

Rahmatollah Rahimi

Professor, Inorganic Chemistry Division E-mail address: Rahimi\_Rah@Iust.ac.ir Office Tele: 77240290, 77240-50(2718) Fax: 77491204

**Academic Degrees:** 

Bachelor of Science: Chemistry, Howard University, USA, 1983
Master of Science: Physical chemistry, Howard University, USA, 1987
Ph. D.: Inorganic Chemistry, Howard University, USA, 1991

# Active Research fields:

-Synthesis and characterization of porphyrins and metalloporphyrins and Investigation of their applications.

-Photocatalysis process

-Preparation and characterization of solar cells

-Invironmental projects

-Bioinorganic chemistry

# **Teaching Experiences:**

#### A)Teaching Courses at undergraduate level:

- -General chemistry
- -Inorganic Chemistry
- -Physical chemistry
- -Physical chemistry laboratory
- -General Chemistry laboratory
- -Chemistry science literature

# **B)**Teaching Courses at graduate level(MS):

- -The professional language for Chemistry
- -Inorganic kinetics and Thermodynamics
- -Physical Inorganic Chemistry
- -Research method
- -Advanced Inorganic Chemistry
- -Bio Inorganic Chemistry

# C)Teaching Courses at graduate level(PhD):

- -Advanced Bio Inorganic Chemistry
- -Structures and bonds of inorganic components
- Organometallic Chemistry

#### Patent: 11

1-"Application of LED lamps for treatment and disinfection of wastewaters using nanophotocatalysts" Rahmatollah Rahimi, Javad Shokraian, Mahboobeh Rabbani, 2013

- 2-"Synthesis of ZnO Nanorods in low temperature via Coprecipitation Method" Rahmatollah Rahimi, Marzieh Yaghoubi Berijani, Solmaz Zargari, 2013
- 3-"Synthesis of BiVO<sub>4</sub> photocatalyst with two monoclinic and tetragonal phases, active in visible and ultraviolet region", Rahmatollah Rahimi, Marzieh Yaghoubi Berijani, Solmaz Zargari, 2013
- 4-"Synthesis of polypyrrole-iron oxide functionalized with porphyrin as an efficient sorbent of industrial pollutions", Rahmatollah Rahimi, Meisam Asadi Davati, Solmaz Zargari, 2013
- 5-" Synthesis of Titanium dioxide (TiO<sub>2</sub>)-Vanadium phosphorous nanocomposite oxidized with silver (Ag-VPO) as a catalyst (Ag-VPO/TiO<sub>2</sub>) and is organic pollution degradation under visible light illumination", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012
- 6-" Synthesis of SbVO<sub>4</sub>-TiO<sub>2</sub> nanocomposite as a catalysts and its investigation in degradation of organic pollutions under visible light irradiation", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012
- 7-"Synthesis of Titanium dioxide-Bismut vanadat (BiVO<sub>4</sub>-TiO<sub>2</sub>) sensitized with porphyrin (TCPP) and its photocatalytic application under visible light irradiation", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012
- 8-"Preparation of V-TiO<sub>2</sub>-TCPP and its concurrent application in removal and degradation of industrial pollutants", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012

- 9-"Preparation of V doped TiO<sub>2</sub> mesoporous and sensitized with porphyrin over SBA-15 substrate", Ahmad Najafian, Masoumeh Mahjoub Moghaddas, Rahmatollah Rahimi, 2012
- 10-"Preparation of porphyrin on SBA-15 catalysts", Mehdi Deilam Kamar, Ahmad najafian, Rahmatollah Rahimi, 2012.
- 11-"Nanoporous TiO<sub>2</sub> solar cell sensitized with tetra(4-carboxyphenyl)porphyrin", Rahmatollah Rahimi, Pegah Tvakoli fard, 2010

# **Research activities:**

# A)Scientific Research articles:

More than 175 Articles Published at Conferences and Journals

**Titles of published papers in Journals: 108** 

# 2018

1.RAHIMI, Rahmatollah, et al. Comparison of chelating ability of dipeptide (histidine-β-alanine) and (tetrakis (4-sulfonatophenyl) porphyrin)(TPPS4) for in vitro removal of toxic metals. Iranian Chemical Communication, 2018, 6: 1-7.

2. Mesgarzadeh, I., Akbarzadeh, A. R., Rahimi, R., & Maleki, A. (2018). Novel Design, Preparation, Characterization and Antimicrobial Activity of Silver Nanoparticles during Oak Acorns Bark Retrograde. Zeitschrift für Physikalische Chemie, 232(2), 209-221.

3. KHARAZI, Parnian; RAHIMI, Rahmatollah; RABBANI, Mahboubeh. Study on porphyrin/ZnFe2O4@ polythiophene nanocomposite as a novel adsorbent and visible

light driven photocatalyst for the removal of methylene blue and methyl orange. Materials Research Bulletin, 2018, 103: 133-141.

4. Fayyaz Jorshari, F., Rabbani, M., Rahimi, R., & Rassa, M. (2019). Preparation, characterization and Photo-inactivation of cellulose nanocrystals impregnated with meso-tetrakis (4-nitrophenyl) porphyrin. Quarterly Iranian Chemical Communication, 7, 11-20.

#### 2017

 Mahboubeh Rabbani, Marzieh Haghverdi, Mahdi Heidari-Golafzani, Rahmatollah Rahimi, and Marziye Javaheri Kachousangi. "Preparation of a New Adsorbent Expanded Perlite@ ZnO@ Reduced Graphene Oxide for the Synergistic Photocatalytic–Adsorption Removal of Organic Pollutants." New Journal of Chemistry, 41 (2017) 8011-8015.

2. Iraj Mesgarzadeh, Ali Reza Akbarzadeh, and Rahmatollah Rahimi. "Surface-Active Properties of Solvent-Extracted Panax Ginseng Saponin-Based Surfactants." Journal of Surfactants and Detergents, 20 (2017) 609-614.

3. Iraj Mesgarzadeh, Ali Reza Akbarzadeh, Rahmatollah Rahimi, and Ali Maleki. "Novel Design, Preparation, Characterization and Antimicrobial Activity of Silver Nanoparticles During Oak Acorns Bark Retrograde." Zeitschrift für Physikalische Chemie. (2017)

4. Maryam Khosravi, Rahmatollah Rahimi, Jalal Pour Ahmad, Mohammad Hadi Zareie, Mahboubeh Rabbani, "Comparsion of kinetic study and protective effects of biological dipeptide and two porphyrin derivatives against metals cytotoxicity in human lymphocytes" Iranian Journal of Pharmaceutical Research, 6 (2017) 1059-1070

5. Maryam Khosravi, Rahmatollah Rahimi, Mahboubeh Rabbani, Safavi, E.

# "MICROWAVE-ASSISTED SOLID-PHASE (SPPS) AND SOLUTION-PHASE (SPS) SYNTHESIS OF BIOLOGICAL DIPEPTIDE ((β-ALANINE-LHISTIDINE)." (2017): 8-18.

6. Maryam Khosravi, Rahmatollah Rahimi. Comparison of Kinetic Study and Protective Effects of Biological Dipeptide and Two Porphyrin Derivatives on Metal Cytotoxicity Toward Human Lymphocytes. Iranian journal of pharmaceutical research: IJPR, 2017, 16.3: 1059.

7. SolmazZargari, RahmatollahRahimi, RahimRahimi, A. (2017).Preparation of a Photoactive 3D Polymer Pillared with Metalloporphyrin. JMaterialSciEng, 6(323),2169-0022.

8. RAHIMI, Rahmatollah; MEHREHJEDY, Amin; ZARGARI, Solmaz. BiVO4/Mn3O4 a novel p–n heterojunction photocatalyst functionalized with metalloporphyrins: Synthesis, charge transfer mechanism, and enhanced visible-light photocatalysis for degradation of dye pollutant. Environmental Progress & Sustainable Energy, 2017, 36.5: 1439-1448.

 RABBANI, Mahboubeh; SEGHATOLESLAMI, Zhaleh Sadr; RAHIMI, Rahmatollah. Selective adsorption of organic dye methylene blue by Cs4H2PMo11FeO40Ě6H2O in presence of methyl orange and Rhodamine-B. Journal of Molecular Structure, 2017, 1146: 113-118.

2016:

1-Rahmatollah Rahimi, Maryam Khosravi, Mahboubeh Rabbani, Ebrahim Safavi, "Comparison of chelating ability of dipeptide (histidine- $\beta$ -alanine) and (tetrakis(4-sulfonatophenyl)porphyrin) (TPPS4) for in vitro removal of toxic metals" *Iran. Chem. Commun*, 6 (2016) 1-2.

2-Mohammad Hossein Keshavarz, Ali Reza Akbarzadeh, Rahmatollah Rahimi, Mohammad Jafari, Matin Pasandideh, Roohollah Sadeghi, "A reliable method for prediction of enthalpy of fusion in energetic materials using their molecular structures "*Fluid Phase Equilibria*, 427 (2016) 46-55.

3- Mahboubeh Rabbani, Mahdi Heidari-Golafzani, Rahmatollah Rahimi, "Synthesis of TCPP/ZnFe<sub>2</sub>O<sub>4</sub>@ZnO nanohollow sphere composite for degradation of methylene blue and 4-nitrophenol under visible light" *Materials Chemistry and Physics* 179 (2016) 35-41, DOI:10.1016/j.matchemphys.2016.05.005

4- Rahmatollah Rahimi, Shabnam Pordel, Mahboubeh Rabbani, "Synthesis of Bi<sub>2</sub>WO<sub>6</sub> nanoplates using oleic acid as a green capping agent and its application for thiols oxidation" *J Nanostruct Chem* (2016) 6:191–196, DOI 10.1007/s40097-016-0195-0

5- Mahsa Moshari, Mahboubeh Rabbani, Rahmatollah, "Synthesis of TCPP– Fe<sub>3</sub>O<sub>4</sub>@S/RGO and its application for purification of water" *Research on Chemical Intermediate*, 42 (2016) 5441-5455. DOI: 10.1007/s11164-015-2378-6.

6- Rahmatollah Rahimi, Solmaz Zargari, Ali Ghaffarinejad, Ali Morsali, "Investigation of the synergistic effect of porphyrin photosensitizer on graphene-TiO2 nanocomposite for visible light photoactivity improvement" *Environmental Progress and Sustainable Energy*, 35 (2016) 642-652.

7- Rahmatollah Rahimi, Fatemeh Fayyaz, Mehdi Rassa, Mahboubeh Rabbani, "Microwave-assisted synthesis of 5,10,15,20-tetrakis(4-nitrophenyl)porphyrin and zinc derivative and study of their bacterial Photoinactivation" *Iranian Chemical Communication*, 4 (2016) 175-185. 8- Solmaz Zargari, Rahmatollah Rahimi, Ali Ghaffarinejad, Ali Morsali, "Enhanced visible light photocurrent response and photodegradation efficiency over TiO2-graphene composite pillared with tin porphyrin" *Journal of colloid and interface science*, 466 (2016) 310-321. (DOI:10.1016/j.jcis.2015.12.046)

9- Rahmatollah Rahimi, Maryam Khosravi, Mohammd H. H. Tehrani,*b* Mahboubeh Rabbani and Ebrahim Safavi, "Solid-Phase Peptide Synthesis of Dipeptide (Histidine- $\beta$ -Alanine) as a Chelating Agent by Using Trityl Chloride Resin, for Removal of Al<sup>3+</sup>, Cu<sup>2+</sup>, Hg<sup>2+</sup> and Pb<sup>2+</sup>: Experimental and Theoretical Study" *Journal of the Brazilian Chemical Society*, 27 (2016) 1814-1819.

10- Rahmatollah Rahimi, Mohammad Hossein Keshavarz, Ali Reza Akbarzadeh, "Prediction of the Density of Energetic Materials on the Basis of their Molecular Structures" *Central European Journal of Energetic Materials*, 13 (2016) 73-101

11- Mahboubeh Rabbani, Hamideh Bathaee, Rahmatollah Rahimi, Ali Maleki, "Photocatalytic degradation of p-nitrophenol and methylene blue using Zn-TCPP/Ag doped mesoporous TiO<sub>2</sub> under UV and visible light irradiation", *Desalination and Water Treatment*, 57 (2016) 25848-25856, DOI: 10.1080/19443994.2016.1157762

- 12- Mahboubeh Rabbani, Fatemeh Rafiee, Hossein Ghafuri, Rahmatollah Rahimi, "Synthesis of Fe3O4 nonoparticles via a fast and facile mechanochemicl method: Modification of surface with porphyrin and photocatalytic study" *Materials Letters*, 166 (2016) 247-250. (DOI: 10.1016/j.matlet.2015.12.087)
- 13- Rahmatollah Rahimi, Fatemeh Fayyaz, Mehdi Rassa, "The study of cellulosic fabrics impregnated with porphyrin compounds for use as photo-bactericidal polymers, *Materials Science and Engineering: C*, 5 9 (2016) 661–668. (DOI: 10.1016/j.msec.2015.10.067)

14-H Ghafuri, F Mohammadi, R Rahimi, E Mohammadiyan, "Synthesis and characterization of a new magnetic nanocomposite with metalloporphyrin (Co-TPyP) and sulfated tin dioxide (Fe3O4@SnO2/SO42–), and investigation of its photocatalytic effects in the degradation of Rhodamine B" RSC Advances, 6 (2016) 83947-83953.

15- H Ghafuri, S Rahmania, R Rahimi, Z Movahedinia, "Synthesis and characterization of benzilic alcohol metaloporphyrin and its nanocomposite with graphene oxide (GO-CoTHMP) and investigation of their efficiency in removal of environmental pollutants" RSC Advances, 6 (2016) 62916-62922.

16- Ali Maleki, Rahmatollah Rahimi, Saied Maleki, "Efficient oxidation and epoxidation using a chromium(VI)-based magnetic nanocomposite" Environ Chem Lett., 14 (2016) 195-199, DOI 10.1007/s10311-016-0558-2

17- R Rahimi, M Moshari, M Rabbani, A Azad, "Photooxidation of benzyl alcohols and photodegradation of cationic dyes by Fe3O4@ sulfur/reduced graphene oxide as catalyst" RSC Advances, 6 (2016) 41156-41164.

