#### **CURRICULUM VITAE**

#### Mohammad Jafarzadeh

#### **Personal Data**

• Date and place of birth: 1976, Iran

• Marital status: Married

• Languages: Persian (native), English (competent)

• Job position: Associate Professor

• Address: Faculty of Chemistry, Razi University,

Kermanshah, Iran

• E-mail: m.jafar@razi.ac.ir

### **Education Records**

2006- 2010 Ph.D. in Chemistry, Universiti Sains Malaysia (USM), Penang, Malaysia

**Ph.D. Dissertation**: Silica nanoparticles, synthesis, modification and their applications in the fabrication of polypyrrole-based silica nanocomposites, **Supervisor**: Prof Ismail Ab Rahman

2001-2004 M.Sc. in Chemistry, University of Kurdistan (UOK), Sanandaj, Iran

M.Sc. Thesis: New Applications of some heteropolyacids and polyoxometalates in organic

synthesis, Supervisor: Dr Kamal Amani

1994-1999 B.Sc. in Chemistry, Islamic Azad University; North Tehran Branch, Iran

B.Sc. Project: The study of production of Tritium, Supervisor: Prof Hossein Ghafourian,

Nuclear Research Center, Atomic Energy Organization of Iran (AEOI), Tehran

### **Research Interests**

- Nanomaterials for Catalysis
- Nanomaterials for Energy Generation
- Metal-Organic Frameworks for Gas Storage

# **Experiences**

#### Research

Visiting Scientist, Départment de Chimie Moléculaire, Université Grenoble Alpes, Grenoble,
 France, Host: Dr. Sylvie Chardon, Feb. 2020

- Guest researcher, Center for Catalysis Sustainable Chemistry, Technical University of Denmark (DTU), Lyngby, Denmark, Host: Prof. Søren Kegnæs, July 2019
- Guest researcher, Institute for Chemistry, Aarhus University, Aarhus, Denmark, Host: Prof. Kim Daasbjerg, July-Sept. 2015, 2016, 2017, and 2018
- Postdoctoral fellow, Faculty of Sciences and Natural Resources, Universiti Malaysia Sabah,
  Supervisor: Prof. Jedol Dayou, Jun 2013-Sept. 2014
- Visiting researcher, School of Chemical Sciences, Universiti Sains Malaysia, Host: Prof. Rohana Adnan, Aug-Sept. 2011

## **Teaching**

- Lecturer (BSc level courses: General Chemistry I, General Chemistry II, Organic Chemistry II, Organic Chemistry III, Organic Chemistry III, Separation & Identification of Organic Compounds Lab., Principle of Polymer Chemistry, Spectroscopy in Organic Chemistry, Organic Synthesis (disconnection approach), Pharmaceutical Chemistry; MSc level courses: Organic Synthesis Methods, New Topics in Organic Chemistry, Nanochemistry, Physical Organic Chemistry, Heterocyclic Compounds; PhD level course: Synthetic Methods for Nanomaterials II, Razi University, Since Jan 2011
- Invited lecturer (Course: Organic Chemistry II) Universiti Malaysia Sabah (UMS), Sept 2013
- Invited lecturer (Courses: Principle of Polymer Chemistry, Polymer Science and Technology,
  Organic Chemistry II), Islamic Azad University, Shahre-rey Branch, 2010
- Teaching assistant and tutor (Courses: Organic Chemistry II, Organic Chemistry III, Inorganic Lab.), USM, 2007-2009
- Teaching assistant (Courses: Organic Chemistry I Lab., Organic Chemistry II Lab., Separation & Identification of Organic Compounds Lab.), UOK, 2003

#### Miscellaneous

- *Administration:* Head of the Department of Organic Chemistry, Faculty of Chemistry, Razi University, Jan. 2017-May 2019
- Deputy head of the Committee for Health, Safety, and Environment (HSE), Faculty of Chemistry, Razi University, since Aug. 2020
- Member of the committee for hiring faculties, Faculty of Chemistry, Razi University, since Nov. 2020
- Reviewer: Journal of Colloid and Interface Science (ISI-index, Elsevier), Journal of Nanoparticle Research (ISI-index, Springer), Ceramics International (ISI-index, Elsevier), Journal of Applied Polymer Science (ISI-index, Wiley), Australian Journal of Chemistry (ISI-

index, CSIRO), RSC Advances (ISI-index, RSC), New Journal of Chemistry (ISI-index, RSC), Nano Research (ISI-index, Springer), Phosphorus, Sulfur, and Silicon and the Related Elements (ISI-index, Taylor & Francis), Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry (ISI-index, Taylor & Francis), Materials and Design (ISI-index, Elsevier), Advances in Polymer Technology (ISI-index, Wiley)

