

Ahmad Reza Bekhradnia, PhD

Mazandaran University of Medical Sciences, Sari, Iran, P.O.Box: 48175- 861

Cell Phone: 0098 912- 288- 1295; E-mail: reza_bnia@yahoo.com

Selected Publications &

Presentation/ Publications in conference Proceeding:

- S. N. Azizi , P. Shakeri, M. J. Chaichi , **A. R. Bekhradnia**, M. Taghavi, M. Ghaemy, The use of imidazolium ionic liquid/copper complex as novel and green catalyst for chemiluminescent detection of folic acid by Mn-doped ZnS nanocrystals, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy* 122 (2014) 482–488.
- **A.R. Bekhradnia**, S. Arshadi, S.A.Siadati, 1,3-dipolar cycloaddition between substituted phenyl azide and 2,3-dihydrofuran, *Chemical Papers*, 68 (2), 283 (2014)
- S. Arshadi, **A. R. Bekhradnia***, E. Mohammadi, and A. Asghari, DISILINE-DOPED BORON NITRIDE NANOTUBES: A COMPUTATIONAL STUDY, J. Structural chemistry. (2014, No.5)
- S. N. Azizi, M. J. Chaichi, P. Shakeri, **A.R. Bekhradnia**, Determination of Epinephrine in Pharmaceutical Formulation by an Optimized Novel Luminescence Method Using CdS Quantum Dots as Sensitizer, *Journal of Fluorescence*, **23**, 227–235 (2013)

- S. N. Azizi, M. J. Chaichi, P. Shakeri, A.R. Bekhradnia, Determination of atropine using Mn-doped ZnS quantum dots as novel luminescent sensitizers, *Journal of Luminescence*, 144, 34-40 (2013).
- S. N. Azizi, M. J. Chaichi, P. Shakeri, **A.R. Bekhradnia**, Chemiluminescence of Mn-doped ZnS Nanocrystals Induced by Direct Chemical Oxidation and Ionic liquid -Sensitized Effect as an Efficient and Green Catalyst, *J. Spectroscopy*. (2013) <http://dx.doi.org/10.1155/2013/803592>.
- S. Arshadi, **A.R. Bekhradnia***, M. Gordan, A. Asghari, Pure and Disilene-doped (6,0) AIN Nanotube: A Computational DFT Study on the NMR Parameters, *Chinese J. Struct. Chem.***32**, 721–729 (2013).
- M. Ebrahimzadeh, N. Miri, M. Bkshpour, **A. R. Bekhradnia**; Syntheses of Two New Saccharin Hydrazide Derivatives and Evaluation of Their Chelatory Activities, *J.Mazand.Univ.Med.Science*, 23, 106 (2013)
- **A.R. Bekhradnia**, S. Arshadi, Efficient Selective Oxidation of Organic Substrates using Pyridinium Sulfonate Halochromate under Solvent-Free Conditions and Microwave Irradiation: Experimental and Theoretical Study, *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*, **42**, 705-710 (2012).
- **A. R. Bekhradnia**, M. A. Ebrahimzadeh, Theoretical study on some non-selective beta-adrenergic antagonists and correlation to their biologically active configurations, *Medicinal Chemistry Research*, **21**, 2571-2578. (2012).
- M. Tajbakhsh, S. Khaksar, **A.R.Bekhradnia**, Z. Tafazzoli, MgCl₂/Et₃N base system as a new catalyst for the synthesis of α -Hydroxy phosphonate, *Chinese Journal of Chemistry*, **30**,827-829 (2012)