18- S. Zargari, R. Rahimi, A. Yousefi, "An efficient visible light photocatalyst based tin porphyrin intercalated between TiO2-graphene nanosheets for inactivation of *E. coli* and investigation of charge transfer mechanism" *RSC Advances*, 6 (2016) 24218-24228, DOI: 10.1039/C5RA19927A

19- Rahmatollah Rahimi, Marzieh Yaghoubi-Berijani, Solmaz Zargari, Mahboubeh Rabbani, Samaneh Shariatinia, "SnTCPP modified ZnO nanorods prepared via a simple co-precipitation method: application as a new photocatalyst

٩

for photodegradation and photoreduction process" Research on Chemical Intermediates, 42 (2016) 4697-4714

20- Ahmad Najafian, Rahmatollah Rahimi, Solmaz Zargari, Masoumeh Mahjoub-Moghaddas, Azadeh Nazemi, "Synthesis and photocatalytic activity of V-doped mesoporous TiO2 photosensitized with porphyrin supported by SBA-15", *Research on Chemical Intermediates*, 42 (2016) 3441-3458. DOI: 10.1007/s11164-015-2222-z

- 1-Mahsa Moshari, Mahboubeh Rabbani, Rahmatollah, "Synthesis of TCPP– Fe3O4@S/RGO and its application for purification of water" *Research on Chemical Intermediate*, DOI: 10.1007/s11164-015-2378-6.
- 2-Mahdi Heidari-Golafzani, Mahboubeh Rabbani, Rahmatollah Rahimi and Alireza Azad, "Catalytic oxidation of primary and secondary alcohols over a novel TCPP/Zn-Fe<sub>2</sub>O<sub>4</sub>@ZnO catalyst" *RSC Advances*, 2015, 5 (2015) 99640-99645, DOI: 10.1039/C5RA17741C
- 3-Rahmatollah Rahimi<sup>\*1</sup>, Solmaz Zargari<sup>1</sup>, Ali Ghaffarinejad<sup>1</sup>, Ali Morsali<sup>2</sup>, "Investigation of the synergistic effect of porphyrin photosensitizer on graphene-TiO<sub>2</sub> nanocomposite for visible light photoactivity improvement" *Environmental Progress and Sustainable Energy*, Published on line.
- 4-Rahmatollah Rahimi, Marzieh Yaghoubi-Berijani, Solmaz Zargari, Mahboubeh Rabbani, Samaneh Shariatinia, "SnTCPP modified ZnO nanorods prepared via a simple co-precipitation method: application as a new photocatalyst for photodegradation and photoreduction process" *Research on Chemical Intermediates*, Accepted

- 5-Mohammad Asgari, Afsaneh Zonouzi, Rahmatollah Rahimi, Mahboubeh Rabbani, "Application of Porphyrin Modified SBA-15 in Adsorption of Lead Ions from Aqueous Media" Oriental Journal of Chemistry 31 (2015) 1537-1544.
- 6-Rahmatollah Rahimi, Sara Saadati, Elham Honarvar Fard, "Fluorine-doped TiO<sub>2</sub> nanoparticles sensitized by tetra(4-carboxyphenyl)porphyrin and zinc tetra(4-carboxyphenyl)porphyrin: Preparation, characterization, and evaluation of photocatalytic activity" *Environmental Progress and Sustainable Energy*, 34 (2015) 1341-1348.
- 7-S. Noushin Ezzati, Mahboubeh Rabbani, Roger M. Leblanc, Ebadullah Asadi, S. Mohammad H. Ezzati, Rahmatollah Rahimi, Saman Azodi-Deilami, "Conducting, magnetic polyaniline/Ba<sub>0.25</sub>Sr<sub>0.75</sub> Fe<sub>11</sub>(Ni<sub>0.5</sub>Mn<sub>0.5</sub>)O<sub>19</sub> nanocomposite: Fabrication, characterization and application" *Journal of Alloys and Compounds*, 646 (2015) 1157-1164.
- 8-Rahmatollah Rahimi, Solmaz Zargari, Azam Yousefi, Marzieh Yaghobi Berijani, Ali Ghaffarinejad, Ali Morsali, "Visible light photocatalytic disinfection of E. Coli with TiO<sub>2</sub>-graphene nanocomposite sensitized with tetrakis(4-carboxyphenyl)porphyrin" *Applied Surface Science*, 355 (2015) 1098–1106.
- 9-Ahmad Najafian, Rahmatollah Rahimi, Solmaz Zargari, Masoumeh Mahjoub-Moghaddas, Azadeh Nazemi, "Synthesis and photocatalytic activity of Vdoped mesoporous TiO2 photosensitized with porphyrin supported by SBA-15", Research on Chemical Intermediates, DOI: 10.1007/s11164-015-2222-z
- 10- Mohammad Hossein Keshavarz, Rahmatollah Rahimi, Ali Reza Akbarzadeh, "Two novel correlations for assessment of crystal density of hazardous ionic

molecular energetic materials using their molecular structures" *Fluid Phase Equilibria*, 402 (2015) 1–8

- 11-Fatemeh Fayyaz, Rahmatollah Rahimi, Mehdi Rassa, Ali Maleki, "Efficient photo-oxidation of phenol and photo-inactivation of bacteria by cationic tetrakis(trimethylanilinium)porphyrins", *Water Science & Technology: Water Supply*, In Press, Uncorrected Proof © IWA Publishing 2015 | doi:10.2166/ws.2015.068
- 12-Rahmatollah Rahimi, Mahdi Heidari-Golafzani, Mahboubeh Rabbani, "Preparation and photocatalytic application of Zn\_Fe<sub>2</sub>O<sub>4</sub>@ZnO core-shell nanostructures" *Superlattices and Microstructures*, 85 (2015) 497-503.
- 13-Hossein Ghafuri\*, Zahra Movahedinia, Rahmatollah Rahimi and Hamid Reza Esmaili Zand, Synthesis of 5, 10, 15, 20-tetrakis (4-naphtalen-2-yl-benzoate) porphyrin, its complexes with Zinc and Cobalt and Fe<sub>3</sub>O<sub>4</sub>@ZrO<sub>2</sub>-TNBP as photocatalyst and investigating its photocatalytic activities, *RSC Advances*, DOI: 10.1039/C5RA11126A
- 14-Rahmatollah Rahimi,\* Samaneh Shariatinia, Solmaz Zargari, Marzieh Yaghoubi Berijani, Ali Ghaffarinejad and Zahra Sadat Shojaie, "Synthesis, characterization, and photocurrent generation of a new nanocomposite based Cu–TCPP MOF and ZnO nanorod" *RSC Advances*, 2015, 5, 46624.
- 15-Ahmad Najafian, Mahboubeh Rabbani, Rahmatollah Rahimi, Mehdi Deilamkamar, Ali Maleki, "Synthesis and characterization of copper porphyrin into SBA-16 through "ship in a bottle" method: A catalyst for photo oxidation reaction under visible light", *Solid State Sciences*, (2015) 46, 7-13.

- 16-Rahmatollah Rahimi, Javad Shokraiyan, Mahboubeh Rabbani and Fatemeh Fayyaz, "Enhanced photobactericidal activity of ZnO nanorods modified by meso-tetrakis(4-sulfonatophenyl)porphyrin under visible LED lamp irradiation" *Water Science & Technology*, (2015) 71, 1249–1254.
- 17-Fatemeh Hashemzadeh, Ali Gaffarinejad, Rahmatollah Rahimi, "Porous *p*-NiO/*n*-Nb<sub>2</sub>O<sub>5</sub> nanocomposites prepared by an EISA route with enhanced photocatalytic activity in simultaneous Cr(VI) reduction and methyl orange decolorization under visible light irradiation", *Journal of Hazardous Materials*, (2015) 286, 64-74.

- 18-Rahmatollah Rahimi, Marzieh Yaghoubi Berijani, Solmaz Zargari "Synthesis of ZnO Nanorods via Coprecipitation Method and its Sensitizing with Tetrakis (4-Carboxy Phenyl) Porphyrin and its Tin Complex to Enhance the Visible Light Photocatalytic Activity", *Nanomaterials* 6:19 (2014) 228.
- 19-Mohsen Moradi-Haji Jafana, Mohammad-Reza Zamani-Meymian, Rahmatollah Rahimi, Mahboubeh Rabbani, "Effect of pyrolysis temperature on the electrical, optical, structural, and morphological properties of ITO thin films prepared by a sol–gel spin coating process" *Microelectronic Engineering* (2014) 130, 40–45.
- 20-Ali Maleki, Rahmatollah Rahimi, Saied Maleki, "Preparation and characterization of magnetic chlorochromate hybrid nanomaterials with triphenylphosphine surface-modified iron oxide nanoparticles" *J Nanostruct Chem.*, DOI 10.1007/s40097-014-0131-0

- 21-Ali Maleki,\* Rahmatollah Rahimi, Saied Maleki and Negar Hamidi, "Synthesis and characterization of magnetic bromochromate hybrid nanomaterials with triphenylphosphine surface-modified iron oxide nanoparticles and their catalytic application in multicomponent reactions", *RSC Advances* (2014) 4, 29765-29771.
- 22-Milad Fallah,\* Mohammad-Reza Zamani-Meymian, Rahmatollah Rahimi, Mahboubeh Rabbani, "Effect of annealing treatment on electrical and optical properties of Nb doped TiO<sub>2</sub> thin films as a TCO prepared by sol–gel spin coating method" *Applied Surface Science* (2014) 316, 456–462.
- 23-Ali Maleki, Rahmatollah Rahimi, Saied Maleki, "Preparation and characterization of a new surface-modified dichromate/triethylamine/silica/iron oxide magnetic hybrid nanomaterial" *Journal of the Iranian Chemical Society*, DOI 10.1007/s13738-014-0473-z.
- 24-Ali Maleki\*, Rahmatollah Rahimi, Saied Maleki, Synthesis, characterization and morphology of new magneticfluorochromate hybrid nanomaterials with triethylamine surfacemodified iron oxide nanoparticles, *Synthetic Metals*, 194 (2014) 11–18.
- 25-Rahmatollah Rahimi, Ali Maleki, Saied Maleki, "Synthesis and characterization of a new magnetic bromochromate hybrid nanomaterial with triethylamine surface modified iron oxide nanoparticles", *Chinese Chemical Letters* 25 (2014) 919–922.
- 26-Fatemeh Hashemzadeh, Rahmatollah Rahimia, Ali Gaffarinejada, Vahideh Jalalata, Siamak Safapour, "Photocatalytic treatment of wastewater containing Rhodamine B dye via Nb<sub>2</sub>O<sub>5</sub> nanoparticles: effect of operational key parameters", *Desalination and Water Treatment*, (2014) 1–13, doi: 10.1080/19443994.2014.936516

- 27-Mohsen Moradi-Haji Jafan, Mohammad-Reza Zamani Meymian, Rahmatollah Rahimi, Mahboubeh Rabbani, "The effect of solvents and the thickness on structural, optical and electrical properties of ITO thin films prepared by a sol– gel spin-coating process", *Journal of Nanostructure in Chemistry*, 4 (2014) 89, DOI 10.1007/s40097-014-0089-y.
- 28-Mahboubeh Rabbani, Rahmatollah Rahimi, Mohammad Bozorgpour, Javad Shokraiyan, Samaneh Safalou Moghaddam, "Photocatalytic application of hollow CuO microspheres with hierarchical dandelion-like structures synthesized by a simpletemplate free approach", *Materials Letters* 119 (2014) 39–42.
- 29-F. Hashemzadeh, R. Rahimi, A. Ghaffarinejad, "Mesoporous nanostructures of Nb<sub>2</sub>O<sub>5</sub> obtained by an EISA route forthe treatment of malachite green dyecontaminated aqueous solutionunder UV and visible light irradiation", *Ceramics International*, 40 (2014) 9817–9829.
- 30-Fatemeh Hashemzadeh, Rahmatollah Rahimi, Ali Gaffarinejad, "Influence of operational key parameters on the photocatalyticdecolorization of Rhodamine B dye usingFe<sup>2+</sup>/H<sub>2</sub>O<sub>2</sub>/Nb<sub>2</sub>O<sub>5</sub>/UV system", *Environmental Science and Pollution Research*, 21 (2014) 5121-5131.
- 31-Farhadi Houshang, Hashemzadeh Fatemeh, Rahimi Rahmatollah, Gaffarinejad Ali, "Surfactant-Free Hydrothermal Synthesisof Mesoporous Niobia Samples and Their Photoinduced Decomposition of Terephthalic Acid (TPA)", *Journal of Cluster Science*, 25 (2014) 651-666.
- 32-Rahmatollah Rahimi, Ali Maleki, Saied Maleki, "Preparation of magnetic fluorochromate hybrid nanomaterials with triphenylphosphine surface modified iron oxide nanoparticles and their characterization", *Journal of Magnetism and Magnetic Materials*, 355(2014)300–305.

33-Rahmatollah Rahimi, Ali Maleki, Saied Maleki, Ali Morsali, Mohmmad Javad Rahimi, "Synthesis and characterization of magnetic dichromate hybridnanomaterials with triphenylphosphine surface modified iron oxidenanoparticles (Fe<sub>3</sub>O<sub>4</sub>@SiO<sub>2</sub>@PPh<sub>3</sub>@Cr<sub>2</sub>O<sub>7</sub><sup>2-</sup>)", *Solid State Sciences* 28 (2014) 9-13.

- 34-F. Hashemzadeh, R.Rahimi, A.Gaffarinejad, "Photocatalytic Degradation of Methylene blue and Rhodamine B dyes by Niobium Oxide Nanoparticles synthesized Via Hydrothermal method", *International Journal of Applied Chemical Sciences Research*, 1 (2013) 95-102, ISSN: 2328-2827 (Online).
- 35-Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, "SbVO<sub>4</sub>-TiO<sub>2</sub> Cation Deficient Photocatalyst: Synthesis and Photocatalytic Investigation", *Advanced Materials Research*, 702 (2013) 51-55.
- 36-Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, Rahim Rahimi, "Synthesis of Mesoporous V-TiO<sub>2</sub> with Different Surfactants: The Effect of Surfactant Type on Photocatalytic Properties", Advanced Materials Research, 702 (2013) 56-61.
- 37-Rahmatollah Rahimi, Solmaz Zargarib, Masoumeh Mahjoub Moghaddas,
   "BiVO<sub>4</sub>-TiO<sub>2</sub> Nanocomposite: Synthesis and Photocatalytic Investigation",
   Advanced Materials Research, 702 (2013) 172-175.
- 38-R. Rahimi, M. Mahjoub Moghaddas, S. Zargari "Investigation of the anchoring silane coupling reagent effect in porphyrin sensitized mesoporous V-TiO<sub>2</sub> on the photodegradation efficiency of methyl orange under visible light irradiation" *Journal of Sol-Gel Science and Technology*, 65(3) (2013) 420-429.

- 39-Rahmatollah Rahimi, Azadeh Tadjarodi, Mahboubeh Rabbani, Hamed Kerdari, Mina Imani, "Preparation, Characterization and Photocatalytic Properties of Ba-Cd-Sr-Ti Doped Fe<sub>3</sub>O<sub>4</sub> Nanohollow Spheres on Removal of Congo Red Under Visible-Light Irradiation", *Journal of Superconductivity and Novel Magnetism*, 26 (2013) 219–228.
- 40-Ahmad Nozad Golikand, Khadijeh Didehban, Rahmatollah Rahimi, "Investigation of the properties of conductive hydrogel composite containing Zn particles", *Journal of Applied Polymer Science*, 126 (2012) 436–441.
- 41-Rahmatollah Rahimi, Ensieh Gholamrezapor, Mohammad Reza Naimi-Jamal, Mahboubeh Rabbani, "Oxidation of *o*-chloro and *o*-hydroxy benzyl alcohols catalyzed by copper (II) tetraphenylporphyrin nanoparticles synthesized by mixed solvent method", *Current Chemistry Letters* 1 (2012) 101–108.
- 42-Rahmatallah Rahimi and Neda Goodarzi, "Simultaneous Determination Watersoluble Vitamin B9 or Folic Acid in Mint Vegetable, by HPLC Method Coupled with a Solid Phase Extraction", *International Journal of Pure & Applied Chemistry*, 7 (2012) 59-63.
- 43-Rahmatollah Rahimi, Seyyedeh Zahra Ghoreishi & Mohammad G. Dekamin, "Immobilized metalloporphyrins on 3- aminopropyl-functionalized silica support as heterogeneous catalysts for selective oxidation of primary and secondary alcohols", *Monatshefte für Chemie - Chemical Monthly*, 143 (2012) 1031-1038.
- 44-Masoomeh Madadi, Rahmatollah Rahimi, "Zeolite-Encapsulated Fe(III) Complex with 5,10,15,20-Tetraphenyl Porphyrin as Heterogeneous Catalysts for Epoxidation of α-Pinene: Synthesis, Characterization and Catalytic Activity", *Journal of Chemistry and Chemical Engineering*, 6 (2012) 173-178.