- Technical Program Committee: 2015 Global Conference on Polymer and Composite Materials (PCM 2015), May 16-19, Beijing, China
- Technical Program Committee: 2014 Global Conference on Polymer and Composite Materials (PCM 2014), May 27-29, Ningbo, China
- Internal examiner for 20 M.Sc. and 10 Ph.D. theses, External examiner for 1 M.Sc. thesis.

### Award

- Gundishapur grant (support by Ministry of Science of Iran and French Embassy in Iran), 2019-2021
- Scholarship (USM Fellowship Scheme), 2007-2009
- Research grant (FRGS: Fundamental Research Grant Scheme) from the Malaysian Ministry of Higher Education on the presented proposal, 2007

# **Scientific Society Memberships**

• Member of Iranian Chemical Society, since 2005

### **Publications**

#### **Book Chapter:**

 M. Jafarzadeh, A. R. Abbasi. Application of Metal-Organic Frameworks (MOFs) for Hydrogen Storage. H.K. Jun (Ed.). Nanomaterials in Energy Devices. CRC Press and Taylor & Francis, Boca Raton, Nov. 2017.

### Journals:

• 32. M. Samari, S. Zinadini, A. K. Zinatizadeh, **M. Jafarzadeh**, F. Gholami, A new fouling resistance polyethersulfone ultrafiltration membrane embedded by metformin modified FSM-16: Fabrication, characterization and performance evaluation in emulsified oil-water separation, *Journal of Environmental Chemical Engineering*, doi: 10.1016/j.jece.2021.105386

- 31. S. Askari; M.M. Khodaei, **M. Jafarzadeh**, Basic ionic liquid anchored on UiO-66-NH<sub>2</sub> metal-organic framework: A stable and efficient Heterogeneous catalyst for synthesis of xanthenes, *Research on Chemical Intermediates*, Accepted
- 30. M. Samari, S. Zinadini, A. K. Zinatizadeh, M. Jafarzadeh, F. Gholami, Designing of a novel polyethersulfone (PES) ultrafiltration (UF) membrane with thermal stability and high resistance using melamine-modified zirconium-based metal-organic framework (UiO-66-NH<sub>2</sub>/MOF), Separation and Purification Technology 2020, 251, 117010.
- 29. S. Askari; **M. Jafarzadeh**, D.B. Christensen, S. Kegnæs, A synergic activity of urea/butyl imidazolium ionic liquid supported on UiO-66-NH<sub>2</sub> metal-organic framework for synthesis of oximes, *Catalysis Letters* **2020**, 150, 3159-3173.
- 28. S. Najari; **M. Jafarzadeh**; K. Bahrami, Copper (II) oxide nanoparticles impregnated on melamine-modified UiO-66-NH<sub>2</sub> metal-organic framework (MOF) for C-N cross-coupling reaction and synthesis of 2-substituted benzimidazoles, *Journal of Heterocyclic Chemistry* **2019**, 56, 2853-2865.
- 27. H. Fatahi; **M. Jafarzadeh**; Z. Pourmanochehri, Synthesis of α-aminonitriles and 5-substituted 1H-tetrazoles using an efficient nanocatalyst of Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>-APTES-supported trifluoroacetic acid, *Journal of Heterocyclic Chemistry* **2019**, 56, 2090-2098.
- 26. K. S. Liow; C. S. Sipaut; **M. Jafarzadeh**, Polypyrrole- and polyaniline-surface modified nanosilica as quasi-solid state electrolyte ingredients for dye-sensitized solar cells, *Journal of Materials Science: Materials in Electronics* **2018**, 29, 21097-21108.
- 25. K. S. Liow; C. S. Sipaut; R. F. Mansa; M. C. Ung; **M. Jafarzadeh**, Formulated quasi-solid state electrolyte based on polypyrrole/polyaniline-polyurethane nanocomposite for dye-sensitized solar cell, *Journal of Materials Science: Materials in Electronics* **2018**, 29, 11653-11663.
- 24. Z. Pourmanochehri; **M. Jafarzadeh**; S. Kakaei; E. Sattarzadeh, Magnetic nanocarrier containing <sup>68</sup>Ga-DTPA complex for targeted delivery of doxorubicin, *Journal of Inorganic and Organometallic Polymers and Materials* **2018**, 28, 1980-1990.
- 23. M. Irandoust; M. Haghighi; A. A. Taherpour; **M. Jafarzadeh**, Electrochemical sensing of trifluralin in water by fluconazole-immobilized Fe<sub>3</sub>O<sub>4</sub>/SiO<sub>2</sub> nanomagnetic core-shell linked to carbon nanotube modified glassy carbon electrode; an experimental and theoretical modeling, *Journal of the Iranian Chemical Society* **2018**, 15, 719-732.
- 22. S. Sadeghi; **M. Jafarzadeh**; A. R. Abbasi; K. Daasbjerg, Incorporation of CuO NPs into modified UiO-66-NH<sub>2</sub> metal-organic frameworks (MOFs) with melamine for catalytic C–O coupling in the Ullman condensation, *New Journal of Chemistry* **2017**, 41, 12014-12027.

