

CURRICULUM VITAE

October 2018



Contact Information

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Personal Information

Date of Birth: 23 Jan. 1966

Place of Birth: Semnan

Citizenship: Iran

Present Status:

Full Professor in Organic Chemistry

Education:

Ph.D (Organic Chemistry): Montreal University, Montreal, Canada, 1995-1999.

Title: Photochemical rearrangement of 2-phenylthiocyclohexanols. New access to deoxyzasugars and their derivatives.

M.Sc. (Organic Chemistry): Shahid Beheshti University, Tehran, Iran, 1988-1991.

B. Sc. (Teaching Chemistry): Ferdowsi university of Mashhad, Mashhad, Iran,
1983-1987.

Teaching Experience (from 1989 to now):

For Undergraduate:

1. General Chemistry I and II
2. General Chemistry Lab. I and II
3. Organic Chemistry I & II & III
4. Organic Chemistry Lab. I & II & III
5. Separation and Identification of Organic Compounds
6. Biochemistry
7. Biochemistry Lab.
8. Inorganic Chemistry I
9. Inorganic Chemistry Lab. II
10. Spectroscopy of Organic Compounds
11. All General and Organic Chemistry Laboratories at Montreal University

For Graduate:

1. Advanced Organic Chemistry
2. Organic Synthesis
3. Asymmetric Organic Synthesis
4. Special Topics in Organic Chemistry

Research Interests:

1. Design and Synthesis of New Nano Heterogeneous Catalysts and Photocatalyst
2. Organic Synthesis
3. Corrosion Inhibitors
4. Emulsifiers & Demulsifiers
5. Chromatography

List of Some Selected Publication:

Articles in Journals

- [1] A. Amoozadeh, H. Mazdarani, H. Beydaghi, E. Tabrizian, M. Javanbakht, Novel nanocomposite membrane based on $\text{Fe}_3\text{O}_4@\text{TDI}@\text{TiO}_2\text{-SO}_3\text{H}$: Hydration, mechanical and DMFC study, *New Journal of Chemistry*, 42 (2018) 16855-16862.
- [2] M. Bitaraf, A. Amoozadeh, S. Otokesh, Nano- WO_3 -Supported Sulfonic Acid: A Versatile Catalyst for the One-Pot Synthesis of 14-Aryl-14H-dibenzo[a,j]xanthene Derivatives Under Solvent-Free Conditions, *National Academy of Sciences*, (2018).
- [3] S. Hosseini, A. Amoozadeh, Nano- TiO_2 -P25- SO_3H as a new and robust photocatalyst: The acceleration effect of selective oxidation of aromatic alcohols to aldehydes under blue LED irradiation, *Journal of Photochemistry and Photobiology A: Chemistry*, 364 (2018) 516-523.
- [4] F. Esfahanian, A. Amoozadeh, M. Bitaraf, $\text{TiO}_2@\text{TDI}@\text{DMAPA}$: An amine-modified nanoparticle, tailored to act as an economic basic heterogeneous nanocatalyst, *Journal of Nanoparticle Research*, 20 (2018).
- [5] A. Madhi, B. Shirkavand Hadavand, A. Amoozadeh, UV-curable urethane acrylate zirconium oxide nanocomposites: Synthesis, study on viscoelastic properties and thermal behavior, *Journal of Composite Materials*, 52 (2018) 2973-2982.
- [6] H. Saeidian, S. Esmail Hosseini, A. Amoozadeh, M. Taghi Naseri, M. Babri, Investigation of sarin(Se) reactivity against human plasma proteins using liquid chromatography-tandem mass spectrometry, *Journal of Mass Spectrometry* 53 (2017) 138-145.
- [7] A. Amoozadeh, S. F. Hosseininya, S. Rahmani, Nano titania-supported sulfonic acid (n-TSA) as an efficient, inexpensive, and reusable catalyst for one-pot synthesis of 1, 8-dioxo-octahydroxanthene and tetrahydrobenzo[b]pyran derivatives, *Research on Chemical Intermediates*, 44 (2017) 991-1011.
- [8] A. Madhi, B. Shirkavand Hadavand, A. Amoozadeh, Thermal conductivity and viscoelastic properties of UV-curable urethane acrylate reinforced with modified Al_2O_3 nanoparticles, *Prog. Color Colorants Coat.*, 10 (2017), 193-204.

