



Kashan University

CURRICULUM VITA

MASOOD HAMADANIAN

Associate Professor of Physical Chemistry

Personal Data

Name: Masood Hamadani Khozani

Birth Date: June 10, 1969

Place of Birth: Khomeini Shahr, Isfahan I.R. IRAN

Nationality: Iranian

Marital Status: Married

Current status: Associate Professor of Physical Chemistry

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University Education

1994-1999: Ph.D. Studies in Chemistry (Quantum Chemistry)

Title: Description of One- and Two-Electron Orbital (Doublet & Triplet State) and Cumulated Double Bond in Molecules by FSGO Method

Department of Chemistry, Faculty of Science, University of Shiraz, Shiraz, I.R. IRAN

1992-1994: M.Sc. Studies in Chemistry (Physical Chemistry)

Title: Photocatalytic Reaction of Heavy Alcohol and Potassium Cyanide by using of Metals Coating on Titanium Dioxide (IV)

Department of Chemistry, Faculty of Science, University of Isfahan, Isfahan, I.R. IRAN

1988-1992: B.Sc. Studies in Chemistry (Pure Chemistry)

Department of Chemistry, Faculty of Science, University of Isfahan, Isfahan, I.R. IRAN

Kashan University

Work Experience

1993-1998: Physical Chemistry and Quantum Chemistry lecturer (courses and labs)

Islamic Free University of Shahreza, Shahreza, I.R. IRAN

1994-1998: Physical Chemistry and Quantum Chemistry lecturer (courses and labs)

Payam-e-Noor University of Isfahan, Isfahan, I.R. IRAN

1999-2007: Physical Chemistry and Quantum Chemistry lecturer (courses and labs)

Payam-e-Noor University of Delijan, Delijan, I.R. IRAN

2001-2004: Editorial Board of International Journal of Science and Technology of the Kashan University

University of Kashan, Kashan, I.R. IRAN

1998-2010: Assistant Professor of Physical Chemistry

Department of Chemistry, Faculty of Science, Kashan University, Kashan, I.R. IRAN

2011-Now: Associate Professor of Physical Chemistry

Department of Physical Chemistry, Faculty of Chemistry, Kashan University, Kashan, I.R. IRAN

Management Experience

2000-2003: Head of Essence Research center of Kashan University, Kashan, I.R. IRAN

2000-Now: Member of Nano research council of Kashan University, Kashan, I.R. IRAN

2004-2005: Head of Nano research Group of Kashan University, Kashan, I.R. IRAN

2007-2009: Chief of Institute of Nano Science and Nano Technology, Kashan University, Kashan, I.R. IRAN

Honors

1992, Rank 1 among B.Sc students of. Pure and applied chemistry of Isfahan University

1992, Rank 3 among B.Sc Iranian students of. Pure and applied chemistry in the first Iranian Olympia

1994, Rank 1 among M.Sc students of all branch of chemistry of Isfahan University

2007, Distinguished Teacher of faculty of Science of Kashan University

2009, Distinguished Researcher of Institute of Nano-Science and Nanotechnology of Kashan University

2010, Distinguished Teacher of faculty of Chemistry of Kashan University

2011, Distinguished Teacher of faculty of Chemistry of Kashan University

Teaching Experience

Undergraduate Level

- 1- General Chemistry I & II
- 2- Physical Chemistry I & II and Its Laboratory
- 3- Physical Chemistry of Engineering and Its Laboratory
- 4- Quantum Chemistry
- 5- Molecular Spectroscopy
- 6- Heat and Thermodynamics
- 7- Computer in Chemistry
- 8- Graphic

Postgraduate Level

- 1- Advanced Physical Chemistry
- 2- Kinetic Chemistry
- 3- Statistical Mechanic & Thermodynamic
- 4- Quantum Chemistry II
- 5- Advanced Molecular Spectroscopy I
- 6- Computational Nano Science