- M. Ghasemi¹, O. Emadian¹, F. Naghshvar¹, **A.R. Bekhradnia**, *etal*, Immunohistochemical Expression of Vascular Endothelial Growth Factor and its Correlation with Tumor Grade in Breast Ductal Carcinoma, *Acta Medica Iranica*, **49**, 776-779 (2011).
- S. Arshadi, **A.R. Bekhradnia***, A.Ebrahimnejad, Feasibility study of hydrogen-bonded nucleic acid base pairs in gas and water phases, *Canadian Journal of Chemistry*, **89**, 1403 (2011).
- S. Arshadi, **A.R. Bekhradnia**, Topomerization of 2-halo-[9] annulen anion at DFT level, *Chinese J Struc Chem*, **30**, 10 (2011).
- S.Arshadi, **A.R. Bekhradnia**, S.Ahmadi, New insights on the mechanism of thermal cleavage of unsaturated bicyclic diaziridines, "*Chinese Journal of Chemistry*, **29**, (2011).
- **A.R. Bekhradnia**, S. Arshadi, Theoretical study of halogen effect in isomerization of 2-halo-[9]-annulen anion at DFT level, *Chinese J Struc Chem*, **30**, 6 (2011).
- M.A.Ebrahimzadeh Sh.Eslami, S.M.Nabavi, **A.R.Bekhradnia**, Assessment of essential and toxic mineral elements in four Mentha Species, *Asian Journal of Chemistry*, **23**,3 (2011).
- S. Arshadi, Y. Shad, J. Emami, **A.R. Bekhradnia**, *etal*, Exo-Axial, Endo-Axial and Exo-Equatorial anomeric effects for mono and di-halo[1,4]-dioxane in solvent and gas phases, *Asian Journal of Chemistry*, Vol. 22, No. 3, 1907 (2010).
- M. Ebrahimzadeh, M. Nabavi, F. Bahramian, **A.R. Bekhradnia**, Antioxidant and free radical scavenging activity of *H.officinalis*. *Pak. J. Pharm. Sci.*, Vol.23, No.1, 29,

- (2010).
- M. Ebrahimzadeh, M. Nabavi, S. Eslami, **A. R. BEKHRADNIA**, Mineral elements and antioxidant activity of three locally edible and medicinal plants in Iran, *Asian Journal of Chemistry*, Vol. 22, No. 3, 1907 (2010).
- **A. R. Bekhradnia**, M. A. Ebrahimzadeh, V. Hejazi and R. Gorji, New Insight to Hair-Loss as a Side Effect of Some Drugs, *Asian Journal of Chemistry*, **21**, 3, (2009).
- F. Hadizadeh, M.A. Ebrahimzadeh, **A.R. Bekhradnia**, Antidepressant and antioxidant activities of some 2-benzoxazolinone derivatives as bupropion analogues, *Pharmacologyonline* (2009).
- M. Z. Kassaei, and **A. R. Bekhradnia**, Energetic of the reaction of aspirin with fepentaene-12 (Fp-12): A possibility for aspirin to make Fp-12 lose its mutagenicity, *Asian Journal of Chemistry*, **20**, 43, (2008).
- M.A. Ebrahimzadeh, F. Pourmorad and **A. R. Bekhradnia**, Iron chelating activity, phenol and flavonoid content of some medicinal plants from Iran, *African Journal of Biotechnology*, **7**, 3188 (2008).
- S. M. Nabavi., M. A. Ebrahimzadeh, S. F. Nabavi, A. Hamidinia and **A. R. Bekhradnia**, Determination of Antioxidant activity, Phenol and Flavonoid Content of Parrotia Persica Mey, *Pharmacologyonline 2*: 560 (2008).
- **A. R. Bekhradnia**, F. Zahir, S. Arshadi, Selective Oxidation of Organic Compounds Using Pyridinum Sulfonate Fluorochromate, C₅H₅NSO₃H [CrO₃F] (PSFC), *Monatshefte für Chemie - Chemical Monthly*, **139**, 521 (2008).
- **A. R. Bekhradnia**, S. Arshadi, Conformational Analysis, Infrared, and Florescence Spectra of 1-Phenyl-1,2-Propandione-1-Oxime and Related Tautomers: Experimental and Theoretical Study, *Monatshefte für Chemie - Chemical Monthly*, **138**, 725 (2007).