- [9] H. Beydaghi, M. Javanbakht, P. Salarizadeh, A. Bagheri, A. Amoozadeh, Novel proton exchange membrane nanocomposites based on sulfonated tungsten trioxide for application in direct methanol fuel cells, *Polymer*, 119 (2017) 253-262.
- [10] T. Shamsi, A. Amoozadeh, E. Tabrizian, S. M. Sajjadi, A new zwitterionic nano-titania supported Keggin phosphotungstic heteropolyacid: An efficient and recyclable heterogeneous nanocatalyst for the synthesis of 2,4,5-triaryl substituted imidazoles, *Reaction Kinetics, Mechanisms and Catalysis*, 121 (2017) 505-522.
- [11] M. Mohammadipour, A. Amoozadeh, The synthesis of polyhydroacridines by covalent 5-sulfobenzoic acid-functionalized graphene oxide as a novel, green, efficient, and heterogeneous catalyst, *Monatshefte für Chemie - Chemical Monthly*, 148 (2017) 1075-1084.
- [12] M. Ghasemi, E. Kowsari, A. Amoozadeh, Chitosan/poly(Amide-Imide) blend films: Studies on thermal and mechanical stability, morphology, and biodegradability, *Iranian Journal of Chemistry & Chemical Engineering-International English Edition*, 36 (2017) 55-70.
- [13] E. Tabrizian, A. Amoozadeh, Sulfamic Acid-functionalized Nano-titanium dioxide as a Novel and Highly Efficient Heterogeneous Nanocatalyst for One-pot and Solvent-free Synthesis of Hexahydroquinolines, *Journal of the Chinese Chemical Society*, 64 (2017) 331-336.
- [14] M. Ghasemi, A. Amoozadeh, E. Kowsari, Chitosan-functionalized nano-titanium dioxide: A novel and highly efficient nanocatalyst for the synthesis of 2,4,5-trisubstituted imidazoles under solvent-free conditions, *Reaction Kinetics, Mechanisms and Catalysis*, 120 (2016) 605-617.
- [15] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, A new approach for one-pot, green synthesis of new polycyclic indoles in aqueous solution, *Chinese Chemical Letters*, 28 (2016) 1031-1034.
- [16] T. Shamsi, A. Amoozadeh, S. M. Sajjadi, E. Tabrizian, Novel type of SO₃H-functionalized nano-titanium dioxide as a highly efficient and recyclable heterogeneous nanocatalyst for the synthesis of tetrahydrobenzo[b]pyrans, *Applied Organometallic Chemistry*, 31 (2016).