- 45-M. Madadi , R. Rahimi, "Zeolite-immobilized Mn(III), Fe(III) and Co(III) complexes with 5,10,15,20-tetra(4-methoxyphenyl)porphyrin as heterogeneous catalysts for epoxidation of (R)-(+)-limonene: Synthesis, characterization and catalytic activity", *Reaction Kinetics, Mechanisms and Catalysis* 107 (2012) 215–229.
- 46- A. Tadjarodi, R. Rahimi, M. Imani, H. Kerdari, M. Rabbani, "Synthesis, characterization and microwave absorbing properties of the novel ferrite nanocomposites", *Journal of Alloys and Compounds* 542 (2012) 43–50.
- 47-Rahmatollah Rahimi, Samaneh Safalou Moghaddam, Mahboubeh Rabbani, "Comparison of photocatalysis degradation of 4-Nitrophenol using N, S codoped TiO<sub>2</sub> nanoparticles synthesized by two different routes", *Journal o Sol-Gel science and technology*, 64 (2012) 17–26.
- 48- Rahmatollah Rahimi, Elham Honarvar Fard, Sara Saadati, Mahboubeh Rabbani, "Degradation of methylene blue via Co-TiO<sub>2</sub> nano powders modified by meso-tetra(carboxyphenyl)porphyrin", ", *Journal of Sol-Gel science and technology* 62 (2012) 351–357.

- 49-Ebrahim Alizadeh-Gheshlaghi, Behrouz Shaabani, Ali Khodayari, Yashar Azizian-Kalandaragh, Rahmatollah Rahimi. "Investigation of the catalytic activity of nano-sized CuO, Co<sub>3</sub>O<sub>4</sub> and CuCo<sub>2</sub>O<sub>4</sub> powders on thermal decomposition of ammonium perchlorate", *Powder Technology* 217 (2012) 330–339.
- 50-Rahmatollah Rahimi, Hamed Kerdari, Mahboubeh Rabbani, Majid Shafiee, "Synthesis, characterization and adsorbing properties of hollow Zn-Fe<sub>2</sub>O<sub>4</sub> nanospheres on removal of Congo red from aqueous solution", *Desalination* 280 (2011) 412–418.

- 51-Seyed Hossein Hosseini, Rahmatollah Rahimi and Hamed Kerdari, "Preparation of a nanocomposite of magnetic, conducting nanoporous polyaniline and hollow manganese ferrite", *Polymer Journal* (2011) 1–6.
- 52- Rahmatolah Rahimi, Ensieh Gholamrezapor, Mohammad Reza Naimi- jamal, "Oxidation of benzyl alcohols to the corresponding carbonyl compounds catalyzed by copper (II) meso-tetra phenyl porphyrin as Cytochrome P-450 model reaction", *Inorganic Chemistry Communications* 14 (2011) 1561–1568.
- 53-Rahmatallah Rahimi, Neda Goodarzi, "Determination of Folic Acid in Mint Vegetable, by High-Performance Liquid Chromatography", *Organic Chemistry Journal*, 1 (2011) 31-35.

- 54-Rahmatollah Rahimi, Mahbobeh Rabbani, Pegah Tavakoli, "Solar energy and solar cells", *Journal of Physics Education development*, winter 2010
- 55-Rahmatollah Rahimi, Maryam Mokhtari Mehr Mahbobeh Rabbani, "Interaction between sulfunated tetra phenyl porphyrin (TPPS) and dopa melanin", *Journal* of Basic Sciences of Islamic Azad University, 2010
- 56-Rahimi Rahmatollah, mohammadnezhad,"Synthesis and Characterization of Titanium Mesoporous Silicate", *Synthesis and Reactivity in Inorganic Metal-Organic and Nano-Metal Chemistry*, (2010)
- 57-Rahimi Rahmatollah, Rabani Mahboubeh, "Mineral contents of some plants used in Iran", *Pharmacognosy Research*, July 2010, Vol 2, Issue 4

- 58-Rahmatollah Rahimi, Maryam Eskandari, Ali Morsali, Spectroscopic, structural and solution studies of new Tl<sup>I</sup> complexe with 3-nytrobenzylidne-4aminobenzoate", Asian Journal of Chemistry, 22 No. 9 (2010)
- 59-R. Rahmatollah, M. Anbia, G.H. Mohamadnezhad and M. Rabani, "Synthesis of Mesoporouse Silicate Molecular Sieves", *Asian Journal of Chemistry*, 22 (2010) 6961-6976.
- 60-Jamal Asadpoor, Rahmatollah Rahimi, Kamran Akhbari and Ali Morsali, "Nanoparticles of a New Potassium (I) Coordination Polymer from Thermal Treatment with Oleic Acid: Syntheses, Characterization, Thermal, Structural and Solution Studies", *Journal of Inorganic and Organometallic Polymers and Materials*, 20 (2010).
- 61-Shahriar Ghammamy, Hajar Sahebalzamani, Nina Khaligh and Rahmatollah Rahimi, "Aquabis [N-(2-hydroxybenzylidene) isonicotinohydrazide- $\kappa$ ,N]silver(I) nitrate", *Acta Cryst*allographica, E66 (2010) m294.

- 62-Davood Zare, Azim Akbarzade, Shahram Tangestani, Majid Moghaddam, Rahmatollah Rahimi, Nasim Bararpour, "Preparation of gold nanoparticles using L – Alanine and stabilizing them with chitosan", *Iranian Journal of Chemical Engineering*, 8th, number 42, Aban, 2009
- 63-Rahimi, Davood Zare, Azim Akbarzade, Shahram Tangestani, Majid Moghaddam, Mohammad Atyabi, Ali Farhangi, Nasim Bararpour, "Use the Phenylalanine to product gold nanoparticles and investigation of the stability of nanoparticles coated with Sodium dodecyl sulfat", *Scientific- Research Journal of Basic Sciences*, Islamic Azad University, 2009

- 64-Z. Javanshir, S. Ghammamy, K. Mehrani, A. Moghimi and R. Rahimi, "Synthesis and Reactivity of Two Fluoroantimonate Complexes(III): tetraalkyl ammonium Fluoro Antimonate (R)4N[SbX<sub>3</sub>F], (R =  $C_2H_5$ ,  $C_4H_9$ )", *International Journal of Pure & Applied Chemistry* 4(4) (2009) 253-256.
- 65-Rahmatollah Rahimi, Fariba Moharrami, "Study of Kinetics Incorporation of Silver with TCPP", *Asian Journal of Chemistry*, (2009)
- 66-Rahmatollah Rahimi, Fariba Moharrami, Seyed Hamed Rahmanpour, "Investigation of Tetra (p-carboxyphenyl) porphyrin in monomer and aggregation forms by UV-Vis , HNMR , CNMR, SEM and AFM", Asian Journal of Chemistry,(2009)
- 67-Hong-Ping Xiao, Rahmatollah Rahimi, Ya-Qian Cheng, Ali Morsali, Wei-Bing Zhang and Jia-Guo Wang, "La(III) and Eu(III) 2-D coordination polymers of 5-nitroisophthalic acid (H<sub>2</sub>Nip) and 1,10-phenanthroline (phen), [M (phen)(HNip)(Nip)]<sub>n</sub>", *Journal of Coordination Chemistry*, (2009)
- 68-Mohamad Mehdi Kashani-Motlagh, Rahmatollah Rahimi, Marziye Javaheri Kachousangi, "Ultrasonic Method for the Preparation of Organic Nanoparticles of Porphyrin", *Molecules* 14 (2009).
- 69-F. Shabani, Kh. Mehrani, Sh. Ghammami, M. R. Rezakhani, S. A. Seyed Sajadi, R. Rahimi, S. Asili, A. Hematimoghadam, "Synthesis and characterization of 2-{[(6-{[(2-Hydroxyphenyl)-methylidene]-amino}-2pypidyl)imino]methyl}phenol and its Zn(II) complex", *Asian Journal of Chemistry*, 21(2009) 6585-6589.
- 70-M. Hajighahramani, R. Zamanpoor, Sh. Ghammamy, Kh. Mehrani, T. Banibairami, R. Rahimi, S. Asili, "Synthesis and characterization of four new

trialkylammonium sulfatotrioxochromates, [R<sub>3</sub>NH]<sub>2</sub>CrO<sub>3</sub>SO<sub>4</sub>, (R=Me, Et, n-Pr, n-Bu)", *Asian Journal of Chemistry*, 21, No. 6 (2009).

- 71-K. Mahanpour, Sh. Ghammamy, R. Rahimi, S. Asili, F. Siavoshifar, F. Imani,
  A. Hematimoghadam, "oxidation of alcohols with tripropylammonium fluorochromate, (C<sub>3</sub>H<sub>7</sub>)<sub>3</sub>NH[CrO<sub>3</sub>F] under microwave irradiation", *Asian Journal of Chemistry*, 21, No. 6 (2009).
- 72-Rahmatollah Rahimi, Alireza Azhdari Tehrani, Mahmood Azizpoor Fard, Bahareh Mir-Mohammad Sadegh, Hamid Reza Khavasi, 'First catalytic application of metal complexes of porpholactone and dihydroxychlorin in the sulfoxidation reaction'', *Catalysis Communications* (2009)
- 73-Rahmatolla Rahimi, Maryam Jeddi. Sayyed Mohammad Reza Ravanfar, " Characterization of Nano Tetrakis(4-sulfonatophenyl)porphyrin Aggregation Through Atomic Force Microscopy and UV-Vis Spectroscopy Methods", *Asian Journal of Chemistry*, 21, No. 4 (2009).

- 74-Rahmatollah Rahimi, Mahbobeh Rabbani, "Application of titanium dioxide nanoparticles", *Journal of Chemical Education development*, 2008, number 88
- 75-Rahmatollah Rahimi, Mahbobeh Rabbani, "Application of nanoscale porous materials", *Journal of Chemical Education development*, 2008, number 87.
- 76-Rahmatollah Rahimi, Mahbobeh Rabbani, "lyker gous cup and Nano technology", *Journal of Chemical Education development*, 2008, number 85.
- 77-Rahmatollah Rahimi, Leila Hojjat Kashani, "Study of ice crystals in frozen food", *Scientific- Research Journal of Basic Sciences*, Islamic Azad University, 2008.

- 78-Z. Javanshir, S. Ghammamy, S. Bagi, R. Rahimi, "The Two New Adsorbed on Alumina Tributylammonium Halochromates,(C<sub>4</sub>H<sub>9</sub>)<sub>3</sub>NH[CrO<sub>3</sub>X],(X=F,Cl): Reagents for Oxidative Coupling of Thiols", *International Journal of Pure and Applied Chemistry* (IUPAC), (2008)
- 79-Hamid Reza Khavasi, Ayoob Bazgir, Vahid Amani, Rahmatollah Rahimi, "Synthesis and crystal structure of 1,2-dihydro-1-(4-chlorophenyl) naphtha [1,2-e][1,3]oxazin-3-one", *Journal of Chemical Research*, (2008) 450–451
- 80-Vahid Amani, Rahmatollah Rahimi and Hamid Reza Khavasi, "Bis (2,6dimethylpyridinium) hexachlorido latinate(IV)", *Acta Crystallographica*, E64 (2008) m1143–m1144.

# 2007-1992:

- 81-Mohammadnejad, Rahimi, Anbia, Sajjadi, "Synthesis and investigation of titanium silicate nanostructure", *Scientific- Research Journal of Basic Sciences*, 2005.
- 82-Fatoreh, Ghahramani, Rabbani, Rahimi, "Investigation of Catalysts based on nanoporous in the production of clean fuel", *Scientific Journal of Vehicle*, 2005.
- 83-Rahimi, Kashani, "Synthesis of nanometric powder of aluminum nitrate", *Iranian Journal of Chemical Engineering*, 2005.
- 84-Rahimi, Kashani, "Combustion process of ALEX solid fuel", *Iranian Journal* of Chemical Engineering, 2004.

- 85-Rahimi, Kashani, "Water purification by coagulation method", *International Journal of Engineering Science*, 2004.
- 86-Rahimi and Kashani, "Combustion investigation of aluminum powder as a solid fuel", *Scientific Journal of Vehicle*, 2003.
- 87-Kashani and Rahimi, "Tricolozane antibacterial material in toothpaste", *Journal of Cosmetics Industry*, 2003.
- 88-Rahimi, "Synthesis of N-methyl tetra sulfonated phenyl porphyrin complex and its reaction with cyanide", *International Journal of Engineering Science*, 2002.
- 89- Rahimi and Ameri, "Kinetics of the demetalation of the inorganic complexes", *Journal of the Caspian process*, 2002.
- 90-Karimpour and Rahimi, "Investigation of equilibrume between the structures of the monomers and dimers of water-soluble porphyrin", *International Journal of Engineering Science*, 2001.
- 91-Fatemi, Abbasi, Rahim and Pirozi, "Investigation of Surface properties and functional properties of the Surfactants in Anionic and nonionic surfactant systems", *Journal of Cosmetics Industry*, 2001.
- 92-Rahmi and Mazuchi, "Today noble gases or Yesterday inert gases", *Journal of research and knowledge, Journal of Scholars Club*, 1999.
- 93-Rahimi and Moqadam, "Hydrogen", Journal of Chemical Education development, 1998.
- 94-R. Rahimi, P. Hambright, "Anti-Cyanide Drugs: Kinetics of the Removal of Copper (II) and Nickel (II) N-Methyl-tetra (4-sulfonatophenyl) porphyrins by

Cyanide. LD<sub>50</sub>s of Common Metalloporphyrins and Metallophthalocyanines", *Journal of Porphyrins Phthalocyanines*, 2 (1998) 493-499.

- 95-Rahimi Rahmatollah, "Boron and Aluminum Elements (part two)", *Journal of Chemical Education development*, 1995.
- 96-Rahimi Rahmatollah, "Boron and Aluminum Elements (part one)", *Journal of Chemical Education development*, 1995.
- 97-Rahimi Rahmatollah, "Olympiad and record of the Iranian chemical activities", Journal of Chemical Education development, 1995.
- 98-Rahimi Rahmatollah, "The third seminar of Inorganic Chemistry's report", Journal of Chemical Education development, 1995.
- 99-Rahimi Rahmatollah and Abedini, "problems of 26th Chemistry Olympiad", 26th international Chemistry Olympic, Oslo University, 1995.
- 100-R. Rahimi, T.P.G. sutter, P. Hambright, "Acid Catalyzed Solvolysis Klinetics Of Zinc(II), Cobalt(II), Copper(II) And Nickel(II) N-methyl-tetra-(4-Sulfonatophenyl) Porphyrins", *Journal of Coordination Chemistry*, 34 (1995) 283-288.
- 101-Rahimi Rahmatollah, "Trail problems of 24th Chemistry Olympiad", *Growth chemistry magazine*, Petersburg University, 1993.
- 102-Timothy P.G. S., Rahmatollah, Rahimi, P.H. "Steric and Inductive Effects on the Basicity of Porphyrins and on the Site of Protonation of Porphyrin Dianions: Radiolytic Reduction of Porphyrins and Metalloporphyrins to Chlorins or Phlorins", *Journal of the Chemical Society, Faraday Transactions*, 89(3) (1993) 495-502.

- 103-Rahimi Rahmatollah, "problems of 24th Chemistry Olympiad", 24th international Chemistry Olympic, *chemistry development magazine*, Petersburg University, 1992.
- 104-D.M. Guldi, P.Hambright, R. Rahimi, "Ring Reduction of [N-Methyltetrakis (4-sulfonatophenyl) porphinato] cobalt (II), -nickel (II), and -copper(II) and Subsequent Methyl Group Migration. Reversible Reaction between Methyl Radicals and Ni<sup>II</sup>TSPP", *Inorganic Chemistry*, 31 (1992) 4849-4853.

# Titles of papers presented in conferences:

- 1-Fatemeh Fayyaz, Rahmatollah Rahimi, Mehdi Rassa, and Reza Hedayat Yaghoobi, "Photodynamic Antimicrobial Chemotherapy, A Pathway for Photo-Inactivation of Bacteria by Porphyrin Compounds" 1st Electronic Conference on Molecular Science, 15–22 October 2015.
- 2-Rahmatollah Rahimi, Fatemeh Fayyaz, Mehdi Rassa, and Reza Hedayat Yaghoobi, "The effect of irradiation time on the viability of Bacillus subtilis by cationic porphyrin compounds" 1st Electronic Conference on Molecular Science, 15–22 October 2015.
  - 3-Rahmatollah Rahimi, Mahdi Heidari-Golafzani, Mahboubeh Rabbani, Highly selective oxidation of benzyl alcohol to benzaldehyde catalyzed by Zn-Fe<sub>2</sub>O<sub>4</sub>@ZnO core-shell nanostructures, International Summit on Current Trends in Mass Spectrometry" during July 13-15, 2015 New Orleans, USA.