- A. Shafiee, M.Z.Kassae, **A. R. Bekhradnia**, Synthesis of Novel 3,4-Diaryl-1H-Pyrroles, *J. Heterocyclic Chem.*, **44**,471 (2007).
- **A. R. Bekhradnia**, S. Arshadi, Potential energy surfaces of 1-Phenyl-1,2-propandione-1-oxime, *Asian Journal of Chemistry*, **19**, 5251-5268, (2007).
- M. Z. Kassae, S. Arshadi, **A. R. Bekhradnia**, *Ab initio* infrared spectra and inversion barriers of dibenzo [a,c]cycloocta-5,8-diones, *Asian Journal of Chemistry*, **19**, 1667 (2007).
- M. Z. Kassae, E. Vessally, **A. R. Bekhradnia**, M. Esfandiari Theoretical study on S-methyl-thiabenzene and their analogue via DFT method, *Asian Journal of Chemistry*, **18**, 1791 (2006).
- M. Z. Kassae, **A. R. Bekhradnia**, and S. Talebzadeh, Isotope effects by comparing ¹H & ²D NMR spectra of 9,9'-bisbicyclo[4.3.0] cyclo-nona-2,4,7-triene, *Spectroscopy letters*, **38**, 487 (2005).
- M. Z. Kassae, and **A. R. Bekhradnia**, Pyridinum sulfonate chlorochromate (VI), C₅H₅NSO₃H [CrO₃Cl] (PSCC): A new reagent oxidizing for oxidation of organic substrates, *Phosphorus, Sulfur, and Silicon*, **179**, 2025 (2004).
- M. Z. Kassae, and **A. R. Bekhradnia**, The kinetics of interactions between fecapentaene-12 and DNA, *J. Biosci. Bioeng.*, **95**, 526 (2003).
- **A.R. Bekhradnia**, M. Forouzani, Z. Shahamat, Synthesis of a novel fluorescent schiff base as a possible Hg and Ag ions selective sensor, *Research in Pharmaceutical Sciences*, **7(5)** (2012)
- **A.R. Bekhradnia**, S.Arshadi, S.Alamdar, Synthesis and characterization of Zn(II) and Pb(II) macrocyclic schiff base complex, *Rafsanjan, Iran*.(2012)
- M.Forouzani, **A. R. Bekhradnia**, Z.Shahamat, Synthesis of a novel chromophore as a potential chelating for cations, *Rafsanjan, Iran*.(2012)

- **A.R. Bekhradnia**, Z. Shahamat, Synthesis of novel chromophore as a potential chelating for mercury, *5th National Seminar of Chemistry & Environment* (2011).
-
- **A. R. Bekhradnia**, Investigation of Biologically Activity in Enantioselective Drugs Using Abinitio Calculations, *1st International Symposium on Computing in Science & Engineering*, Kusadasi, Turkey (2011).
- **A. R. Bekhradnia** and M. A. Ebrahimzadeh, Theoretical study on correlation of geometrical structures and biological side effect in different drugs, *13th ECSBM*, Palermo, Italy (2009).
- **A.R.Bekhradnia* & M.Z.Kassae**, SYNTHESIS OF NANO-COPPER IN VARIOUS SIZES AND RELATED CATALYTIC USAGE IN BIOLOGICAL REACTIONS, *4th International Conference on the Environmental Effects of Nanoparticles and Nanomaterials*, Vienna, Austria (2009).
- **A.R.Bekhradnia, S.Arshadi, S.Kazemi**, Solvent effects in potential energy surfaces of the pair of organic bases in DNA and RNA structures: Theoretical Study, *2nd International symposium on Organic Chemistry*, Sofia, Bulgaria (2008).
- **A. R. Bekhradnia, M.A. Ebrahimzadeh**, Biologically activity and structural relation of Propanolol, Nadolol, Bunolol, and Timolol: An abinitio study, *2nd International symposium on Organic Chemistry*, Sofia, Bulgaria (2008).
- **A. R. Bekhradnia, S. Arshadi**, Substituent Effects on Cycloheptatetraenes Racemizations, *International Conference on Organic Chemistry*, Antalya, Turkey (2007).
- **A. R. Bekhradnia, F. Zahir**, Spectroscopic studies on the extent of oxidation of alcohols, *International Conference on Organic Chemistry*, Erzurum, Turkey (2007).