- [17] S. E. Hosseini, H. Saeidian, A. Amozadeh, M. Taghi Naseri, M. Babri, Fragmentation pathways and structural characterization of organophosphorus compounds related to the Chemical Weapons Convention by electron ionization and electrospray ionization tandem mass spectrometry, *Rapid Communications in Mass Spectrometry*, 30 (2016) 2585-2593.
- [18] H. Saeidian, S. E. Hosseini, A. Amozadeh, M. T. Naseri, M. Babri, EI-MS and ESI-MS/MS study of O,O -dialkyl(diaryl) methylphosphonoselenoates, *International Journal of Mass Spectrometry*, 409 (2016) 44-52.
- [19] E. Tabrizian, A. Amoozadeh, A new type of SO₃H-functionalized magnetic-titania as a robust magnetically-recoverable solid acid nanocatalyst for multi-component reactions, *RSC Advances*, 6 (2016) 96606-96615.
- [20] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, Environmentally Friendly, One-pot, Catalyst-free, and Facile Electrochemical Synthesis of New SupraN- and O-Heterocycles, *Chemistry Letters*, 45 (2016) 1060-1062.
- [21] A. Amoozadeh, E. Tabrizian, M. Salehi, M. Kubicki, S. Rahmani, T. Shamsi, M. Bitaraf, Catalyst-free synthesis of (7E)-7-benzylidene-3,3a,4,5,6,7-hexahydro-2,3-diphenyl-2H-indazole derivatives in PEG-400 as a green and reusable solvent, *Journal of Chemical Research*, 40 (2016) 535-539.
- [22] M. Bitaraf, A. Amoozadeh, S. Otokesh, ChemInform Abstract: A Simple and Efficient One-Pot Synthesis of 1,4-Dihydropyridines Using Nano-WO₃-Supported Sulfonic Acid as an Heterogeneous Catalyst under Solvent-Free Conditions, *ChemInform*, 47 (2016).
- [23] E. Tabrizian, A. Amoozadeh, T. Shamsi, A novel class of heterogeneous catalysts based on toluene diisocyanate: The first amine-functionalized nano-titanium dioxide as a mild and highly recyclable solid nanocatalyst for the Biginelli reaction, *Reaction Kinetics, Mechanisms and Catalysis*, 119 (2016) 245–258.
- [24] E. Tabrizian, A. Amoozadeh, A unique approach to magnetization of metal oxides: Nano-Fe₃O₄@TDI@TiO₂ as a highly efficient, magnetically separable and recyclable heterogeneous nanocatalyst, *Catalysis Science & Technology*, 6 (2016) 6267–6276.

- [25] M. Bitaraf, A. Amoozadeh, S. Otokesh, A Simple and Efficient One-pot Synthesis of 1,4-dihydropyridines Using Nano-WO₃- supported Sulfonic Acid as an Heterogeneous Catalyst under Solvent-free Conditions, *Journal of the Chinese Chemical Society*, 63 (2016) 336-344.
- [26] A. Amoozadeh, M. Malmir, N. Koukabi, S. Otokesh, ChemInform Abstract: Microwave-Assisted, Solvent Free Preparation of 1,5-Benzodiazepine Derivatives Using Nanomagnetic-Supported Sulfonic Acid as a Recyclable and Heterogeneous Catalyst, *ChemInform*, 47 (2016).
- [27] E. Tabrizian, A. Amoozadeh, S. Rahmani, Sulfamic acid-functionalized nano-titanium dioxide as an efficient, mild and highly recyclable solid acid nanocatalyst for chemoselective oxidation of sulfides and thiols, *RSC Advances*, 6 (2016) 21854-21864.
- [28] N. Koukabi, S. Otokesh, E. Kolvari, A. Amoozadeh, Convenient and rapid diazotization and diazo coupling reaction via aryl diazonium nanomagnetic sulfate under solvent-free conditions at room temperature, *Dyes and pigments*, 124 (2016) 12-17.
- [29] A. Amoozadeh, S. Rahmani, M. Hafezi, E. Tabrizian, E. Imanifar, F. Zolfagharkhani, A convenient, simple and one-pot synthesis of dibenzoxanthenes and tetrahydrobenzoxanthenes by nanotitania-supported sulfonic acid as an efficient and highly reusable nanocatalyst, *Reaction Kinetics, Mechanisms and Catalysis*, 117 (2016) 365-377.
- [30] A. Amoozadeh, S. Rahmani, M. Bitaraf, F.B. Abadi, E. Tabrizian, Nano-zirconia as an excellent nano support for immobilization of sulfonic acid: A new, efficient and highly recyclable heterogeneous solid acid nanocatalyst for multicomponent reactions, *New Journal of Chemistry*, 40 (2016) 770-780.
- [31] E. Tabrizian, A. Amoozadeh, S. Rahmani, M. Salehi, M. Kubicki, Synthesis, characterization, and crystal structures of α , α' -bis(substituted-benzylidene)cycloalkanone derivatives by nano-TiO₂/HOAc, *Research on Chemical Intermediates*, (2015).
- [32] E. Tabrizian, A. Amoozadeh, S. Rahmani, E. Imanifar, S. Azhari, M. Malmir, One-pot, solvent-free and efficient synthesis of 2,4,6-triarylpyridines catalyzed by

nano-titania-supported sulfonic acid as a novel heterogeneous nanocatalyst, *Chinese Chemical Letters*, (2015).