- 4-Rahmatollah Rahimi, Mahsa Moshari, Mahboubeh Rabbani, Oxidation of benzyl alcohols in presence of sulfur/graphene, International Summit on Current Trends in Mass Spectrometry" during July 13-15, 2015 New Orleans, USA.
- 5- Rahmatollah Rahimi, Shabnam Pordel, Mahboubeh Rabbani, Oxidation of benzylalcohols in presence of Ni/Bi<sub>2</sub>WO<sub>6</sub> nanoparticles synthesized by simple hydrothermal method, International Summit on Current Trends in Mass Spectrometry" during July 13-15, 2015 New Orleans, USA.
- 6-Rahmatollah Rahimi, Amin Mehrehjedy, Simple and efficient oxidation of thiols to disulfides Using SnO<sub>2</sub>, International Summit on Current Trends in Mass Spectrometry" during July 13-15, 2015 New Orleans, USA.
- 7-Mahdi Heidari-Golafzani, Mahboubeh Rabbani, Rahmatollah Rahimi, Alireza Azad, Using ZnFe<sub>2</sub>O<sub>4</sub>@ZnO as an efficient heterogeneous catalyst for silylation of alcohols with HMDS, The 19th International Electronic Conference on Synthetic Organic Chemistry, 1-30 November 2015
- 8-Rahmatollah Rahimi, Mahboubeh Rabbani, Ghaffar Kareh, Comparative study of photocatalytic activity for three type Fe<sub>3</sub>O<sub>4</sub> prepared in presence of different hydrolysis agent, The 19th International Electronic Conference on Synthetic Organic Chemistry, 1-30 November 2015
- 9-R.Rahimi, S.Zaragri, A. Morsali, A. Ghaffarinejad. "Preparation of porphyrin based metal organic framework/TiO<sub>2</sub>-graphene nanocomposite" 2<sup>nd</sup> Iran National Zeolite Conference, 27-28 may 2015.
- 10-Rahmatollah Rahimi, Mahsa Moshari, Mahboobeh Rabbani, "Effect of photocatalyst sulfur/Graphene composite in water purification" Asian Nano Fourm Conference (ANFC 2015) 8-11 March 2015.

- 11- Rahmatollah Rahimi, Solmaz Zargari and Zahra Sadat Shojae, Ali Ghafarinejad,
   "Photoelectrochemical Investigation of TiO<sub>2</sub>-Graphene Nanocomposites" *The* 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry, 1 - 30 November 2014.
  - 12- Rahmatollah Rahimi, Solmaz Zargari and Marzieh Yaghobi Berijani, "Synthesis and Photocatalytic Application of BiVO<sub>4</sub> Nanocrystalline Functionalized by *porphyrin with Two Different Crystalline Phasesas an Efficient Photocatalyst" The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.
  - 13-Rahmatollah Rahimi, Amin Mehrehjedy and Solmaz Zargari, "Synthesis and Photocatalytic Activity Investigation of CuO Nanorod Functionalized with Porphyrin" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.
  - 14-Rahmatollah Rahimi, Rouholah Zare-Dorabei, Asgar Koohi and Solmaz Zargari, "Synthesis of Porphyrin- Graphene Oxide Nanocomposite for an Optical Chemical Sensor Application" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 30 November 2014.
- 15-Asgar Koohi, Rahmatollah Rahimi, Rouholah Zare-Dorabei and Solmaz Zargari, "Synthesis of graphene oxide-porphyrin nanocomposite and its application in removal of toxic metals" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.
- 16-Rahmatollah Rahimi, Hossein Ghafuri, Zahra Movahedinia and Solmaz Zargari,
  " Synthesis and Characterization of 5,10,15,20-Tetrakis(4-Tolyl) Porphyrin and its Tin and Cobalt Complexes: Investigation of their PhotodynamicProperties in

Degradation of Methylen Blue" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.

- 17-Maryam Khosravi, Rahmatollah Rahimi, Ebrahim Safavi, Synthesis of L-Carnosine and its Applications in Biomedical Field, *The 18th International Electronic Conference on Synthetic Organic Chemistry*, 1-30 November 2014.
- 18-Fatemeh Fayyaz, Rahmatollah Rahimi\* and Mehdi Rassa, "Comparison of Minimal Inhibitory Concentration of Porphyrin Compounds Against Bacillus Subtilis Under Irradiation With Visible Light" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.
- 19-Rahmatollah Rahimi\*, Fatemeh Fayyaz and Mehdi Rassa, "Coating of Glass with Tetra-Cationic porphyrin and its Zinc Compound Used Asphoto-Inactivation of Bacteria" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.
- 20-Hossein Ghafuri, Rahmatollah Rahimi\*, Ziba Felfelian and Mahboubeh Rabbani, " Synthesis, Characterization and Photocatalytic Activity of Co(III) 5,10,15,20-Tetrakis (Carboxyphenyl) Porphyrin-Supported Chitosan" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 30 November 2014.
- 21-Hossein Ghafuri, Rahmatollah Rahimi\* and Fatemeh Rafiee, "Synthesis and Characterization of Tin(II) 5,10,15,20-Tetrakis (4-Phenylbenzoate) Porphyrin and Tin(II) 5,10,15,20-Tetrakis (4-[1,1'-Biphenyl]-4ylbenzoate)Porphyrin" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 -30 November 2014.
- 22- Rahmatollah Rahimi, Fatemeh Rafiee and Mahboubeh Rabbani, "Synthesis, Characterization and Photocatalytic Activity of Porphyrin–Polyoxometalate

Hybrid Material" *The 18<sup>th</sup> International Electronic Conference on Synthetic Organic Chemistry*, 1 - 30 November 2014.

- 23- Rahmatollah Rahimi, Mahdi Heidari-Golafzani, Mahboubeh Rabbani, Preparation and Photocatalytic Application of Zn-Fe<sub>2</sub>O<sub>4</sub>@ZnO Core-Shell Structured Spheres, *The 18th International Electronic Conference on Synthetic* Organic Chemistry, 1-30 November 2014
- 24- Rahmatollah Rahimi, Mahsa Moshari, Mahboubeh Rabbani, Photocatalytic Degredration of Methylene Blue and Crystal Violet by Sulfur/Reduced Graphene Oxide Composite, *The 18th International Electronic Conference on Synthetic Organic Chemistry*, 1-30 November 2014.
- 25- Solmaz Zargari, Rahmatollah Rahimi, "Metaloporphyrin functionalized TiO<sub>2</sub>graphene composite with excellent visible-light photocatalytic activity" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 26- Solmaz Zargari, Rahmatollah Rahimi, "Photoantibacterial activity of TiO<sub>2</sub>graphene nanocomposite functionalized with metaloporphyrin: a new and efficient photocatalyst based graphene composite for inactivation of E. Coli" *16<sup>th</sup> Iranian Inorganic Chemistry Conference*, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 27- Solmaz Zargari, Zahra Sadat Shojaei, Rahmatollah Rahimi, Ali Ghafarinejad,
  "Photoelectrochemical investigation of a new 3D graphitic nanostructure base graphene-TiO<sub>2</sub> nanocomposite" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 28- Zahra Sadat Shojaei, Solmaz Zargari, Rahmatollah Rahimi, Ali Ghafarinejad, "Photoelectrochemical behavior investigation of TiO<sub>2</sub>-graphene composite

functionalized with porphyrin" *16<sup>th</sup> Iranian Inorganic Chemistry Conference*, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.

- 29- Hossein Ghafuri, Shirin Rahmani, Zahra movahedinia, Rahmatollah Rahimi, Solmaz Zargari, "Oxidation of 5, 10, 15, 20-Tetrakis-(4-MethylPhenyl) Porphyrin to Aldehydic functionalized" *16<sup>th</sup> Iranian Inorganic Chemistry Conference*, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 30-Hossein ghafuri, Zahra Movahedinia, Shirin Rahmani, Solmaz Zargari, Rahmatollah Rhimi, " Synthesis and characterization of 5, 10, 15, 20-Tetrakis-(4-Tolyl) Porphyrin, its Tin complexes and application in the photodynamic degradation of Methylene blue" *16<sup>th</sup> Iranian Inorganic Chemistry Conference*, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 31- Hossein ghafuri, Shirin Rahmani, Zahra Movahedinia, Rahmatollah Rahimi, Solmaz Zargari, " Synthesis and characterization of 5, 10, 15, 20-Tetrakis-(4-CarboxyMethylPhenyl) Porphyrin and its application in the photodynamic degradation of Methylene blue" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 32- Samaneh Shariatynia, Solmaz Zargari, Rahmatollah Rahim, "Synthesis and characterization of metal organic framework based porphyrin" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 33- Marzieh Yaghobi, Solmaz Zargari, Rahmatollah Rahimi, "Preparation of BiVO<sub>4</sub> nanocrystalline with two different crystalline phases as an efficient photocatalyst" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.

- 34- Marzieh Yaghobi, Solmaz Zargari, Rahmatollah Rahimi, " A simple lowtemperature chemical method to fabrication of ZnO nanorods" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 35- Maryam Khosravi, Rahmatollah Rahimi, Ebrahim Safavi, "A comparative synthesis of Phthalyl-(β)-alanine with microwave and conventional heating technologies" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 36- Rahmatollah Rahimi, Alireza Akbarzadeh, Saeed Yousefinejad, Samira Shakeri, Mohammad Hossein Keshavarz, "Non-steroidal anti-inflammatory drugs (NSAIDs) for block COX-2 enzyme through QSAR" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 37-Rahmatollah Rahimi, Alireza Akbarzadeh, Mohammad Hossein Keshavarz, Saeed Yousefinejad, Samira Shakeri, " Prediction of cyclooxygenase inhibitor activity for human body by the PASS software" 16<sup>th</sup> Iranian Inorganic Chemistry Conference, Bu-Ali Sina University, Hamedan, Iran, 27-29 August 2014.
- 38-Ali Maleki, Rahmatollah Rahimi, Mahboubeh Rabbani, Shirin Shahrokh, characterization and application as a magnetically recoverable nanocatalyst for the one-pot three-component synthesis of quinazolinone derivatives, 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), 22-24 October 2014
- 39- Ali Maleki<sup>\*</sup>, Zahra Alirezvani, Rahmatollah Rahimi, Saied Maleki, "The Synthesis of Substituted imidazoles by using functionalized ferrate (III) catalyst

under green chemistry conditions" 21<sup>st</sup> Iranian Seminar of Organic Chemistry (21<sup>st</sup> ISOC), Ilam University, Ilam, Iran, 13-15 March 2014.

- 40-Rahmatollah Rahimi\*, Alireza Akbarzadeh, masoud Shakeri, Samira Shakeri, Mohammad Hossein Keshavarz, "Sublation method for the surfactant separation", 21<sup>st</sup> Iranian Seminar of Organic Chemistry (21<sup>st</sup> ISOC), Ilam University, Ilam, Iran, 13-15 March 2014.
- 41-Rahmatollah Rahimi, Saeed Amani, <u>Meisam Jamali</u>, <u>Solmaz Zargari</u>, "Highperformance porphyrin sensitized solar cell with graphene as an efficient hole transporting layer", *3*<sub>th</sub> International Conference in Emerging Trends in Energy Conservation, 3-4 March 2014.
- 42-Rahmatollah Rahimi\*, Alireza Akbarzadeh, masoud Shakeri, Samira Shakeri, Mohammad Hossein Keshavarz, "Photosensitizer Activity Prediction through Validation of Quantitative Structure Activity Relationship (QSAR) by multiple linear regression analysis (MLRA) Model", 20<sup>th</sup> Iranian Analytical Chemistry Conference (IACC 2014), Isfahan University of Tecnology, Isfahan, Iran, 25-27 February 2014.
- 43-Rahmatollah Rahimi\*, Alireza Akbarzadeh, masoud Shakeri, Samira Shakeri, Mohammad Hossein Keshavarz, "Development of models QSPR for the prediction of thermal stability of explosion nitroaromatics", 20<sup>th</sup> Iranian Analytical Chemistry Conference (IACC 2014), Isfahan University of Tecnology, Isfahan, Iran, 25-27 February 2014.
- 44- Ali Maleki, Rahmatollah Rahimi, Mahboubeh Rabbani, Shirin Shahrokh, characterization and application as a magnetically recoverable nanocatalyst for the one-pot three-component synthesis of quinazolinone derivatives, 5th International Congress on Nanoscience & Nanotechnology (ICNN2014), 22-24 October 2014

- 45- Milad Fallah, Mohammad-Reza Zamani-Meymian, Rahmatollah Rahimi, Mahboubeh Rabbani, "????? " 3th Confrences of nanostructured Solar Cells (NSSC92), 07 NOV 2013, Sharif University.
- 46-Rahmatollah Rahimi\*, Mohammad Bozorgpour, Mahboubeh, "Photocatalytic degradation of MB from water by using Ni-TPPS/NiO nanoparticles", *17th International Electronic Conference on Synthetic Organic Chemistry*, 01 NOV 2013.
- 47-Rahmatollah Rahimi\*, Mohammad Bozorgpour, Mahboubeh Rabbani, "Synthesis of Fe-doped Nickel oxide nanostructures via a simple mechanochemical route and its application for photocatalytic removing of MB", *17th International Electronic Conference on Synthetic Organic Chemistry*, 01 NOV 2013.
- 48-Rahmatollah Rahimi\*, Javad Shokrayian, Mahboubeh Rabbani, "Photocatalytic removing of methylene blue by using of Cu-doped ZnO, Ag-doped ZnO and Cu, Ag-codoped ZnO nanostructures", *17th International Electronic Conference on Synthetic Organic Chemistry*, 01 NOV 2013.
- 49-Rahmatollah Rahimi\*, Javad Shokrayian, Mahboubeh Rabbani, "Synthesis of ZnO nanorods modified with TPP, TPPS and Cu-TPPS for photodegradation of MB", *17th International Electronic Conference on Synthetic Organic Chemistry*, 01 NOV 2013.
- 50-Rahmatollah Rahimi, Mohammad Bozorg Poor, Mahboobe Rabbani, "Synthasis and characterization of nickel oxide nanoparticles functionalized with nickelporphyrin complex as a photocatalyst for removal of methylen blue from water", *The third national conference of fuel, energy and environment*, Materials and Energy Research Center. 18 and 19 September 2013

- 51-Rahmatollah Rahimi, Mohammad Bozorg Poor, Mahboobe Rabbani, "The mechanochemical synthesis of nickel oxide nanostructure doped with iron for photocatalytic application in the removal of organic pollutant", *the third national conference of fuel, energy and environment*, Materials and Energy Research Center. 18 and 19 September 2013
- 52-Rahmatollah Rahimi, Javad Shokraian, Mahboobe Rabbani, "The comparsion of photocatalytic ability of nano zinc oxides doped with copper and silver metals for removal of methylen blue", *The third national conference of fuel, energy and environment*, Materials and Energy Research Center. 18 and 19 September 2013
- 53-Rahmatollah Rahimi, Javad Shokraian, Mahboobe Rabbani, "Photocatalytic removal of methylen blur using zinc oxide modified with tetra phenyl sulfunated porphyrin", *The third national conference of fuel, energy and environment*, Materials and Energy Research Center. 18 and 19 September 2013
- 54- Mohsen Moradi, Mohammad Raza Zamani, Rahmatollah Rahimi, Mahboobeh Tabbani, "The effect of poly vhynile alcohol in In<sub>2</sub>O<sub>3</sub> structure and its application as a TCO", *First national conference of nano technology applications in industry, mining, agriculture and medicine*, 14<sup>th</sup> and 15<sup>th</sup> may 2013, material and energy research center
- 54- Rahmatollah Rahimi\*, Samira Shakeri, Alireza Akbarzadeh, sadegh Shakeri,
  "Professional ethics and achieve to the ideal accounting", *The First International Conference on Political Epic & Economic Epic (ICPEEE 2014)*, Islamic Azad University, Tehran, Iran, 13, 14 February 2013.
- 55- Rahmatollah Rahimi\*, Alireza Akbarzadeh, Samira Shakeri, masoud Shakeri, "Current cash flow in predicting future cash flow and the promotion of knowledge production" *The First International Conference on Political Epic* &

*Economic Epic (ICPEEE 2014)*, Islamic Azad University, Tehran, Iran, 13, 14 February 2013.