- **A. R. Bekhradnia**, Spectral Measurement of Stereoselective Olefination, *International Conference on Organic Chemistry*, Erzurum, Turkey (2007).
- **A. R. Bekhradnia, S. Arshadi**, Theoretical gas phase study of 9-annulene anion isomerization, *International Conference on Organic Chemistry*, Erzurum, Turkey (2007).
- **A. R. Bekhradnia, S. Arshadi**, Theoretical study of resolution analysis of 1, 3, 5, 7-cyclononatetraenyl anion topomers, *International Conference on Organic Chemistry*, Erzurum, Turkey (2007).
- **A. R. Bekhradnia, M. Aliasgharlo**, ^1H -NMR and ^{13}C -NMR Shift Studies in a Series of 3, 4- Diaryl-(1H)-Pyrrols, *International Conference on Organic Chemistry*, Erzurum, Turkey (2007).
- **A. R. Bekhradnia, F. Zahir**, A new aspect of efficient and convenient oxidation of biological compounds by PSFC, *67th International Congress of FIP, China, Beijing* (2007).
- **A. R. Bekhradnia, S. Arshadi**, The Effect of Heteroatom on Conformational Equilibria, *67th International Congress of FIP, China, Beijing* (2007).
- **A. R. Bekhradnia, S. Arshadi**, A new insight to racemizations of 1,2,4,6-Cycloheptatetraenes, *67th International Congress of FIP, China, Beijing* (2007).
- **A. R. Bekhradnia, S. Arshadi**, Conformational analysis of diaziridines derivatives, *67th International Congress of FIP, China, Beijing* (2007).
- **A. R. Bekhradnia, S. Arshadi**, Conformational analysis of propandione-1-oxime and its tautomers, *67th International Congress of FI, China, Beijing P* (2007).
- **A. R. Bekhradnia, V.Hejazi, R. Gorji**, THEORETICAL STUDY ON SOME DRUGS WITH HIRSUTISM SIDE, *67th International Congress of FIP, China, Beijing* (2007).

- **A. R. Bekhradnia, M. Aliasgharlo**, CORROLATION OF HAIR LOSS SIDE EFFECT AND CONFOMATIONAL STRUCTURES, *67th International Congress of FIP (2007)*.
- **M.A. Ebrahimzadeh, A.R. Bekhradnia, M. Ali asgharlo, F. zahir**, Confomational analysis on some drugs with hair loss side effect, *10th Seminar National Physical Chemistry, Isfahan, Iran, 2007*.
- **A. R. Bekhradnia, F. Zahir, A. R. Bekhradnia, F. Zahir**, Spectroscopic study usage for description of fluorine replacement reaction progressing, *10th Seminar National Physical Chemistry, Isfahan, Iran, 2007*.
- **A. R. Bekhradnia, M. Fazelian**, Trapping of heavy metals using Isoxazole derivatives, *همایش کاربرد های شیمی در صنعت. Isfahan, Iran, ۲۰۰۶*.
- **A. R. Bekhradnia, M. Fazelian**, Semi-experimental synthesis of Ethyl dithiophenyl phosphate. *همایش کاربرد های شیمی در صنعت. Isfahan, Iran, ۲۰۰۶*.
- **A. R. Bekhradnia**, ¹H & ²D NMR spectra of bisbicyclocyclo-nona-trienes, *ESOC-14, 2005, Helsinki, Finland, Jul. 14-18; Book of Abstracts, paper: 13B*.
- **A. R. Bekhradnia**, Spectral measurements of a new oxidizing reagent, *ESOC-14, 2005, Helsinki, Finland, Jul. 14-18; Book of Abstracts, paper: 16B*.
- **A. R. Bekhradnia, S.Z. Moussavi**, A new method for synthesis of an organo phosphorus poison, *ICTX, 2004, Tampere, Finland, Jul. 8-13; Book of Abstracts, paper: 460*.
- **M. Z. Kassae, A. R. Bekhradnia**, ¹⁹F-NMR shifts in Flourstilbens, *Pittsburgh Conference (Pitcon), 2005, Orlando, Florida, USA, Feb. 27-March 4; Book of Abstracts, paper: 22100-1300p*.