- 21. R. Ahmadi; M. Jafarzadeh; M. M. Khodaei; R. Adnan, Encapsulation of Ag nanoparticles in magnetically modified silica nanostructures for reduction of 4-nitrophenol, Monatshefte für Chemie 2017, 148, 1423-1431.
- 20. C. S. Sipaut; H. A. Halim; **M. Jafarzadeh**, Processing and properties of ethylene-vinyl acetate blend foam incorporated with EVA and PU waste foams, *Journal of Applied Polymer Science* **2017**, 134, 44708.
- 19. M. Mozaffari; Sh. Amiri; M. Jafarzadeh; H. R. Fallah; S. Shatooti, Application of CdSe-PVK nanocomposite as a hole transport layer for OLEDs, *Journal of the Chinese Chemical Society* 2016, 63, 886-892.
- 18. C. S. Sipaut; **M. Jafarzadeh**; M. Sundang; N. Ahmad, Size control in porosity of hydroxyapatite using a mold of polyurethane foam, *Journal of Inorganic and Organometallic Polymers and Materials* **2016**, 26, 1066-1074.
- 17. **M. Jafarzadeh**; C. S. Sipaut; J. Dayou; R. F. Mansa, Progresses in solar cells: Insight into hollow micro/nano-structures, *Renewable & Sustainable Energy Reviews* **2016**, 64, 543-568.
- 16. R. F. Mansa; C. S. Sipaut; I. A. Rahman; N. S. M. Yusof; **M. Jafarzadeh**, Preparation of glycine-modified silica nanoparticles for the adsorption of malachite green dye, *Journal of Porous Materials* **2016**, 23, 35-46.
- 15. E. Soleimani; M. Jafarzadeh; P. Norouzi; J. Dayou; C. S. Sipaut; R. F. Mansa; P. Saei, Synthesis of pyranopyrazoles using magnetically recyclable heterogeneous iron oxide-silica core-shell nanocatalysts, *Journal of the Chinese Chemical Society* **2015**, 62, 1155-1162.
- 14. **M. Jafarzadeh**; E. Soleimani; P. Norouzi; R. Adnanc; H. Sepahvand, Preparation of trifluoroacetic acid-immobilized Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>-APTES nanocatalyst for synthesis of quinolines, *Journal of Fluorine Chemistry* **2015**, 178, 219-224.
- 13. **M. Jafarzadeh**; E. Soleimani; H. Sepahvand; R. Adnan, Synthesis and characterization of fluconazole-functionalized magnetic nanoparticles as a catalyst for the synthesis of 3-aryl and 3-amino-imidazo- [1,2-a]pyridines, *RSC Advances* **2015**, 5, 42744-42753.
- 12. M. Mozaffari; S. Shatooti; **M. Jafarzadeh**; M. Niyaifar; A. Aftabi; H. Mohammadpour; Sh. Amiri, Synthesis of Zn<sup>2+</sup> substituted maghemite nanoparticles and investigation of their structural and magnetic properties, *Journal of Magnetism and Magnetic Materials* **2015**, 382, 366-375.
- 11. C. S. Sipaut; R. F. Mansa; V. Padavettan; I. A. Rahman; J. Dayou; M. Jafarzadeh, The effect of surface modification of silica nanoparticles on the morphological and mechanical