[33] M. Salehi, A. Amoozadeh, A. Salamatmanesh, M. Kubicki, G. Dutkiewicz, S. Samiee, A. Khaleghian, Synthesis, characterization, crystal structures, computational studies, and antibacterial activities of two new Schiff bases derived from isophthalaldehyde, *Journal of Molecular Structure*, 1091 (2015) 81-87.

[34] S. Otokesh, N. Koukabi, E. Kolvari, A. Amoozadeh, M. Malmir, S. Azhari, A solvent-free synthesis of polyhydroquinolines via Hantzsch multicomponent condensation catalyzed by nanomagnetic-supported sulfonic acid, *South African Journal of Chemistry*, 68 (2015) 15-20.

[35] S. Otokesh, E. Kolvari, A. Amoozadeh, N. Koukabi, Magnetic nanoparticle-supported imidazole tribromide: a green, mild, recyclable and metal-free catalyst for the oxidation of sulfides to sulfoxides in the presence of aqueous hydrogen peroxide, *RSC Advances*, 5 (2015) 53749-53756.

[36] A. Asghari, O. Ghaderi, M. Rajabi, M. Ameri, A. Amoozadeh, Mechanistic and electrochemical investigation of catechol oxidation in the presence of thioacetamide: Application for voltammetric determination of thioacetamide in aqueous media, *Progress in Reaction Kinetics and Mechanism*, 40 (2015) 95-103.

[37] A. Asghari, M. Ameri, A.A. Ziarati, S. Radmannia, A. Amoozadeh, B. Barfi, L. Boutorabi, Electro-oxidation of paracetamol in the presence of malononitrile: Application for green, efficient, none-catalyst, simple and one-pot electro-synthesis of new paracetamols, *Chinese Chemical Letters*, 26 (2015) 681-684.

[38] A. Asghari, M. Ameri, B. Baraee, M. Rajabi, M. Bakherad, A. Amoozadeh, Mechanistic investigation of the electrooxidation of catechols in the presence of N-methylbenzylamine at room temperature: Synthesis of new quinone derivatives, *Progress in Reaction Kinetics and Mechanism*, 40 (2015) 77-85.

[39] A. Amoozadeh, E. Tabrizian, S. Rahmani, Nano titania-supported sulfonic acid catalyzed synthesis of α,α' -bis(substituted-benzylidene)cycloalkanones and of their xanthene derivatives under solvent-free conditions, *Comptes Rendus Chimie*, 18 (2015) 848-857.