- **M. Z. Kassaee, A. R. Bekhradnia**, Spectral measurements of the extent of selective oxidizing reagent, *Pittsburgh Conference (Pittcon)*, 2005, Orlando, Florida, USA, Feb. 27-March 4; Book of Abstracts, paper: 1830-5p.
- **A. R. Bekhradnia**: *ISPC, 2003, Istanbul, Turkey*, Sep. 17-19; Book of Abstracts, paper: 114, P-22.
- **A. R. Bekhradnia, M. Z. Kassaee**: *Pittsburgh Conference (Pittcon)*, 2003, Orlando, Florida, USA, March 9-14; Book of Abstracts, paper: 1830-5p.
- **E. Vessally, A. R. Bekhradnia**, Performance of cyanates in polluted water after conversion of cyanide to cyanates, *دانشگاه کردستان ن ۷-۵ مهر ماه ۲۰۰۵*, Iran.
- **S. Arshadi, A. R. Bekhradnia, E. Vessally**, Theoretical study of oximes. *11th of Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.
- **A. R. Bekhradnia**, A novel method for synthesis of a mild sulfonating reagent, pyridinium-1-sulfonate Chloride, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.
- **M.Z. Kassaee, A. R. Bekhradnia**, Transition state characteristics of planar singlet 2,4,6,8-cyclononatetraenylidenes and its haloderivatives, via ab initio, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.
- **A. R. Bekhradnia, S. Arshadi, E. Vessally**, A new reagent for oxidation of organic substrates, PSCC, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.
- **E. Vessally, A. R. Bekhradnia, S. Arshadi**, Study or the stability and properties of various isomers of C₅H₆S, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.
- **E. Vessally, A. R. Bekhradnia, S. Arshadi**, Singlet-triplet energy gaps in cyclopropanylidenes, compared to the corresponding sila-stana and plumba- analogue, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran*.

- **E. Vessally, A. R. Bekhradnia, S. Arshadi**, Study of electronic effects on the conversion of norbornadiene-quadracyclane derivatives system, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran.*
- **A. R. Bekhradnia, E. Vessally, S. Arshadi**, Synthesis of Hinozan, an organo phosphorus poison, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran.*
- **E. Vessally, A. R. Bekhradnia, S. Arshadi**, Exploring nitro-nitrite rearrangement via monitoring of ¹H-NMR spectroscopy, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran.*
- **E. Vessally, S. Arshadi, A. R. Bekhradnia**, Racemization of halo-1,2,4,6,8-cyclononapentaenes via abinitio, *Seminar of Organic Chemistry, 2005, Feb.1-3, Isfahan, Iran.*
- **M. Z. Kassae, A. R. Mahjoub, A. R. Bekhradnia**: New method for synthesis of pyridinium-1-sulfonate fluoride, *ISOC 10, 2002, Sep. 10-12, Guilan, Iran*
- **M. Z. Kassae, E. Vessally, A. R. Bekhradnia, S. Arshadi, M. koohi**: Study of 1,4-cyclohexadien derivatives, *via ab initio* , *ISOC 10, 2002, Sep. 10-12, Guilan, Iran.*
- **A. R. Bekhradnia, M.Z Kassae**: Kinetics of Binding of Fp-12 to DNA, *Third Azad University Conference of Chemistry, 2002, Tehran, Iran, Book of Abstracts, paper: 23ج.*
- **A.R. Bekhradnia, S.Z. Moussavi**, Synthesis of Isoxazole Derivatives as Antifungal and Calcium Channel Blocker Compounds, *De Pharmacochimie, Belgium, 2001.*