- properties of bismaleimide/diamine matrices, *Advances in Polymer Technology* **2015**, 34, 21492.
- 10. C. S. Sipaut; V. Padavettan; I. A. Rahman; R. F. Mansa; J. Dayou; **M. Jafarzadeh**, An optimized preparation of bismaleimide-diamine co-polymer matrices, *Polymers for Advanced Technologies* **2014**, 25, 673-683.
- 9. M. Jafarzadeh; R. Adnan; M.K.N. Mazlan, Thermal stability and optical property of ormocers (organically modified ceramics) nanoparticles produced from copolymerisation between amino-silanes and tetraethoxysilane, *Journal of Non-Crystalline Solids* 2012, 358, 2981-2987.
- 8. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut, Synthesis of silica-polypyrrole core-shell nanocomposite using in-situ γ-aminopropyltriethoxysilane(APTES)-modified nanosilica, *Synthetic Metals* **2012**, *162*, 466-676.
- 7. I. A. Rahman; M. Jafarzadeh; C. S. Sipaut, Physical and optical properties of organo-modified silica nanoparticles prepared by sol-gel, *Journal of Sol-Gel Science and Technology* 2011, 59, 63-72.
- 6. M. Jafarzadeh; I. A. Rahman; C. S. Sipaut, Optical properties of amorphous organo-modified silica nanoparticles produced via co-condensation method, *Ceramic International*, 2010, 36, 333-338.
- 5. I. A. Rahman; M. Jafarzadeh; C. S. Sipaut, Synthesis of organo-functionalized nanosilica via a co-condensation modification using γ-aminopropyltriethoxysilane (APTES), Ceramic International 2009, 35, 1883-1888. [This article ranks 8th in Top 25 Hottest Articles for Ceramic International (Category: Materials Science) by Oct. 2009-Dec. 2010
- 4. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut, Synthesis of silica nanoparticles by modified sol-gel Process: the effect of mixing modes of the reactants and drying techniques, *Journal of Sol-Gel Science and Technology* **2009**, *50*, 328-336.
- 3. **M. Jafarzadeh**, Trimethylsilyl azide (TMSN<sub>3</sub>): A versatile reagent in organic synthesis, *Synlett* **2007**, 2144-2145.
- 2. **M. Jafarzadeh**; K. Amani; F. Nikpour, Effective and regioselective iodination of arenes using iron (III) nitrate in the presence of tungstophosphoric acid, *Canadian Journal of Chemistry* **2005**, *83*, 1808-1811.
- 1. **M. Jafarzadeh**; K. Amani; F. Nikpour, Solvent-free and room temperature synthesis of thiochromans in the presence of a catalytic amount of tungstophosphoric acid, *Tetrahedron Letters* **2005**, *46*, 7567–7569.

# Conferences

- 16. H. Fatahi; **M. Jafarzadeh**, Synthesis of α-aminonitriles via Strecker-type reaction using trifluoroacetic acid-immobilized Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>-APTES core-shell nanoparticles, *23<sup>rd</sup> Iranian Seminar of Organic Chemistry*, University of Kurdistan, Sanandaj, Iran, 8-10 Sept 2015.
- 15. E. Ghasemi; S. Kakaei; **M. Jafarzadeh**; E. Sattarzadeh Khameneh, Preparation of Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> core-shell nanostructures functionalized with APTES and DOTA ligand for drug delivery of teniposide, 23<sup>rd</sup> Iranian Seminar of Organic Chemistry, University of Kurdistan, Sanandaj, Iran, 8-10 Sept 2015.
- 14. S. Kakaei; Z. Pourmanochehri; **M. Jafarzadeh**; E. Sattarzadeh Khameneh, Preparation of iron oxide-silica core-shell nanostructures functionalized with APTES and TETA ligand for drug delivery of doxorubicin, *23<sup>rd</sup> Iranian Seminar of Organic Chemistry*, University of Kurdistan, Sanandaj, Iran, 8-10, Sept 2015.
- 13. **M. Jafarzadeh**; M. M. Khodaei, R. Ahmadi, Organo-modified silica hollow structures for drug delivery, *3rd Nano Today Conference*, Institute of Bioengineering and Nanotechnology, Singapore, 8-11 Dec 2013.
- 12. S. Shatooti; **M. Jafarzadeh**; Sh. Amiri; A. Aftabi; M. Mozafari, Investigation of Curie temperature and magnetic properties of maghemite and Zn-substituted maghemite nanoparticles prepared by coprecipitation method, *First Workshop on Nanomagnetism*, Isfahan University of Technology, Isfahan, Iran, 24-25 April 2013.
- 11. S. Shatooti; **M. Jafarzadeh**; Sh. Amiri; A. Aftabi; M. Mozafari, Preparation of Zn-substituted maghemite nanoparticles by coprecipitation method and investigation of their magnetic properties, *11th Condensed Matter Physics Conference of Iran*, Shahrood University of Technology, Shahrood, Iran, 26-27 Jan 2013.
- 10. **M. Jafarzadeh**; R. Adnan; M.K.N Mazlan; N.H.A. Ridzwan, The effect of thermal treatment on the optical properties of organo-modified silica nanoparticles, *XI International Conference on Nanostructured Materials*, Rhodes, Greece, 26-31 Aug 2012.
- 9. M. Mehrazin; R. M. A. Tehrani; **M. Jafarzadeh**, The electrochemical synthesis of nano-Cu/multi-walled carbon nanotubes modified composite graphite electrode for electroctalytic application, 6<sup>th</sup> International Conference on Surfaces, Coatings and Nano-Structured Materials (NANOSMAT), Krakow, Poland, 17-20 Oct 2011.
- 8. P. Ansari; R. M. A. Tehrani; **M. Jafarzadeh**, The voltammetric fabrication of nanocrystalline nickel-MWCNT onto composite graphite electrode and its electroctalytic application, 6<sup>th</sup> International Conference on Surfaces, Coatings and Nano-Structured Materials (NANOSMAT), Krakow, Poland, 17-20 Oct 2011.