- [40] A. Amoozadeh, S. Rahmani, Nano-WO₃-supported sulfonic acid: New, efficient and high reusable heterogeneous nano catalyst, *Journal of Molecular Catalysis A: Chemical*, 396 (2015) 96-107.
- [41] A. Amoozadeh, M. Malmir, N. Koukabi, S. Otokesh, Microwave-Assisted, solvent free preparation of 1,5-benzodiazepine derivatives using nanomagnetic-supported sulfonic acid as a recyclable and heterogeneous catalyst, *Journal of Chemical Research*, 39 (2015) 694-697.
- [42] A. Amoozadeh, E. Kolvari, N. Koukabi, S. Otokesh, Nanomagnetic-supported Sulfonic Acid: Simple and Rapid Method for the Synthesis of α,α' -Bis-(substituted-benzylidene) Cycloalkanones, *Journal of the Chinese Chemical Society*, (2015).
- [43] A. Amoozadeh, E. Kolvari, N. Koukabi, S. Otokesh, Nanomagnetic-supported Sulfonic Acid: Simple and Rapid Method for the Synthesis of α,α' -Bis-(substituted-benzylidene) Cycloalkanones, *Journal of the Chinese Chemical Society*, 62 (2015) 501-505.
- [44] A. Amoozadeh, S. Golian, S. Rahmani, TiO₂-coated magnetite nanoparticle-supported sulfonic acid as a new, efficient, magnetically separable and reusable heterogeneous solid acid catalyst for multicomponent reactions, *RSC Advances*, 5 (2015) 45974-45982.
- [45] A. Amoozadeh, S. Azhari, E. Kolvari, S. Otokesh, Synthesis of Pyrimidinone and 5-unsubstituted 4, 6-diarylpyrimidine-2(1H)-ones by Using Nano Magnetic Catalyst under Solvent Free Condition, *Journal of the Chinese Chemical Society*, 62 (2015) 968-973.
- [46] A. Amoozadeh, R.A. Azadeh, S. Rahmani, M. Salehi, M. Kubicki, G. Dutkiewicz, Nano-Titania-Supported Sulfonic-Acid-Catalyzed Synthesis of 2-Arylbenzothiazole Derivatives under Solvent Free Conditions, *Phosphorus, Sulfur and Silicon and the Related Elements*, 190 (2015) 1874-1883.
- [47] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, D. Nematollahi, An efficient, simple, non-catalytic electro-synthesis of new polycyclic benzofuran derivatives, *Tetrahedron Letters*, 56 (2015) 2141-2144.
- [48] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, First electroorganic synthesis based on a metal-and amine-free Sonogashira-type coupling reaction with

an ECECECE mechanism, *Journal of the Electrochemical Society*, 162 (2015) G25-G28.

[49] M. Ameri, A. Amoozadeh, A. Asghari, D. Nematollahi, M. Bakherad, A facile and efficient one-pot electrochemical synthesis of thiazole derivatives in Aqueous Solution, *Helvetica Chimica Acta*, 98 (2015) 210-223.

[50] S. Rahmani, A. Amoozadeh, E. Kolvari, Nano titania-supported sulfonic acid: An efficient and reusable catalyst for a range of organic reactions under solvent free conditions, *Catalysis Communications*, 56 (2014) 184-188.

[51] E. Kolvari, A. Amoozadeh, N. Koukabi, S. Otokesh, M. Isari, Aryl diazonium nanomagnetic sulfate and potassium iodide: An iodination process, *Tetrahedron Letters*, 55 (2014) 3648-3651.

[52] A. Asghari, M. Ameri, A.A. Ziarati, S. Radmannia, A. Amoozadeh, B. Barfi, L. Boutorabi, Electro-oxidation of paracetamol in the presence of malononitrile: Application for green, efficient, none-catalyst, simple and one-pot electro-synthesis of new paracetamols, *Chinese Chemical Letters*, (2014).

[53] M. Ameri, A. Asghari, A. Amoozadeh, D. Nematollahi, M.A. Chamjangali, L. Boutorabi, Kinetic and mechanistic investigation of electrochemical oxidation of hydroquinones in the absence and presence of 2-acetyl-gamma-butyrolactone, *Progress in Reaction Kinetics and Mechanism*, 39 (2014) 391-403.

[54] M. Ameri, A. Asghari, A. Amoozadeh, H. Daneshinejad, D. Nematollahi, Electrosynthesis of hydroquinonethioethers using electrochemical oxidation of hydroquinone in the presence of thiouracil derivatives, *Chinese Chemical Letters*, 25 (2014) 797-801.

[55] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, D. Nematollahi, Green and highly efficient synthesis of new bis-benzofurans via electrochemical methods under ECECCC mechanism, *Journal of the Electrochemical Society*, 161 (2014) G75-G80.

