadi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

26) “Synthesis and evaluation of nanocomposite hydrogels based on alginate grafted acrylamide containing graphene oxide nanoparticles for industrial wastewater treatment”, Sevda Pashaei Fakhri, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

27) “Synthesis and evaluation of nanocomposite hydrogels based on carboxymethyl cellulose grafted acrylamide containing carbon-based nanofiller for industrial wastewater treatment”, Elmira Ghargharechi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

28) “Synthesis and evaluation of nanocomposite hydrogels based on sodium alginate grafted acrylamide containing carbon-based nanofiller for industrial wastewater treatment”, Fateh Karimzadeh Halimi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

29) “Synthesis and evaluation of nanocomposite hydrogels based on carboxymethyl cellulose-alginate blend/graphene oxide for dye removal from wastewater”, Abbas Mostafaei, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

30) “Synthesis and evaluation of poly(methacrylic acid-co-acrylamide) nanocomposite hydrogels containing nanoclays for removal of dyes from wastewater”, Hamid Safarzadeh, Chemical Engineering Department, Caspian Faculty of Engineering, University of Tehran (Completed)

31) “Synthesis and evaluation of biopolymer-based nanocomposite hydrogels graft by poly(methacrylic acid-co-acrylamide) for removal of dyes from aqueous solutions”, Hamzeh Khatooni, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

32) “Stabilization of polyoxomethals and perovskites on polyvinylidene fluoride and polysulfone based polymeric membranes for industrial wastewater treatment”, Abolfazl Sadeghi Azar, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

- 33)** “Synthesis of carboxymethyl cellulose/hydroxyapatite/activated carbon (CMC/HAp/AC) composite and its use as an adsorbent in the removal of cationic dyes”, Mahdiah Vatankhah, Polymer Engineering Department, Faculty of Chemistry, University of Tabriz (Completed)
- 34)** “Preparation of nanocomposite adsorbents based on biopolymer containing clay modified by organic-metal frameworks (MOF) and their use in the adsorption of heavy metals from aqueous solutions”, Amirreza Jaafari Monavvar, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 35)** “Evaluation of UV/H₂O₂/O₃ advanced oxidation process for reduction of TBC from Tabriz Petrochemical wastewater”, Saeid Sheikhi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 36)** “Investigation of removal of heavy metals from aqueous solutions using modified waste petroleum coke”, Behrad Barzegar, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 37)** “Surface modification of cellulose fibers derived from *Luffa Cylindrica* biopolymer by organic monomers for removal of heavy metals from aqueous solutions”, Mehran Alizadeh, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 38)** “Modification investigation of activated carbon obtained from *Luffa Cylindrica* by magnetic nanoparticles in composites based on biopolymer containing them for removal of antibiotics from aqueous solutions”, Baharak Fakhimi Najafi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 39)** “Modification of activated carbon obtained from *Luffa Cylindrica* by using Layered Double Hydroxides (LDH) in composites based on biopolymer containing them for removal of cationic dyes from aqueous solutions”, Shabnam Imani, Polymer Engineering Department, Faculty of Chemistry, University of Tabriz (Completed)
- 40)** “Use of natural and synthetic zeolites as an effective and efficient adsorbent in removing color molecules from aqueous solutions”, Touhid Hosseini, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 41)** “Preparation of composite adsorbents based on biopolymer - containing biochar and magnetic nanoparticles to remove dye contaminants from aqueous solution”, Mina Mollazadeh Azari, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 42)** “Preparation of biochar-based adsorbents modified by magnetic nanoparticles and

layered double hydroxides (LDH) to remove dye contaminants from aqueous solution”, Shima Abdollahian, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

43) “Evaluation the performance of hydrochar from licorice root pulp as adsorbent in removal of cationic dyes from aqueous solutions”, Ali Akbari, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

44) “Preparation of biopolymer-based composite hydrogels containing hydroxyapatite modified by layered double hydroxides (LDH) to remove dyes from aqueous solutions”, Alireza Masroor, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

45) “Evaluation of adsorption performance of nanocomposite hydrogel adsorbent of xanthan gum containing magnetic biochar nanoparticles to remove dyes from aqueous solutions”, Alireza Zavar Golzari, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

46) “Preparation of adsorbent obtained from walnut shell biochar modified by nanoparticles and metal-organic framework (MOF) for the removal of heavy metals from aqueous solutions”, Armin Hamdi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

47) “Fabrication of magnetic composite adsorbent obtained from biochar modified by metal-organic framework based on zirconium (MOF-808) to remove cationic dyes from aqueous solution”, Kosar Rasoolpour, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

48) “Modification of carbon obtained from melamine waste by starch and magnetic nanoparticles as adsorbent for antibiotics removal from aqueous solutions”, Somayyeh Rezaei Aghdam, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

49) “Preparation of magnetic nanocomposite based on carbon obtained from pyrolysis process and using it as an adsorbent for cationic dyes' removal from aqueous solution”, Zahra Mahdavi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)