- 56- Rahmatollah Rahimi\*, Samira Shakeri, Alireza Akbarzadeh, sadegh Shakeri, "Islamic Accounting and its implementation challenges in Iran", *The First International Conference on Political Epic & Economic Epic (ICPEEE 2014)*, Islamic Azad University, Tehran, Iran, 13, 14 February 2013.
- 57- Rahmatollah Rahimi\*, Alireza Akbarzadeh, Samira Shakeri, masoud Shakeri, "Content of Information of accruals for anticipated future cash to create epic in Iran", *The First International Conference on Political Epic & Economic Epic* (*ICPEEE 2014*), Islamic Azad University, Tehran, Iran, 13, 14 February 2013.
- 58- Rahmatollah Rahimi, Samira Shakeri, Alireza Akbarzadeh, sadegh Shakeri, "Accounting Information Systems", *The First International Conference on Political Epic & Economic Epic (ICPEEE 2014)*, Islamic Azad University, tehran, Iran, 13, 14 February 2013.
- 59- Maryam Khosravi, Rahmatollah Rahimi, Ebrahimi Safavi, "Synthesis and Charactrization of Carnosine as a chelating agent for biological detoxification", *the first national conference of chemistry of chemical engineering and industry*, Azad university of Arak, 19 and 20 February 2013.
- 60- Fatemeh Fayyaz Jorshari, Rahmatollah Rahimi, Mehdi Rassa, "Study of photoinactivation of metalloporphyrin compound on growth curve of B.subtilis and P.aeruginosa", *First national conference on chemistry, chemical engineering and industry*, Azad university of Arak, 19 and 20 February 2013.
- 61- Rahmatollah Rahimi, Fatemeh Fayyaz Jorshari, "Effect of 5,10,15,20-tetrakis-(3-methyl pyridyl) zinc porphyrin compound on growth rate of P.aeruginosa",

*National conference on chemistry and chemical engineering*, Azad University of Kermanshah, 19 and 20 Desumber 2013

- 62- Fatemeh Hashemzadeh, Rahmatollah Rahimi, Ali Gaffarinejad, "Synthesis and Photocatalytic Activity of Semiconducting Lamellar Calcium Niobate Prepared by Polymerized Complex (PC) Method", 6<sup>th</sup> Iranian National Seminar of Chemistry and the Environment, University of Tabriz, Tabriz, Iran, 29-30 Oct. 2013
- 63- Fatemeh Hashemzadeh, Rahmatollah Rahimi, Ali Gaffarinejad, Yaser Hashemzadeh, "Hydrothermal Synthesis of Wormhole-like Potassium Hexaniobate Nanoparticles and Its Application in Photocatalysis", 6<sup>th</sup> Iranian National Seminar of Chemistry and the Environment, University of Tabriz, Tabriz, Iran, 29-30 Oct. 2013
- 64- Abolfazl Akhtar, Ali Ghaffarinejhad, Seied Mohammad Reza Milani, Ali Moradpoor, Rahmatollah Rahimi, Solmaz Zargari, " Investigation of hydrogen production through electrochemistry using carbon paste modified with TiO<sub>2</sub> electrocatalyst deposited on graphene", *The first conference of hydrogen (production, storage, Consumption)*, 7 November 2013
- 65- Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, Rahim Rahimi, "Synthesis of Mesoporous V-TiO<sub>2</sub> with Different Surfactants: The Effect of Surfactant Type on Photocatalytic Properties", *2013 International Conference on Solid State and Materials*, Los Angeles, 30-31 January 2013.
- 66- Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari,
  "SbVO<sub>4</sub>-TiO<sub>2</sub> Cation Deficient Photocatalyst: Synthesis and Photocatalytic Investigation", 2013 *International Conference on Solid State and Materials*, Los Angeles, 30-31 January 2013.

67- Rahmatollah Rahimi, Solmaz Zargari, Masoumeh Mahjoub Moghaddas,
"BiVO<sub>4</sub>-TiO<sub>2</sub> Nanocomposite: Synthesis and Photocatalytic Investigation", 2013
International Conference on Solid State and Materials, Los Angeles, 30-31
January 2013.

- 68- F. Hashemzadeh, M.M. Kashanimotlagh, "Hydrothermal Synthesis of Niobium Oxide Nanoparticles and Investigation of Photocatalytic Activity in Degradation of MB", *International Congress on Nanoscience & Nanotechnology (ICNN2012)*, Kashan, I. R. Iran, 8 – 10 September 2012
- 69- R. Rahimi, M. Mahjoub Moghaddas, S. Zargari, "Photodegradation of MO with Porphyrin Functionalized V-TiO<sub>2</sub> Mesoporous Using Silane-Coupling Reagent", *International Congress on Nanoscience & Nanotechnology*, 8-10 September 2012.
- 70- R. Rahimi, M. Mahjoub Moghaddas, S. Zargari, "Investigation of Photocatalytic Degradation of Methyl Orange with Bi-V doped TiO<sub>2</sub>-Porphyrin Composite", *International Congress on Nanoscience & Nanotechnology*, 8-10 September 2012.
- 71- Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, "Solmaz Zargari, Synthesis of mesoporous vanadium doped Titania with surfactant assisted sol-gel method and investigation of photocatalytic application in the visible light", 14<sub>th</sub> *Iranian Inorganic Chemistry Conference*, 28-29 August 2012.
- 72- Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari,
  "Visible-Light Responsive SbVO<sub>4</sub> Doped Mesoporous TiO<sub>2</sub> Photocatalyst for Methyl Orange Degradation", *14<sub>th</sub> Iranian Inorganic Chemistry Conference*, 28-29 August 2012.

- 73- Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari,
  "Synthesis of Mesoporous Titania with Vanadium Phosphorous Oxide Modified
  Silver Doping and Investigation of the Visible Light Photocatalytic Activity",
  14<sub>th</sub> Iranian Inorganic Chemistry Conference, 28-29 August 2012.
- 74- Rahmatollah Rahimi, Solmaz Zargari, Masoumeh Mahjoub Moghaddas, "Preparation and Photocatalytic Activity Investigation of V-Doped TiO<sub>2</sub>-Activated Carbon Composite Photocatalyst with High Surface Area and Easy Separation", *14<sub>th</sub> Iranian Inorganic Chemistry Conference*, 28-29 August 2012.
- 75- Rahmatollah Rahimi, Solmaz Zargari, Masoumeh Mahjoub Moghaddas,
  "Synthesis and Characterization of V-TiO<sub>2</sub> Included in Zeolite X for photodegradation of Methyl Orange", *14<sub>th</sub> Iranian Inorganic Chemistry Conference*, 28-29 August 2012.
- 76- Rahmatollah Rahimi, Solmaz Zargari, "Effect of  $\pi$ -elongation of porphyrins as sensitizers in DSSCs on photovoltaic properties", *1st Conference of nanomaterial and Nanotechnology*, 29 Feburary 1 March 2012.
- 77- Rahmatollah Rahimi, Solmaz Zargari, "Application of trans-D-π-A porphyrin dyes in dye sensitized solar cells", 1<sup>st</sup> Conference of nanomaterial and Nanotechnology, 29 Feburary – 1 March 2012.
- 78- Rahmatollah Rahimi, Solmaz Zargari, "Several Parameters Affecting Charge Recombination in Dye-Sensitized Solar Cells Based porphyrin and Some Approaches to its Controlling", *1stInternational Conference on Nanostructures and Nanomaterials*, 7-9 Feburary 2012.
- 79- Rahmatollah Rahimi, Solmaz Zargari, "Porphyrin-Thiophene π-Conjugated Copolymers for Dye-Sensitized Solar Cells", 1<sup>st</sup> International Conference on Nanostructures and Nanomaterials, 7-9 Feburary 2012.

- 80- Rahmatollah Rahimi, Masoumeh Madadi, "Oxidation of monoterpenes by tetraphenylporphyrin and its Metal substitutions on zeolite", *12<sup>th</sup> conference of nanotechnology*, 23-24 May, 2012
- 81- Rahmatollah Rahimi\*, Mehdi Deilamkamar, Ahmad Najafian, Ali Maleki, Mahboubeh Rabbani, "Removal of Heavy Metal from Aqueous Solution by tetrakis(4-carboxyphenyl) Porphyrin-Functionalized SBA-15 Mesoporous Silica", 3rd Iran International Zeolite Conference, Arak, Iran, 6-7 june, 2012
- 82- Rahmatollah Rahimi\*, Ahmad Najafian, Mehdi Deilamkamar, Ali Maleki, Mahboubeh Rabbani, Samaneh Safaloumoghaddam, "Investigation on Photocatalytic Activity of Porphyrin into Mesoporous Silica as Biomimetic Heterogeneous Catalyst for Degradation of Azo Dyes", 3rd Iran International Zeolite Conference, Arak, Iran, 6-7 june, 2012
- 83- S. Safalou Moghaddam, R. Rahimi, M. Rabbani, A Najafian, "Photocatalytic degradation of methylene blue with porphyrin-sensitized N, S-codoped TiO<sub>2</sub> under visible light", *3rd Iran International Zeolite Conference*, Arak, Iran, 6-7 june, 2012
- 84- Rahmatollah Rahimi, Ali Noraee, Mahboubeh Rabbani, "Application of Tetrakis(4-carboxyphenyl)porphyrin Functionalized MCM-48 For Removal of Heavy metal ion from water", *3rd Iran International Zeolite Conference*, Arak, Iran, 6-7 june, 2012

85- Rahmatollah Rahimi, Sara Saadati, "Photocatalytic activity of Porphyrin / Fdoped TiO<sub>2</sub> nanopowders for degradation of congo red", *The 2011 International Conference on Water, Energy and Environment,* Sharjah, United Arab Emirates, November 14-17, 2011

- 86- Rahmatollah Rahimi, Elham Honarvar Fard, "Decomposition of MB by Co-TiO<sub>2</sub> nanopowders modified by Meso-tetra (carboxyphenyl) porphyrin", *The 2011 International Conference on Water, Energy and Environment, Sharjah, United* Arab Emirates, November 14-17, 2011
- 87- R. Rahimi, S Safalou Moghaddam, "Photocatalytic Activity of N, S-codoped TiO<sub>2</sub> Nanoparticles for Degradation of Crystal violet", *The 2011 International Conference on Water, Energy and Environment,* Sharjah, United Arab Emirates, November 14-17, 2011
- 88- Rahmatollah Rahimi, Mahboubeh Rabbani, Hamed Kerdari, Majid Shafiee, "Adsorption and magnetic removal of Crystal violet from aqueous solution using hollow Cu-Fe<sub>2</sub>O<sub>4</sub> nanospheres and Cu-Fe<sub>2</sub>O<sub>4</sub> nanosheets", *The 2011 International Conference on Water, Energy and Environment, Sharjah, United* Arab Emirates, November 14-17, 2011
- 89- Rahmatollah Rahimi, Azadeh Tadjarodi, Mahboubeh Rabbani, Hamed Kerdar, Mina Imani, "Preparation and photocatalytic characteristics of Ba<sub>0.75</sub>Cd<sub>0.25</sub>SrTiFe<sub>10</sub>O<sub>19</sub> hollow nanospheres", *3rd International Conference on Ultrafine Grained and Nanostructured Materials*, Tehran, Iran. 2-3 November 2011
- 90- Azadeh Tadjarodi, Rahmatollah Rahimi, Hamed Kerdar, Mahboubeh Rabbani, Mina Imani, " Ba<sub>0.34</sub> Sr<sub>0.34</sub> Cd<sub>0.16</sub> Zn<sub>0.16</sub> Fe<sub>12</sub>O<sub>19</sub> nanoparticles: preparation, characterization and applications in microwave absorption", *3rd International Conference on Ultrafine Grained and Nanostructured Materials*, Tehran, Iran. 2-3 November 2011
- 91- Rahmatollah Rahimi, Mahboubeh Rabbani, "The study of UV-vis spectra and AFM of TPP (Tetraphenylporphyrin) and MTPP (M=Co, Zn) Nanoparticles",

regional seminar of Chemistry and technology, SAMa school, Miandoab, 5 May 2011

- 92- Rahmatollah Rahimi, Mahboubeh Rabbani and Zahra Ghasemi,
  "Electrochemical reduction of TPP (meso-tetraphenylporphyrin) and MTPP (M= Ni<sup>II</sup>, Cu<sup>II</sup> and Pd<sup>II</sup>)", *regional seminar of Chemistry and technology*, SAMa school, Miandoab, 5 May 2011
- 93- Rahmatollah Rahimi, Mahboubeh Rabbani, Hamed Kerdari, "Synthesis and characterization of hollow Zn-Fe<sub>2</sub>O<sub>4</sub> nanospheres and investigation of its properties on congo red adsorption in water solutions", *regional seminar of Chemistry and technology*, SAMa school, Miandoab, 5 May 2011
- 94- Rahmatollah Rahimi, Mahboubeh Rabbani, Pegah Tavakkoli fard, Rahim Rahimi, "Study and comparison of photovoltaic activity of Tetrakis (4carboxyphenyl)porphyrin (TCPP) and its complex (Cu-TCPP) on TiO<sub>2</sub> nanoparticles for light energy conversion", *The first conference on nanostructured solar cells (NSSC())*, Sharif University of Technology, September 15<sup>th</sup> 2011
- 95- Rahmatollah Rahimi, Elham Honarvar Fard, "Preparation and characterization of Co-TiO<sub>2</sub> nanopowders modified by Meso-tetra (carboxyphenyl) porphyrin", 13<sup>th</sup> Conference of Inorganic chemistry, Kermanshah, 7 and 8 September 2011.
- 96- R. Rahimi, S. Safalo Moghaddam, "Improving visible light photocatalytic activity of N, S-codoped TiO<sub>2</sub> nanoparticles via sensitization by Tetra (4carboxyphenyl) porphyrin", 13<sup>th</sup> Conference of Inorganic chemistry, Kermanshah, 7 and 8 September 2011.

- 97- Rahmatollah Rahimi, Sara Saadati, Elham Honarvar Fard, "Porphyrin / F-doped TiO<sub>2</sub> nanopowders: preparation, characterization and activity evaluation", 13<sup>th</sup> Conference of Inorganic chemistry, Kermanshah, 7 and 8 September 2011.
- 98- Rahmatollah Rahimi, Sara Saadati, "Preparation, characterization and activity evaluation of porphyrin/FTiO<sub>2</sub> photocatalyst", *first National congress of modern Iranian chemistry*, Shiraz, 4-5 May 2011
- 99- R. Rahimi, S. Safalo Moghaddam, "Photocatalytic degradation of crystal violet using N,S-codoped TiO<sub>2</sub> nanoparticle", *first National congress of modern Iranian chemistry*, Shiraz, 4-5 May 2011
- 100- Rahmatollah Rahimi, Elham Honarvar Fard, "porphyrin/ Co-TiO<sub>2</sub> nanopowders
  Preparation, characterization and enhanced photocatalytic activity", *first National congress of modern Iranian chemistry*, Shiraz, 4-5 May 2011
- 101- N.Rahmani khalili, R.Rahimi, "Immobilization of metalloporphyrins in 3aminopropyl functionalized SBA-15 as heterogeneous catalysts for oxidation of alkenes", *15<sup>th</sup> Conference of Iranian chemistry*, Hamedan, 4 and 6 September 2011.
- 102- Rahmatollah Rahimi, Mahboubeh Rabbani, Hamed Kerdari, "Coating of hollow zinc ferrite nanospheres with polyaniline, a conducting polymer", *15<sup>th</sup> Conference of Iranian chemistry*, Hamedan, 4 and 6 September 2011.
- 103- R. Rahimi, S. Safalo Moghaddam, "Improving visible- light photocatalytic activity of N, S-codoped TiO<sub>2</sub> nanoparticles via sensitization by Tetra (4-carboxyphenyl (porphyrin)) ", *15<sup>th</sup> Conference of Iranian chemistry*, Hamedan, 4 and 6 September 2011.