[56] M. Ameri, A. Asghari, A. Amoozadeh, M. Bakherad, D. Nematollahi, Facile and one-pot, electro-organic synthesis of a new bis-quinone by the ECCE mechanism in green media, *Chinese Chemical Letters*, 25 (2014) 1607-1610.

- [57] G. Dutkiewicz, M. Salehi, A. Amoozadeh, M. Ghasemi, A. Rezaei, M. Kubicki, Synthesis, characterization, and crystal structure of α -glucosimino- pyranose anthranilic acid, *Journal of Chemical Crystallography*, 43 (2013) 59-64.
- [58] A. Amoozadeh, S. Rahmani, F. Nemati, Poly(ethylene)glycol/ AlCl_3 as a new and efficient system for multicomponent Biginelli-type synthesis of pyrimidinone derivatives, *Heterocyclic Communications*, 19 (2013) 69-73.
- [59] A. Amoozadeh, M. Ahmadzadeh, E. Kolvari, Easy access to coumarin derivatives using alumina sulfuric acid as an efficient and reusable catalyst under solvent-free conditions, *Journal of Chemistry*, (2013).
- [60] M. Salehi, G. Dutkiewicz, A. Rezaei, A. Amoozadeh, S. Rahmani, G.H. Grivani, M. Kubicki, Synthesis, antibacterial studies and crystal structures of tridentate schiff base ligand and it's cobalt(III) complex, *Journal of Chemical Crystallography*, 42 (2012) 871-878.
- [61] F. Nemati, M. Arghan, A. Amoozadeh, Efficient, solvent-free method for the one-pot condensation of-naphthol, Aromatic aldehydes, and cyclic 1,3-dicarbonyl compounds catalyzed by silica sulfuric acid, *Synthetic Communications*, 42 (2012) 33-39.
- [62] F. Nemati, A.S. Fakhaei, A. Amoozadeh, Y.S. Hayeniaz, Highly stereoselective synthesis of β -amino ketones via a mannich reaction catalyzed by cellulose sulfuric acid as a biodegradable, efficient, and recyclable heterogeneous catalyst, *Synthetic Communications*, 41 (2011) 3695-3702.
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- [64] A. Amoozadeh, S. Rahmani, G. Dutkiewicz, M. Salehi, F. Nemati, M. Kubicki, Novel synthesis and crystal structures of two α , α -bis-substituted benzylidene cyclohexanones: 2,6-Bis-2-nitro(benzylidene)cyclohexanone and 2,6-Bis-4-methyl(benzylidene)cyclohexanone, *Journal of Chemical Crystallography*, 41 (2011) 1305-1309.
- [65] H. Raissi, E.S. Nadim, M. Yoosefian, F. Farzad, E. Ghiamati, A.R. Nowroozi, M. Fazli, A. Amoozadeh, The effects of substitutions on structure, electron density,

resonance and intramolecular hydrogen bonding strength in 3-mercapto-propenethial, *Journal of Molecular Structure: THEOCHEM*, 960 (2010) 1-9.

[66] A. Amoozadeh, S. Rahmani, F. Nemati, Poly(ethylene)glycol/ AlCl_3 as a Green and Reusable System in the Synthesis of α,α' -bis(substituted-benzylidene) Cycloalkanones, *South African Journal of Chemistry*, 63 (2010) 72-74.

[67] A. Amoozadeh, F. Nemati, Poly(ethylene) glycol as a green and reusable solvent in the oxidation of sulfides to sulfoxides using NaClO , Phosphorus, Sulfur and Silicon and the Related Elements, 185 (2010) 1381-1385.

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[71] D. Gravel, A. Amoozadeh, Y. Wang, Photochemical rearrangement of 2-phenylthio-3-aminocyclohexanols. New access to deoxyzasugars and their derivatives, *Tetrahedron Letters*, 39 (1998) 8039-8042.

US Patent

[1] H. Beydaghi, M. Javanbakht, P. Salarizadeh, A. Bagheri, A. Amoozadeh, Nanocomposite blend membrane, (2017).

Papers Presented at Conferences and Seminars

More than 70.