50) “Development of copolymer hydrogel based on chitosan grafted with polyacrylamide containing Diatomaceous soil modified with layered-double hydroxide (LDH) for cationic dye removal from aqueous solution”, Mohaddeseh Mardani, Faculty of

Chemical and Petroleum Engineering, University of Tabriz (Completing)

51) “Fabrication of composite copolymer hydrogel based on biopolymer containing clay modified with ZIF-9 to remove heavy metal ions from aqueous solutions”, Roghayyeh Rashidi, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

52) “Preparation of magnetic composite based on biochar obtained from corn straw modified with polydopamine to remove cationic dyes from aqueous solutions”, Aylar Gholipour, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

53) “Preparation of biocomposite hydrogel grafted with polyacrylamide containing magnetic coke as an adsorbent to remove cationic dyes from aqueous solutions”, Ali Abdollahi Beirami, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completing)

d) MSc Thesis Advising

1) “Preparation and evaluation of fluorinated nanocomposite proton exchange membrane with high selectivity for DMFC applications”, Mir Mohammad Arif, Islamic Azad University Ahar Barach (Completed)

2) “Simulation and improvement process conditions of LTSC and HTSC reactors of Tabriz oil refinery”, Rohollah Timareh, Islamic Azad University Ahar Barach (Completed)

3) “Active packaging of carrot juice with nanocomposite film based on LDPE-metallic nanoparticles and organically modified nanoclay”, Leila Poursharif, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

4) “Active packaging of Tabriz traditional cheese with nanocomposite film based on LDPE-metallic nanoparticles and organically modified nanoclay”, Parisa Abdolsattarfi, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

5) “Active packaging of ground beef with nanocomposite film based on LDPE-metallic nanoparticles and organically modified nanoclay”, Omid Sadeghian Kaffash, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

6) “Modelling the migration of metal nanoparticles from polyethylene nanocomposites films as active food packaging”, Aynaz Molayi, Department of Food Science and Technology, Faculty of Agriculture, University of Tabriz (Completed)

- 7) "Preparation of (acrylic-polyaniline) composite adhesive and investigating its mechanical and electrical properties", Milad Azami, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 8) "Removal of heavy metals from industrial wastewater by modern crystallization process and investigation of effective parameters on its efficiency", Parvaneh Khalati Barenj, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 9) "Influence of tire co-feeding on the properties of products in the catalytic (zeolite) pyrolysis of poplar wood", Seyed Milad Hosseini, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 10) "Influence of polyethylene terephthalate co-feeding on the properties of products in the catalytic (zeolite) pyrolysis of poplar wood", Yousef Keramatian, Faculty of Chemical and Petroleum Engineering, University of Tabriz (Completed)
- 11) "Development and characterization of next generation flexible dielectrical and electrical composites", Mehdi Jasourian, Material Engineering Department, Faculty of Mechanical Engineering, University of Tabriz (Completed)
- 12) "Synthesis and characterization of chitosan/polyacrylic acid/Fe₃O₄ magnetic nanocomposite hydrogel and evaluation of its application for deltamethrin pesticide removal form aqueous solutions", Hossein Rasouli, Department of Organic and Biochemistry, Faculty of Chemistry, University of Tabriz (Completed)
- 13) "Removal of copper and nickel heavy metals from aqueous solution using magnetic composite carbon nanotube/zinc oxide/manganese ferrite", Ahsan Sagheb Asl, Faculty of Chemical and Petroleum Engineering, University of Tabriz ((Completed)
- 14) "Investigation of mechanical properties of montmorillonite and graphene nanocomposites", Jalil Navadeh Soleiman, Material Engineering Department, Faculty of Mechanical Engineering, University of Tabriz (Completed)
- 15) "Performance Investigation char obtained from the pyrolysis of textiles as a catalyst in the polymerization process of different bio-oil phase materials obtained from this pyrolysis", Mahrou Moshaver, Chemical and Petroleum Engineering, University of Tabriz (Completing)
- 16) "Studying the effect of Nickel - Zeolite 4A catalyst on the pyrolysis process of waste paper for fuel production", Hassan Yari, Chemical and Petroleum Engineering, University of Tabriz (Completing)

11. Teaching Experiences

Ph.D. Courses

- Engineering Properties of Polymers

M.Sc. Courses

- Physical and Mechanical Properties of Polymers and Composites
- Advanced Fluid Mechanics
- Polymer Processing
- Polymer Technology
- Advanced Numerical Methods

B.Sc. Courses

- Unit Operation I
- Chemical Engineering Thermodynamics I
- Principles of Polymerization
- Petrochemical Processes
- Fluid Mechanics
- General Chemistry
- Petroleum Fractions Calculations
- Numerical Methods

12. Memberships

- Iranian Polymer Society
- Iranian Chemical Engineering Society
- Iran National Science foundation (INSF) as Reviewer
- Iran Society of Nanotechnology