- 7. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut, Preparation and characterization of polypyrrole-silica nanocomposites via a dispersion polymerization, *13<sup>th</sup> Asian Chemical Congress*, Shanghai International Convention Center, Shanghai, China, 14-16 Sept 2009.
- 6. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut, A study on optical properties of in-situ synthesized amino functionalized nanosilica particles, *1st Nano Today Conference*, Institute of Bioengineering and Nanotechnology, Singapore, 2-5 Aug 2009.
- 5. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut, Modification of the silica nanoparticles surface via in-situ process, *The 10<sup>th</sup> Eurasia Conference on Chemical Sciences (EuAsC<sub>2</sub>S-10)*, Philippine International Convention Center, Manila, Philippines, Jan 2008.
- 4. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut; P. Vejayakumaran, The effect of drying process on the morphology, porosity, and thermal behavior of nanosilica particles, *Singapore International Chemistry Conference 5 (SICC-5)*, Suntec, Singapore, Dec 2007.
- 3. **M. Jafarzadeh**; I. A. Rahman; C. S. Sipaut; P. Vejayakumaran; R. Adnan, Preparation and characterization of nanoscale silica particles, *12<sup>th</sup> Asian Chemical Congress; International Symposium on Advances in Polymer and Materials Chemistry*, Putra World Trade Center, Kuala Lumpur, Malaysia, Aug 2007.
- 2. K. Amani; **M. Jafarzadeh**, Direct iodination of aromatic compounds using iodine and iron(III) nitrate nonahydrate as oxidant in the presence of heteropolyacids, *11<sup>th</sup> Iranian Seminar of Organic Chemistry*, Isfahan University of Technology, Isfahan, Feb 2005.
- 1. K. Amani; **M. Jafarzadeh**, Solvent-free synthesis of thiochromans at room temperature in the presence of a catalytic amount of heteropolyacids, *14<sup>th</sup> Iranian Chemistry & Chemical Engineering Congress*, Tarbiat Moallem University, Tehran, Feb 2004.

# Thesis Supervision

#### **Main Advisor**

- 13. E. Ashabi; (MSc student, 2019), Preparation of supported ionic liquid phase (SILP) on UiO-66-NH<sub>2</sub> metal-organic framework (MOF) for acid-catalyzed organic synthesis.
- 12. P. Heydari; (graduated in MSc, 2020), In-situ preparation of hybrid UiO-66-NH<sub>2</sub> metalorganic framework (MOF) with Ti and Zn.
- 11. S. Askari; (graduated in MSc, 2019), Preparation of supported ionic liquid phase (SILP) on UiO-66-NH<sub>2</sub> metal-organic framework (MOF) for base-catalyzed organic synthesis.
- 10. Samira Khalili (graduated in MSc, 2019), Preparation of heterogeneous metal-organic frameworks (MOFs) based on Ti and Zn for photocatalytic applications, Co-Advisor: Dr A. K. Zinatizadeh