- 104- Rahmatollah Rahimi, Sara Saadati, Elham Honarvar Fard, "Porphyrin / Fdoped TiO<sub>2</sub> nanopowders: preparation, characterization and activity evaluation", 15<sup>th</sup> Conference of Iranian chemistry, Hamedan, 4 and 6 September 2011.
- 105- Rahmatollah Rahimi, Elham Honarvar Fard, Sara Saadati, "Preparation and characterization of Co-TiO<sub>2</sub> nanopowders modified by Meso-tetra (carboxyphenyl) porphyrin", *15<sup>th</sup> Conference of Iranian chemistry*, Hamedan, 4 and 6 September 2011.

- 106- N. Rahmani Khalili, R. Rahimi, "Immobilization of metalloporphyrins in mesoporous MCM-48 as a heterogeneous catalysts for the oxidation of alkenes", *12<sup>th</sup> Iranian Inorganic Chemistry Seminar*, University of Guilan (IICC12) Rasht, Iran, 2010
- 107- M. Madadi, R. Rahimi, "Cationic metalloporphyrins in zeolite matrix as efficient catalysts for Monoterpenes oxidation with H<sub>2</sub>O<sub>2</sub>/ammonium acetate", *12<sup>th</sup> Iranian Inorganic Chemistry Seminar*, University of Guilan (IICC12) Rasht, Iran, 2010
- 108- Z.Ghoreishi, R.Rahimi, "Silica supported metalloporphyrins as catalysts for oxidation of cyclohexane with molecular oxygen", 12<sup>th</sup> Iranian Inorganic Chemistry Seminar, University of Guilan (IICC12) Rasht, Iran, 2010
- 109- Rahmatollah Rahimi, Seyyedeh Zahra Ghoreishi, Mohammad G. Dekamin, "Mild Oxidation of Benzhydrol by t-Butyl Hydroproxide in the Presence of Silica Supported Iron Porphyrin as a Heterogeneous Catalyst", ECSOC-14: The 14th International Electronic Conference on Synthetic Organic Chemistry, 1-30 November 2010

- 110- M. Madadi, R. Rahimi, "Synthesis and Characterization of Manganese (III) tetra (4-methoxyphenyl) porphyrin encapsulated in zeolite–X: as efficient catalyst for the hydroxylation of Thymol", *ECSOC-14: The 14th International Electronic Conference on Synthetic Organic Chemistry*, 1-30 November 2010
- 111- Rahmatollah Rahimi, Mahboube Rabbani, Rahim Rahimi, Morteza Moghimi Waskasi, "DFT-TDDFT Computational Study of Three Different Chlorophyllous as Dye sensitized solar cells (DSSCs)", *ECSOC-14: The 14th International Electronic Conference on Synthetic Organic Chemistry*, 1-30 November 2010
- 112- Rahmatollah Rahimi, Mahboube Rabbani, Marziye Javaheri Kachousangi, "Study of Tetracarboxyphenylporphyrin Covalently Bound to Silica in the Removal of Crystal Violet from Aqueous Solution", *ECSOC-14: The 14th International Electronic Conference on Synthetic Organic Chemistry*, 1-30 November 2010
- 113- Rahmatollah Rahimi, Hamed Kerdari, Mahboubeh Rabbani, "Adsorptive Removal of Crystal violet (CV), a Carcinogenic Textile Dye, from Aqueous Solution by Conducting Polyaniline/ Hollow Manganese Ferrite Nanocomposites", ECSOC-14: The 14th International Electronic Conference on Synthetic Organic Chemistry, 1-30 November 2010
- 114- Nafiseh Rahmanikhalili, Rahmatollah Rahimi, Mansoor Anbia, "Cyclohexene oxidation by metalloporphyrins immobilized in nanoporous MCM-48 as efficient heterogenous catalysts", *Nanotech India 2010*, Gokulam Park, Cochin, 19th -21st November 2010
- 115- Masoomeh Madadi, Rahmatollah Rahimi, "Host (nanocages of zeolite X)– guest (metallo and nanometallo porphyrins) nanocomposite material: An efficient catalyst for the epoxidation of (*R*)-(+)-limonene", *Nanotech India 2010*, Gokulam Park, Cochin, 19- 21 November 2010

- 116- Seyyedeh Zahra Ghoreishi, Rahmatollah Rahimi, Mohammad G. Dekamin,
  "Study Of Silica Supported Metalloporphyrin Nanoparticles as Catalysts For Oxidation of Alcohol", *Nanotech India 2010*, Gokulam Park, Cochin, 19th - 21st November 2010
- 117-Rahmatollah Rahimi, Hamed Kerdari, Mahboube Rabbani, "Adsorptive selective removal of Congo red (CR) and Crystal violet (CV), carcinogenic textile dyes, from aqueous solutions by Hollow (Zn and Mn-ferrites) anoparticles", *Nanotech India 2010*, Gokulam Park, Cochin, 19th 21st November 2010
- 118-Rahmatollah Rahimi, Hamed Kerdari, Mahboubeh Rabbani, Majid Shafiee, "The Nano Compound of Hollow Ferromagnetic Manganese Ferrite Composed with Conductive Polyaniline (PANI) for Strong Adsorptive Removal of Congo Red, a Carcinogenic Textile Dye, from Aqueous Solution", *Nanotech India 2010,* Gokulam Park, Cochin, 19th - 21st November 2010

- 119- R. Rahimi, M. R. Naeemi Jamal, E. Gholam Reza poor, "selective oxidation of benzyl alcohols to carbonyl or related aldehyde compounds catalyzed by Cu(II) mezotetraphenyl porphyrin in the presence of molecular oxygen", 7<sup>th</sup> national seminar of payam-e-noor University of Shiraz, 21-23 Oct 2009
- 120- R. Rahimi, M. M. Kashani Motlagh, Marzie Javaheri Kachusangi, "Recognition of heavy metal ions", *third seminar of engineering of environment*, Tehran University, 19-20 Oct 2009
- 121- M. R. Naeemi Jamal, R. Rahimi, E. Gholam Reza poor, "Synthesis and characterization of Nano particles of meso tetra phenyl porphyrin by ultrasonic "first seminar of role of basic sciences in nano technology, University of Emam Hosein, 9-10 Dec 2009

- 122- R. Rahimi, M. R. Naeemi Jamal, E. Gholam Reza poor, "Synthesis and characterization of Nano particles of meso tetra phenyl porphyrin by microwave", *national seminar of applications of nano technology in pure and applied sciences*, Islamic Azad University of Kermanshah, 2009.
- 123- R. Rahimi, M. Mahboobi, "Photocatalytic Destruction of Malachite Green by the Tetraphenyl Porphyrin Sulfonate / Titanium Dioxide Nanoparticles Thin Layer Catalyst under UV Irradiation", *National Seminar of Nano materials and naono Technology*, Islamic Azad university of Najaf abad, 2009.
- 124- Rahmatollah Rahimi, Mahboubeh Rabbani, Hamed Kerdari, "Synthesis and investigation of polyaniline, as a conducting polymer, on hollow Cu ferrite nanospheres", *15<sup>TH</sup> Intrinational Electronic Conferences On Organic Chemistry* (*ECSOC-15*), 1-30 November 2009, http://www.mdpi.org/ecsoc-15
- 125-Rahmatollah Rahimi, Samaneh Safalou moghaddam, Mahboubeh Rabbani, "Photocatalytic degradation of 4-nitrophenol in aqueous N, S-codoped TiO<sub>2</sub> suspensions", 15<sup>TH</sup> Intrinational Electronic Conferences On Organic Chemistry (ECSOC-15), 1-30 November 2009, http://www.mdpi.org/ecsoc-15
- 126- Rahmatollah Rahimi, Maryam Mahbobie, "Study of The Destruction of Malachite Green by The Composite Film Assembled of Porphyrin and TiO<sub>2</sub> Nano Particles", 11<sup>th</sup> Iranian Inorganic Chemistry Conference (IICC11), Isfahan university, 13-14 May 2009
- 127- Rahmatollah Rahimi, Alireza Azhdari Tehrani, Hamid Reza Khavasi, "First Catalytic Application of Metal Complexes of Porpholactone and Dihydroxychlorin in the Sulfoxidation Reaction", *11<sup>th</sup> Iranian Inorganic Chemistry Conference (IICC11)*, Isfahan university, 13-14 May 2009

- 128-Mohamad Mehdi Kashani-Motlagh, Rahmatollah Rahimi , Marziye Javaheri Kachousangi, "Synthesis and characterization of zeolite-encapsulated Porphyrins", 13<sup>th</sup> International Electronic Conferences on Organic Chemistry (ECSOC-13), 1-30 November 2009, <u>http://www.mdpi.org/ecsoc-13</u>
- 129-Rahmatollah Rahimi, Marziye Javaheri Kachousangi, "Preparation and Optical Properties of Porphyrin Nanoparticles using Microwave Method", *NanoSpain*, Zaragoza-Spain, 09-12 March 2009.

- 130-R. Rahimi, Z. Karamzade, "synthesis and Characterization and study of catalytic of metaloporphyrin meso substituted and polyoxometalats and their hybrid", 6<sup>th</sup> seminar of chemistry, Payame noor University, Abhar, 2008
- 131-R. Rahimi, M. Mahboobi, "Synthesis of Titanium dioxide sensitive with porphyrin pigments and investigation of photocatalyze properties", 6<sup>th</sup> seminar of *chemistry*, Payame noor University, Abhar, 2008
- 132-R. Rahimi, F. Moharrami, "Study of TCCP doped on silica gel by silica gel process", *first seminar nanobiotechnology*, Joibar, 2008
- 133-R. Rahimi, P. Tavakkoli, "Synthesis of nano- particles of tetrakis 4-carboxy phenylporphyrin (TCPP) and investigation of effective factors on its synthesis", *1<sup>st</sup> seminar of nanobiotechnology*, Juibar, 2008
- 134-Rahimi, Jeddi, "TPPS<sub>4</sub> nanoporphyrin aggregationand their application in disease treatment", *1st NanobioTechnology Conference*, Joibar, 2008
- 135-R. Rahimi, M. Mahboobi, "Comparison for photocatalytic decay of Azo dyes by Titanium dioxide/Tetraphenyl porphyrin carboxilate and Titanium dioxide ",

national seminar of New founds of chemistry in industry and medicine, Islamic Azad University of Shahr-e-Rey, 2008

- 136- R. Rahimi, M. Javaheri, M. M. Khashani, "Spectral Properties of Nanoparticles of porphyrins", *national seminar of New Founds of Chemistry in Industry and Medicine*, Islamic Azad University of Shahr-e-Rey, 2008
- 137-Rahimi, Rabani, Rajaii, "Associations of keggin-type anions with cationic porphyrin as catalysts for epoxidation of alkenes", *12th Iranian Chemical Engineering Congress*, Tabriz, Sahand, 2008
- 138-R. Rahimi, Z. Karamzade, M. Javaheri, "Preparation and characterization of heteropoly acid H<sub>7</sub>SeVMo<sub>5</sub>O<sub>24</sub>.xH<sub>2</sub>O as a Catalyst", 12<sup>th</sup> Iranian Chemical Engineering Congress, Tabriz, Sahand, 2008
- 139-R. Rahimi, M. Rabani, "Study and characterize of Minerals in Vegetables", 15<sup>th</sup> National & 3<sup>rd</sup> International Conference of Biology, Universitr of Tehran, Tehran, Iran, 19-21August 2008
- 140-R. Rahimi, M. Rabani, "Removal of Chlorophyll from vegetable oils by acidactivated sepiolite", 15<sup>th</sup> National & 3<sup>rd</sup> International Conference of Biology, University of Tehran, Tehran, Iran, 19-21 August 2008
- 141-Rahimi, Rabani, Moharami, Jeddi, "Kinetics of incorporation of silver in water soluble porphyrins", 10<sup>th</sup> Iranian Inorganic Chemistry Conference, Zahedan, 2008
- 142-Rahimi, Rabani, Moharami, "Porphyrinotitania: Hybrid Organic-Inorganic MaterialsSynthesis sol-gel porphyrin", 10<sup>th</sup> Iranian Inorganic Chemistry Conference, Zahedan, 2008

- 143-Rahimi, Rabani, Jeddi, "The interaction between nanoporphyrins and melanin dye and the study of their application in skin cancer treatment", 10<sup>th</sup> Iranian Inorganic Chemistry Conference, Zahedan, 2008
- 144-Rahimi, Tavakoli, "Synthesis and Characterization of porphyrin and metalloporphyrin Nanoparticles", 10<sup>th</sup> Iranian Inorganic Chemistry Conference, Zahedan, 2008
- 145-Rahimi, Moharami, "Improved catalyst effect of metalloporphyrins with encapsulated in zeolit". *1st Iran International Zeolite Conference (IIZC'08, 1387)*, 2008
- 146-R. Rahimi, M. Rabani, "The surface photovoltaic properties of  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  tetrahydroxylphenylporphyrin (THPP) and  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  -tetraphenylporphyrin (TPP) affected by nano-TiO<sub>2</sub>", *The First Regional Symposium on Bioelectrochemistry*, Oct. 13-15, 2008
- 147-Rahimi, Moharami, Jeddi, "The study of nano porphyrins and their application in electronic systems", 2nd International Congress on Nanoscience and Nanotechnology, Faculty of Chemistry, University of Tabriz, 28-30 October 2008
- 148-Rahimi, Rabani, Mahboobi, "The surface photovoltaic properties of  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  tetrahydroxylphenylporphyrin) THPP) and  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$  -tetraphenylporphyrin (TPP) affected by nano-TiO<sub>2</sub>", *2nd International Congress on Nanoscience and Nanotechnology*, Faculty of Chemistry, University of Tabriz, 28-30 October 2008
- 149-Rahimi, Moharami, "Theoretical DFT study of Interaction of Molecular Compounds Composed of Fullerene C60 and Cobalt Octaethylporphyrin", 2nd

International Congress on Nanoscience and Nanotechnology Faculty of Chemistry, University of Tabriz, 28-30 October 2008

- 150-Rahimi, Moharami, "Theoretical study on methelated porphyrin", *The First Conference and Workshop on Mathematical Chemistry*, Tarbiat Modares University, Tehran, Iran, January 29-31, 2008.
- 151-R. Rahimi, Javaheri, "Ultrasonic method for the preparation of organic nanoparticles", 12<sup>th</sup> Electronic Conference On Synthetic Organic Chemistry, November 2008
- 152- R. Rahimi, F. Moharami, "Spectroscopic and SEM Investigation of TCPP in titanium matrix", *Proceedings Of World Academy Of Science, Engineering And Technology*, Volume 33, September 2008, ISSN 2070-3740
- 153- R. Rahimi, F. Moharami, "Study of Kinetics incorporation of Ag with TCPP", Proceedings Of World Academy Of Science, Engineering And Technology, Volume 33, September 2008, ISSN 2070-3740
- 154-R. Rahimi, Z. Ghasemi, M. Rabani, "study and investigation of natural and synthetic pigments consist Chrome and Iron", *first scientific seminar of sciences and technology of pigment*, pigment Department, 2008
- 155-R. Rahimi, Z. Ghasemi, M. Rabani, "study and investigation of carbon pigments (black carbon)", *first scientific seminar of sciences and technology of pigment*, pigment Department, 2008
- 156-R. Rahimi, P. Tavakolifard, "Synthesis and characterization of Tetra (4carboxylphenyl) porphyrin nanoparticles and investigation of its effect on the efficiency of the nanoporous TiO<sub>2</sub> solar cell", 4<sup>th</sup> Student Conferences Nano Technology, Razi University, 2008

157-R. Rahimi, M. Rabani, "Effect of table salt on health of human", *The First National SALT Conference*, 2008

- 158-R. Rahimi, F. Moharami, "Applications of nanoporphyrins in nano-wires", *Second Conferences of nano structures*, Kish, 2007
- 159-Rahimi, Azhdari, "Synthesis and characterization of CuO nanoparticles via photochemistry and thermal process", *Student conference of nanotechnology*, 2007
- 160-Gh. Mohammad nejad Shirazi, R. Rahimi, N. Afsharipour, "study of catalytic properties of transition metals bonded with Mesoporous materials at alkenes Opoxidation", *The third conference of chemistry*, Varamin University, Pishva, 2007
- 161-R. Rahimi, F. Moharrami, M. Jeddi, S. H. Rahmanpoor, "Kinetic and mechanism of Cupper (II) porphyrin at absence Reducer factors", *The third conference of chemistry*, Varamin University, Pishva, 2007
- 162-R. Rahimi, F. Moharrami, M. Jeddi, S. H. Rahmanpoor, "study of formation complexes kinetic of porphyrin with silver", *The third conference of chemistry*, Varamin University, Pishva, 2007
- 163-R. Rahimi, A. R. Adjari, "synthesis and Characterization of Carboranyl phenyl –tetra banzo porphyrin and its biological applications", *The third conference of chemistry*, Varamin University, Pishva, 2007

- 164-R. Rahimi, A. R. Adjari, "investigation of synthesis of porphyrin and chemotherapy role of photo sensitizer chemotherapy", *The third conference of chemistry*, Varamin University, Pishva, 2007
- 165-R. Rahimi, F. Moharrami, M. Jeddi, S. H. Rahmanpoor, "synthesis and Characterization of tetraphenylporphyrins and metaloporphyrins Ni(II)TPP and Zn(II)TPP", *The third conference of chemistry*, Varamin University, Pishva, 2007
- 166-R. Rahimi, M. Jeddi, "Intraction of nanoporphyrins and melanin pigment and investigation of its application in treatment of skin disease", *first conference of applications of nanotechnology in science, engineering and medicine*, Mashhad, 2007
- 167-R. Rahimi, P. Tavakkoli, "synthesis of nano-particles of tetrakis4-carboxy phenylporphyrin (TCPP) and investigation of effective factors on its synthesis", 5<sup>th</sup> seminar of chemistry, Tehran, 2007
- 168-Rahimi, Moharrami, Jeddi, "Porphyrins in photovoltaic cells", 9th Iranian inorganic Chemistry Conference, , Semnan University, 7-8 March 2007
- 169-Rahimi, Rahmanpoor, Ravanfar, "Synthesis and characterization of tetra carboxy phenyl porphyrin TCPP with different techniques", *9th Iranian inorganic Chemistry Conference*, Semnan University, 7-8 March 2007
- 170-Rahimi, Jeddi, Moharrami, "Evaluation and study of the nano porphyrins and their application", *9th Iranian inorganic Chemistry Conference*, , Semnan University, 7-8 March 2007
- 171-Rahimi, Rahmanpoor, Jeddi, Moharrami, "Bio Nano Wire", 9th Iranian inorganic Chemistry Conference, , Semnan University, 7-8 March 2007

- 172-Rahimi, Rahmanpoor, "A survey of application of tetracarboxyphenyl porphyrin TCPP", 9th Iranian inorganic Chemistry Conference, , Semnan University, 7-8 March 2007
- 173-Rahimi, Rahmanpoor, "Porphyrins as a suitable substituent for photoconverter in new research", 9th Iranian inorganic Chemistry Conference, , Semnan University, 7-8 March 2007
- 174-Rahimi, Rahmanpoor, "The role of porphyrins and their mixtures with different dyes as an electrical current producer in a photoelectrochemical cells", *9th Iranian inorganic Chemistry Conference*, Semnan University, 7-8 March 2007
- 175-Rahimi, mohamadnezhad, Afsharipoor, Anbia, "Characterization of Synthesized Titanium Mesoporous Silicate Using Low-Angle X-ray Diffraction and Nitrogen Adsorption", 9th Iranian inorganic Chemistry Conference, , Semnan University, 7-8 March 2007

- 176-R. Rahimi, A. Tajarodi, A. Rajaii, "Hetero Poly Acids: Synthesis, characterization and Applications", *The First Students Conference on Applications of Chemistry in Industry*, Isfahan University, 2006
- 177-R. Rahimi, S. H. Rahmanpoor, R. Rahimi, "using of porphyrins as changer of solar energy to electrical current", The First Student Energy Seminar, Bafgh University, 2006
- 178-R. Rahimi, S. H. Rahmanpoor, M. Mahboobi, "Porphyrins as photo adsorbent in solar cell TiO<sub>2</sub>", the First Student Energy Seminar, Bafgh University, 2006

- 179-R. Rahimi, S. H. Rahmanpoor, F. Moharrami, M. Jeddi, "Synthesis of dimmer porphyrins and their Application at Solar Cells", The First Student Energy Seminar, Bafgh University, 2006
- 180-R. Rahimi, F. Moharami, M. Jeddi, "Study of Molecular Electronic Nanometery of porphyrins", The First national Conference on Biotechnology and Biocatalysts, Islamic Azad University of Shahr-e-Rey, 2006
- 181-R. Rahimi, F. Moharami, M. Jeddi, "porphyrino silica and metaloporphyrino silica of organ metal hybrid materials from sol gel process", second seminar chemistry and industry, Slamshahr University, 2006
- 182-R. Rahimi, R. Rahimi, S. H. Rahmanpoor, S. M. R. Ravanfar, "synthesis of heteropoly acids and role of its multifarious at industries", second seminar chemistry and industry, Slamshahr University, 2006
- 183-R. Rahimi, R. Rahimi, S. H. Rahmanpoor, S. M. R. Ravanfar, "porphyrins and its act in solar sells", second seminar chemistry and industry, Slamshahr University, 2006
- 184-R. Rahimi, Z. Karamzade, M. Javaheri, "Preparation and characterization of heteropoly acid H<sub>7</sub>SeVMo<sub>5</sub>O<sub>24</sub>.xH<sub>2</sub>O as a Catalyst", 12<sup>th</sup> Iranian Chemical Engineering Congress, Tabriz, Sahand, 2006

185-R. Rahimi, S. M. R. Ravanfar, S. H. Rahmanpoor, "Study of Influence of Cloroquin on Ferriprotoporphyrin(IX) and mesotetra(sulfonat penyl)porphyrin that use as sensitizer to photo at photodynamic trophy", The First Students Conference on Applications of Chemistry in Industry, Isfahan University, 2005

- 186-R. Rahimi, S. M. R. Ravanfar, S. H. Rahmanpoor, "Applications of Hetero Poly Acids in Industry", The First Students Conference on Applications of Chemistry in Industry, Isfahan University, 2005
- 187-R. Rahimi, "Acid-Base Balance- Nutrition and Health", first seminar of medicinal & natural products chemistry, Shiraz University Iran. May10-11, 2005
- 188-R. Rahimi, M. Rabani, P. Ghahramani, M. Fatoore, "Syenthesis and Characterization of requirement minerals at human body in vegetables", seminer of chemistry and industry, Slamshahr University, 2005
- 189-R. Rahimi, P. Ghahramani, M. Fatoore, "Syenthesis and Characterization of decatungsto CobaltoAmin Heteropoly Acid", seminer of chemistry and industry, Slamshahr University, 2005
- 190-R. Rahimi, P. Ghahramani, M. Fatoore, "Syenthesis and Characterization of H<sub>2</sub>O.{H<sub>5</sub>(GeW<sub>10</sub>MoNbO<sub>4</sub>)<sub>12</sub>} Heteropoly Acid", seminer of chemistry and industry, Slamshahr University, 2005

#### 2004-1991:

- 191-Gh. Mohammad nejad Shirazi, R. Rahimi, M. Anbia, "synthesis and Characterization of Mesoporous silicate and investigation of presented mechanisms", second chemistry seminar, Varamin University, Pishva, 2004
- 192-R. Rahimi, Karimpoor "synthesis of complex of Cupper N-methyl tetra solfonated phenyl porphyrin and its reaction with Cyanide ", 6<sup>th</sup> National Congress of Engineering Chemistry, Isfahan University, 1991
- 193-R. Rahimi, "synthesis of complex of Cobalt N-methyl tetra solfonated phenyl porphyrin and its reaction with Cyanide", 6<sup>th</sup> National Congress of Engineering Chemistry, Isfahan University, 1991

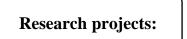
# **Translated papers:**

- 1-R. Rahimi, P. Farasati, "General Chemistry", Roshd Journal of Chemical Education, 1996
- 2-R. Rahimi, P. Farasati, "Chemical Education", Roshd Journal of Chemical Education, 1995
- 3-R. Rahimi, P. Farasati, "General Chemistry", Roshd Journal of Chemical Education, 1995
- 4-M. Abedini, H. Aghaii, R. Rahimi, "International Chemistry Olympiad", Roshd Journal of Chemical Education, 1994

# **Translated and written Books:**

- 1-Rahmatollah Rahimi, Abdous, Fariba Moharami, Mahboobeh Rabbani, "Physical Chemistry II" publisher: Amir Kabi University, 1391(2012)
- 2-R. Rahimi, L. Hojat Khashani, "Bioinorganic chemistry", publisher: Iran University of Science and Technology, 2012
- 3-R. Rahimi, F. MoharamiT M. Rabani, "Physical chemistry 1", publisher: Noavaran Sharif, 2010
- 4-R. Rahimi, "Reaction Mechanisms for coordination compound", publisher: Raze rezvan, 2007
- 5-R. Rahimi, L. Hojat Khashani, "Laboratory General chemistry 2", Islamic Azad university, publisher: Islamic Azad university, 2005
- 6-S. R. Aghapoor Moghadam, R. Rahimi, "chemistry of Aluminum", Edition: Sepidrood, publisher: Raze rezvan, 2003

- 7-R. Rahimi, H. Karimpoor, "general chemistry with multiple choice questions", Edition: Iran University of science and technology, publisher: Raze rezvan, 2002
- 8-R. Rahimi, S. Bozorgi, S. R. Aghapoor Moghadam, "chemistry 1, 2 and 3 with multiple choice questions", publisher: Ostadi, third edition: 2002, second edition: 2000, firs dition: 1999
- 9-R. Rahimi, "Kinetic of porphyrin chemistry", Edition: Iran University of science and technology, publisher: Dadkhah,1995



	Project title	Date of Start	date of end
1	synthesis of Porphyrin complexes and Investigation of their applications in removal of cyanide	2001	2003
2	Acids - Bases and buffers in human body	2004	2005
3	Preparation of Heteropoly anions and Investigation of Applications	2005	2006
4	Study of Electerical Conductivity of Heteropoly anions	2006	2007
5	Study and characterization of kinetic reactions of porphyrins and metaloporphyrins with acids and metals in aqueous solutions	2007	2008
6	Study of Electerical Conductivity of Porphyrin Nano Particles	2008	2009

7	Study of Porphyrins and nano porphyrins and their applications as complexes of heavy transition metals	2009	2010
8	Study of catalytic effect of Porphyrins and metalloporphyrins immobilized in various Support on oxygen addition to various substrates and comparison with nanoporphyrins	2010	2011
9	Application of porphyrin modifiedTiO2forphotocatalyticdecompositionofpollutantsunder visible light	2011	2012

# Guided Projects at Ph.D. level:

- 1-"Synthesis, and characterization of cobaloxime as an organometalic compound; a model of vitamin B12 with the approach of green nanochemistry", by Iraj Mesgarzadeh, for degree of Ph.D., Supervisors: Dr. R. Rahimi and, Advisor: Dr. Ali Maleki, Dr. Mahboobeh Rabbani, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision
- 2-"A chemical study and investigation of kinetic processes of porphyrin compounds as photobactericidial and bacteriostatic agents", by Fatemeh Fayaz Joshari, for degree of Ph.D., Supervisor: Dr. R. Rahimi and Advisors: Dr. Ali Maleki and Engineer Mehdi Rasa, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision

- 3-"Synthesis and charactrization of L-Carnosine and porphyrin as a achelating agent for biological detoxification and investigation of their effects on the therapeutic samples", by Maryam Khosravi, for degree of Ph.D., Supervisor: Dr. R. Rahimi and Advisors: Dr. ebrahimi Safavi, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision
- 4-"Synthesis, charactrization and the photocatalytic activity investigation of new compounds of the porphyrin-graphene-TiO<sub>2</sub> nanocomposite in the degradation of methyl orange and inactivation of *Escherichia coli*", by Solmaz Zargari, for degree of Ph.D., Supervisor: Dr. R. Rahimi and Advisors: Dr. Morsali and Dr. Ghaffarinejad, Chemistry Department, Iran University of Science and Technology.
- 5-"Immobilization of Chromium (VI) phase transfer catalysis on magnetic nanoparticles and study of their applications in organic reactions", by Ali Maleki, for degree of Ph.D., Supervisor: Dr. R. Rahimi and Advisors: Dr Morsali and Dr. Maleki, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision
- 6-"Synthesis of nano catalysts with active site of TiCl₄/AlR<sub>3</sub> based on Alkaline earth metals halide by using porphyrin for the α-Olefines polymerization" by Mahboubeh Rabbani, for degree of Ph.D., Supervisor: Dr. R. Rahimi, and Advisors: Dr. A. Maleki and Dr. H. Ghafouri, Chemistry Department, Iran University of Science and Technology.
- 7-"Synthesis and characterization of photocatalysts based niubum and investigation of photocatalytic application of these compounds" by Fatemeh Hashemzadeh for degree of Ph.D., Supervisor: Dr. R. Rahimi and Dr. Ali

Ghaffarinejhad, Chemistry Department, Iran University of Science and Technology,

# **Guided Projects at graduate level:**

- 1-Synthesis, characterization and photocatalytic peoperties investigation of nano Fe<sub>3</sub>O<sub>4</sub>/NiO/V<sub>2</sub>O<sub>5</sub> functionalized with porphyrin", by Ghafar Kareh, Supervisor: Dr. R. Rahimi, Advisor: Dr. Mahboobeh Rabbani, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision.
- 2-"Synthesis and characterization of Bismuth Tangestate functionalized with porphyrin", by Shabnam Pordel, Supervisor: Dr. R. Rahimi, Advisor: Dr. Mahboobeh Rabbani, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision.
- 3-"Synthesis, characterization and photocatalytic application of graphene functionalization with sulfur and porphyrin", by Mahsa Moshari, Supervisor: Dr. R. Rahimi, Advisor: Dr. Mahboobeh Rabbani, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision.

4-"Synthesis, characterization, and photocatalytic activity investigation of core-shell nanoparticles of Zn-Fe<sub>2</sub>O<sub>4</sub>@ZnO with nanopore functionalized with porphyrin", by Mehdi Heidari Golfazani, Supervisor: Dr. R. Rahimi, Advisor: Dr. Mahboobeh Rabbani, Chemistry Department, Iran University of Science and Technology.

- 5-"Synthesis and characterization of Manganeze (II, III)-Bismuth Vanadateporphyrin and its photocatalytic activity under visible light irradiation", by Amin Mrhrejadi, Supervisor: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology, The completion of experimental processes is still under supervision.
- 6-"Synthesis and characterization of magnetic sulfunated tin oxide nanoparticles and its functionalization with mateloporphyrin of tetrakis(4pyridyl) porphyrin to investigate of oxidation processes", by Fatemeh Mohammadi Dolatabadi, Supervisors: Dr. R. Rahimi and Dr. Hosein Ghafuri, Chemistry Department, Iran University of Science and Technology.