- 9. Amir Nasiri (graduated in MSc, 2018), Application of UiO-66-NH<sub>2</sub>–Mlm/CuO nanocatalyst for synthesis of azo compounds.
- 8. Susan Najari (graduated in MSc, 2018), UiO-66-NH<sub>2</sub>–Mlm/CuO metal-organic frameworks (MOFs) for catalyzing nucleophilic substitution reaction of arenes, Co-Advisor: Prof K. Bahrami
- 7. Samira Sadeghi (graduated in MSc, 2017), Preparation of copper nanoparticles impregnated on the modified UiO66-NH<sub>2</sub> metal-organic framework for organic synthesis, Co-Advisor: Dr A. R. Abbasi
- 6. Hosna Fatahi (graduated in MSc, 2016), The immobilization of trifluoroacetic acid on the surface of Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> core-shell nanoparticles modified by aminopropyltriethoxysilane as a catalyst for organic synthesis
- 5. Zahra Pourmanochehri (graduated in MSc, 2016), Preparation of iron-silica core-shell nanostructures functionalized with APTES and TETA ligand and labeled by gallium-68 as a drug delivery system for anticancer agent doxorubicin, Co-Advisor: Dr S. Kakaei
- 4. Effat Ghasemi (graduated in MSc, 2016), Preparation of iron oxide-silica core-shell nanostructures functionalized with APTES and DOTA ligand, labeled with <sup>68</sup>Ga as a drug delivery system for teniposide, Co-Advisor: Dr S. Kakaei
- 3. Heshmatollah Sepahvand (graduated in MSc, 2014), Surface functionalization of Fe<sub>3</sub>O<sub>4</sub>/SiO<sub>2</sub> nanoparticle with immobilized fluconazole as potential solid catalyst for synthesis of 3-aryl-imidazo[1,2-a]pyridines and iso-cyanide multi component reaction, Coadvisor: Dr E. Soleimani
- 2. Parastoo Norouzi (graduated in MSc, 2014), The preparation of organo-functionalized core-shell system of Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub> nanoparticles as a catalyst for organic syntheses. Co-advisor: Dr E. Soleimani
- 1. Ronak Ahmadi (graduated in MSc, 2014), The preparation of organo-modified silica hollow spheres and their applications for drug delivery and organic syntheses. Co-advisor: Prof M. M. Khodaei

#### Co-advisor

- 8. M. Samari (graduated in MSc, 2020), Fabrication of metal-organic framework-based UF membrane for oil-water separation. Main Advisor: Dr S. Zinadini
- 7. Mino Abdizad (MSc student, 2016-2017), The effect of nano zirconium- metal-organic frameworks (MOFs) and their modified structures on Knoevenagel condensation reaction and theoretical studies by ab initio. Main Advisor: Dr A. R. Abbasi

- 6. Yousef Nouri (graduated in MSc, 2017), Study of pores effect of nanoscale metal-organic frameworks containing copper (II) on uptake and release of Acriflavine hydrochloride. Main Advisor: Dr A. R. Abbasi
- 5. Mohsen Bafarani (graduated in MSc, 2016), Study of pores effect of nanoscale metalorganic frameworks containing zirconium on uptake and release of iodine. Main Advisor: Dr A. R. Abbasi
- 4. Sara Shatooti (graduated in MSc, 2013), Preparation of zinc-substituted maghemite nanoparticles and investigation of their magnetic properties. Main Advisor: Dr M. Mozafari (Razi University, Department of Physics)
- 3. Shima Amiri (graduated in MSc, 2013), Preparation of nanocomposite-based organic light emitting diodes (OLEDs) and investigation of their physical properties. Main Advisor: Dr M. Mozafari (*Razi University*, *Department of Physics*)
- 2. Maryam Mehrazin (graduated in MSc, 2011), The electrochemical synthesis of Ni/MWCNT nanocomposite onto composite graphite electrode with electroctalytic applications (methanol fuel cell). Main Advisor: Dr Ramin MA Tehrani (Islamic Azad University Shahr-rey Branch, Department of Chemistry)
- 1. Parisa Ansari (graduated in MSc, 2011), The electrochemical synthesis of Cu/MWCNT nanocomposite onto composite graphite electrode with electroctalytic applications (nitrite reduction). Main Advisor: Dr Ramin MA Tehrani (Islamic Azad University Shahr-rey Branch, Department of Chemistry)