7-"**Preparation of electrod based TiO<sub>2</sub> sensitized with porphyrin and investigation of its application as a photoelectrochemical sensor of NADH**", by Zahra Sadat Shojaie, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. A. Ghaffarinejad, Chemistry Department, Iran University of Science and Technology.

8-"Synthesis and characterization of visible light photocatalyst based zinc oxide nanostructure modified with porphyrin", by Samaneh Shariatinia, for degree of M.S., Supervisor: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.

9-"Synthesis and characterization of photocatalyst based ZnO-BiVO<sub>4</sub> nanocomposites sensitized with porphyrin in degradation of organic pollutants and reduction of graphene oxide to graphene", by Marziyeh Yaghubi Barijani, for degree of M.S., Supervisor: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.

10-"Design of optical chemical sensor based tetrkas(4-hydroxy phenyl)porphyrin stabilized on graphene oxide to quantitative determine of Hg(II) in water samples", by: Asgar Koohi Khasheh heiran, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. R. Zare Dorabi, Chemistry Department, Iran University of Science and Technology.

- 11-"Synthesis and characterization of metal complexes of 5, 10, 15, 20tetrakis 1-E, 3-diphenyl, 2-propen, 1-one porphyrin and its photocatalytic activity investigation after fixing on the graphene oxide and its application in the oxidation of olefins", by Zahra Movahedinia, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. Ghafuri, Chemistry Department, Iran University of Science and Technology.
- 12-"Synthesis of 5, 10, 15, 20- tetrakis (parabenzoic acid) porphyrin cobalt and magnesium (III) and its linkage to natural polymer of chitosan and its photocatalytic properties investigation as well as its application in oxidation of sulfides to disulfides", by Ziba felfelian, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. Ghafuri, Chemistry Department, Iran University of Science and Technology.
- 13- "synthesis, characterization and properties investigation of Ca<sup>2+</sup>, Mg<sup>2+</sup>, Fe<sup>2+</sup> complexes with mononuclear and two nuclear ligands of 1, 4-dihydro pyridine (synthesized with baritoric acide)", by Fatemeh Rafie, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. Ghafuri, Chemistry Department, Iran University of Science and Technology.
- 14-"Synthesis and characterization of 5, 10, 15, 20-tetrakis (4-amino biphenyl, 4-iminophenyl) porphyrin cobalt (III) and its interaction with graphene oxide, its photocatalytic properties and its using in the oxidation of thols to disulfids", by Shirin Rahmani, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. Ghafuri, Chemistry Department, Iran University of Science and Technology.
- 15- "The alloy optimization of silica and alumina in kaolin to prepare a nanostructure of zeolite NaX", by: Sahar pirkhedri, Supervisors: Dr. R.

Rahimi and M. Anbia, Chemistry Department, Iran University of Science and Technology.

- 16- "Preparation of dye sensitized solar cell based porphyrin dye and improvement of its efficiency using graphene in the anode electrod" by meisam Jamali, for degree of M.S., Supervisosr: Dr. R. Rahimi and Dr. Amani, Chemistry Department, Arak University.
- 17-"Using of porphyrins and nanotubes in the preparation of solar cells", by Zahra Kheradmand, for degree of M.S., Supervisor: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.
- 18- "Preparation and characterization of substrates of TiO2 nanoparticles doped with metals and complexes and their properties investigations in solar cells", by: Milad Fallah, Supervisors: Dr. ? Zamani and Dr. R. Rahimi, Physic Department, Iran University of Science and Technology.
- 19- "Preparation of TCO using indium oxide nanoparticles doped with transition metals and complexes and their properties investigations in solar cells", by: Mohsen Moradi Haji Jafan, Supervisors: Dr. ? Zamani and Dr. R. Rahimi, Physic Department, Iran University of Science and Technology.
- 20- "Synthesis, characterization, and photocatalytic application of nickel oxide nanostructures modified using nickel complexe of sulfunated tetrakis phenyl porphyrin", by: Mohammad Bozorgpour, Supervisors: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.
- 21-"Synthesis of poly pyrrole-iron oxide nanocore shell functionalized with TCPP porphyrin and investigation of its application in the removal of mercury metal", by Meisam Asadi Davati, for degree of M.S., Supervisor: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.

- 22- "Synthesis, characterization nad photocatalytic application of zinc oxide modified with copper complex of sulfunated tetrakis phenyl porphyrin", by: Javad Shokraian, Supervisors: Dr. R. Rahimi, Chemistry Department, Iran University of Science and Technology.
- 23-"Synthesis and characterization of TiO<sub>2</sub> mesoporous doped by V and Halogen and organi compounds", by Msoumeh Mahjoub, for degree of M.S., Supervisor: Dr. R. Rahimi and Advisor: Dr. Anbia and Dr. Zare, Chemistry Department, Iran University of Science and Technology.
- 24-"Study, investigation and removal of heavy metals from water by porphrins and metalloporphyrins nanoparticles on mesoporous silica", by Mahdi Deylam, for degree of M.S., Supervisor: Dr. R. Rahimiand and Advisor: Dr. Maleki, Chemistry Department, Iran University of Science and Technology.
- 25-"Removal of organic pollutants from water by porphrins on SBA-15 nanoprticles", by Ahmad Najafian, for degree of M.S., Supervisor: Dr. R. Rahimiand and Advisor: Dr. Maleki, Chemistry Department, Iran University of Science and Technology.
- 26- "Removal of organic pollutants from aqueous media by TiO<sub>2</sub> sensitized with porphyrins and metalloporphyrins", by Hamideh Bathaee, for degree of M.S., Supervisor: Dr. R. Rahimi and Advisor: Dr. Maleki, Chemistry Department, Iran University of Science and Technology.
- 27-"The photocatalytic degradation of 2,4-dichlrophenol and Methylene blue
  by porphyrin and metalloporphyrin immobilized on Co-TiO<sub>2</sub>
  nanopoweder", by Elham Honarvar Fard , for degree of M.S., Supervisor: Dr.
  R. Rahimi, 2012, Chemistry Department, Iran University of Science and Technology

- 28-"Investigation of synthesize of porphyrin and metalloporphyrin on F doped titanium dioxide nanoparticles for photocatalytic degradation of Rhodamine B", by Sara Saadati, for degree of M.S., Supervisor: Dr. R. Rahimi, 2012, Chemistry Department, Iran University of Science and Technology
- 29-"Photocatalytic degradation of 4-nitrophenol by porphyrin and metalloporphyrins immobilized on N, S-codoped TiO<sub>2</sub> nanoparticles", by Samaneh Safalou Moghaddam, for degree of M.S., Supervisor: Dr. R. Rahimi, 2012, Chemistry Department, Iran University of Science and Technology
- 30-"Study and investigation of catalytic oxidation of alkenes by porphyrins and metalloporphyrins immobilized in nanoporous", by Nafise Rahmani Khalili, for degree of M.S., Supervisor: Dr. R. Rahimi and Consulted by: Dr. M. Anbia, 2011, Chemistry Department, Iran University of Science and Technology
- 31-"Study and investigation of catalytic oxidation of alkenes by porphyrins and metalloporphyrins immobilized in silica", by Zahra Ghoreyshi, for degree of M.S., Supervisor: Dr. R. Rahimi and Consulted by: Dr. M. G. Dekamin, 2011, Chemistry Department, Iran University of Science and Technology
- 32-"Oxidation reactions of monoterpenes by nano metalloporphyrins on nanozeolite substrate", by Masoumeh Madadi, for degree of M.S., Supervisor: Dr. R. Rahimi, 2011, Chemistry Department, Iran University of Science and Technology
- 33-"The synthesis and characterization of nanoparticles of porphyrins and investigation of catalitic activity on oxidation of benzylic alcohols", by Ensie Gholam Reza poor, for degree of M.S., Supervisors: Dr. R. Rahimi, Dr.

M. R. Naeemi Jamal, July 2009, Chemistry Department, Iran University of Science and Technology

- 34-"**The synthesis and study of polymers involved Oxygen-donors atoms as ligand and their complexs with silver**", by Mohammad Jamal Asad poor, for degree of M.S., Supervisors: Dr. R. Rahimi, Dr. A. Morsali, March 2010, Chemistry Department, Iran University of Science and Technology
- 35-"The synthesis, characterization and solution study of novel o-donor nitro schiff bases and their Thallium complexes", by Maryam Eskandari, for degree of M.S., Supervisors: Dr. R. Rahimi, Dr. A. Morsali, March 2010, Chemistry Department, Iran University of Science and Technology
- 36-"Synthesis and Characterization of NanoParticles of Porphyrins and Their Application as Sensor of Heavy Metals", by Marzieh Javaheri Kachosangi, for degree of M.S., Supervisors: Dr. R. Rahimi, Dr. M. Khashani, July 2009, Chemistry Department, Iran University of Science and Technology
- 37-"Synthesis and characterization of NanoPorphyrins and Study of their Applications on Nanoprous as photocatalysis", by Maryam Mahboobi, for degree of M.S., Supervisors: Dr. R. Rahimi, May 2009, Chemistry Department, Iran University of Science and Technology
- 38-"Association of Keggin-type anions with cationic meso-substituted porphyrins: synthesis, characterization and oxidative catalytic studies", by Zahra karamzadeh, for degree of M.S., Supervisors: Dr. R. Rahimi and Advisor: Dr. Hamid Reza Khavasi, September 2008, Chemistry Department, Iran University of Science and Technology
- 39-"Synthesis, characterization and metallation of pyrrole modified porphyrins and investigation of their catalytic activity in oxidation reactions", by Alireza Azhdari Tehrani, for degree of M.S., Supervisors: Dr. R.

Rahimi and Advisor: Dr. Hamid Reza Khavasi, May 2008, Chemistry Department, Iran University of Science and Technology

- 40-"Synthesis and Characterization of Porphyrins and Their Nano Particles and Investigation of Electerical Conductivity of Their Compounent", by Pegah Tavakoli fard, for degree of M.S., Supervisors: Dr. R. Rahimi, May 2008, Chemistry Department, Iran University of Science and Technology
- 41-"Synthesis and Characterization of Silver Porphyrins and Study of their Applications", by F. Moharrami, for degree of M.S., Supervisors: Dr. R. Rahimi, Feb. 2007, Chemistry Department, Iran University of Science and Technology
- 42-"Synthesis of TPPS complex and Study of demetallation Reactions", by M. Jeddi, for degree of M.S., Supervisors: Dr. R. Rahimi, Feb. 2007, Chemistry Department, Iran University of Science and Technology
- 43- "Synthesis and Characterization of Tritungstovanadoselenic Heteropoly acid", by Amir Rajaee, for degree of M.S., Supervisors: Dr. R. Rahimi, Dr. A. Tadjarodi, Dec. 2006, Chemistry Department, Iran University of Science and Technology
- 44-"Synthesis, Characterization and Application of TCPP and Study of its Reaction with Hetropoly acids", by Sayyed Hamed Rahmanpour, Supervisors: Dr. R. Rahimi, Dec. 2006, Chemistry Department, Iran University of Science and Technology
- 45-"Synthesis of TPPS<sub>4</sub> Porphyrin molecule and Study of its Reaction with Chloroquine", by Sayyed Mohammad Reza Ravanfar, for degree of M.S., Supervisors: Dr. R. Rahimi, Dec. 2006, Chemistry Department, Iran University of Science and Technology
- 46-"Synthesis and detection of acidic porphyrin and study its interaction with synthetic melanin (Dopamelanin)", by Maryam Mokhtarimehr, for degree of

M.S., Supervisors: Dr. R. Rahimi, Fall 2006, Chemistry Department, Iran University of Science and Technology

- 47-"Charachterization of Minerals of Some of The Vegetables", by Mahboobe Rabani, for degree of M.S., Supervisors: Dr. R. Rahimi, December 2005, Chemistry Department, Iran University of Science and Technology
- 48-"Syenthesis and Characterization of decatungstomolybdoniobogermanic Heteropoly Acid", by Mohammad Fatooreh, for degree of M.S., Supervisors: Dr. R. Rahimi, December 2005, Chemistry Department, Iran University of Science and Technology
- 49-"Synthesis & Charactrisation of UndecaTungstoCobaltoAluminic Heteropoly Acid", by Pasha Ghahramani, for degree of M.S., Supervisors: Dr. R. Rahimi, December 2005, Chemistry Department, Iran University of Science and Technology
- 50-"Synthesis of Titanium Mesoporous Silicate, Studying and Characterization", by Gh. Mohammadnezhad Shirazi, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. M. Anbia, Jan. 2005, Chemistry Department, Iran University of Science and Technology
- 51-"Producting of Hegmatan Pozzolanic Cement", by J. Haidari Mohazab, for degree of M.S., Supervisors: Dr. A. Taeb, and Consulted by: Dr. R. Rahimi, Oct. 1999, Chemistry Department, Iran University of Science and Technology
- 52-"Purification of Phosphoric Acid", by A. Amiri, for degree of M.S., Supervisors: Dr. A. Taeb, Dr. R. Rahimi, and Consulted by: Dr. T. Mohammadi, Dec.1999, Chemistry Department, Iran University of Science and Technology

53-"Reactivity of Glycin and Asparagine with Mn(III)Porohyrins", by A. Mani, for degree of M.S., Supervisors: Dr. R. Rahimi and Dr. D. boghaie, 1998, Chemistry Department, Iran University of Science and Technology

#### **Administrational Positions:**

- 1.Dean of Chemistry Department at Iran University of science and Technology (IUST) (Since 2010 to present)
- 2.Member of Board of Directors of Amir kabir petrochemistry (2011)
- 3.Secretary of executive board and head of secretarial office for instructor selection at university of applied science and technology, 2008
- 4.Member of Quran curriculum council in Islamic Azad university, branch of Saveh city, 2003
- 5.Member of research council in Islamic Azad university, branch of Saveh city, 1995
- 6.Committee member of faculty and scholarship students recruitment in Islamic Azad university, branch of Saveh city, 1999
- 7.Director of applied chemistry division in Islamic Azad university, branch of Saveh city, 2003
- 8.Supervisor of Iranian chemistry Olympiad team in Italy with commission of education ministry, 1992
- 9.Beholder of appraisal research plants in chemistry laboratories at nurtured education ministry, 1992
- 10.Deputy of nurtured education ministry in chemical and chemical engineering society of research and educational curriculum organization, 1992
- 11.Committee member of chemistry Olympiad of Iran by ordinance of vice minister for research and educational curriculum, 1992

- 12-Committee member of coordination in development office at University of applied science and technology, 2005
- 13-Member of editorial board for Roshd educational Journal of research and educational curriculum organization, 1992
- 14-Plenipotentiary deputy of vice ministry for student affairs in presenting statistics plants with ordinance of vice minister for research and curriculum, 1991
- 15-Major constant member of programming headcourter for cultural affairs of murderds children in ministry of cultural and education, 1993
- 16-Research concil member of Iran University of science and technology, 1992
- 17-Commission member for evalution of international degrees in ministry of research, Iran University of science and technology, 1999
- 18-Director of international relation affairs in UAST, 2005
- 19-Manager of examination and specific educations in UAST, 2004
- 20-Editorial manager for Journal of Exir in IUST, 2000
- 21-Head of inorganic chemistry division at chemistry department in IUST, 2001
- 22-Deputy of secretary-general in higher council of applied science in university of applied science and technology. 1995
- 23-Vice president for student affairs in Iran University of science and technology, 1994
- 24-Counselor and office manager of vice-ministry of higher education, 1993
- 25-Vice-chairman of chemical Engineering department in Iran University of science and Technology, 1992

# Membership in scientific and international councils, committees and associations:

1-member of Journal of porphyrin and phthalocyanine (JPP), 2007

- 2-member of Iranian professional association, 2006
- 3-member of Iranian chemical society, 2006
- 4-member of American chemical society (ACS), 1983, Howard university