PhD Level

- 1- Quantum Chemistry III
- 2- Non Reversible Thermodynamic
- 3- Advanced Molecular Spectroscopy II
- 4- Advanced Statistical Chemistry

Research Experience

- 1- Computational Quantum Chemistry

- 2- Nano Photo-Catalyst
- 3- Computational Nano Science
- 4- Dye Sensitized Solar Cell

Publications:

A) Book

- 1- M. Oftadeh and **M. Hamadani**, "General Chemistry in Laboratory", Sama ghalam Ltd., 2006.
- 2- M. Salavati-Niassari, **M. Hamadani**, A. Majedi and Z. Fereshteh, "NanoCatalyst", Elm-o-Danesh Ltd., 2009.

B) Journal Papers

- 1- A. Zeini-Isfahani and **M. Hamadani Khozani**
"Photocatalytic reaction of aromatic alcohol by using of metal coated on dioxide titanium (IV)"
Iranian journal of chemistry and chemical engineering, 17 (1998) 20.
- 2- A. H. pakiari and **M Hamadani Khozani**
"One-electron orbital Description of Doublet radical by FSGO"
J. Mol. Struct. (TheoChem), 453 (1998) 77.
- 3- **M. Hamadani** and A. R. Ashrafi
"The Full NonRigid Group Theory for Trimethylamine"
International Journal of Mathematics and Mathematical Sciences, 42 (2003) 2701-2706.
- 4- A. R. Ashrafi and **M. Hamadani**
"The Full NonRigid Group Theory for Tetraammine Platinum (II)"
Croatia Chemica Acta, 76 (2003) 299-303.
- 5- **M. Hamadani** and A. R. Ashrafi
"The Full NonRigid Group Theory for Cis- and Trans-Dichlorodiammine Platinum (II) and Trimethylamine"
Croatia Chemica Acta, 76 (2003) 305-312.
- 6- A. R. Ashrafi and **M. Hamadani**
"Group Theory for Tetraammine Platinum (II) with C_{2v} and C_{4v} Point Group in the Non-Rigid System"
Journal of Applied Mathematics and Computing, 14 (2004) 289-303.
- 7- G. A. Moghani, A. R. Ashrafi and **M. Hamadani**
"Symmetry Properties of Tetraammine Platinum(II) with C_{2v} and C_{4v} Point Groups"

Journal of Zhejiang University Science, 6 (2005) 1087-1093.

8- A. R. Ashrafi and **M. Hamadani**

“Symmetry Properties of some Chemical Graphs”

Croatica Chemica Acta, 78 (2005) 159-163.

9- A.R. Ashrafi and **M. Hamadani**

“Full non-rigid group Theory and Symmetry of Melamine”

Journal of the Iranian Chemical Society, 2 (2005) 135-139.

10- **M. Hamadani** and A.R. Ashrafi

“ON THE SYMMETRY OF BIS BENZENE CHROMIUM(0) WITH D_{6d} POINT GROUP”

The Journal of the Argentine Chemical Society, 94 (2006) 47-53.

11- G.R. vakili-nezhaad, **M. Hamadani** and M. Ghomashi

“Calculation of the Heat Capacities of Solid Phase Buckminster Fullerene by Using Semi-empirical methods”

International Journal of Nanoscience and Nanotechnology, 2 (2006) 9-18.

12- M.R. Darafsheh, Y. Farjami, A.R. Ashrafi and **M. Hamadani**

“Full non-rigid group of Sponge and Pina”

Journal of Mathematical Chemistry, 41 (2007) 315-326.

13- A. Kahani, **M. Hamadani** and O. Vandadi

“Deposition of Magnetite Nanoparticles in Activated Carbons and preparation of Magnetic Activated Carbons”

American Institute of Physics (AIP), 929 (2007) 183-188.

14- M. Behpour, S.M. Ghoreishi, N. Soltani, M. Salavati, **M. Hamadani** and A. Gandomi

“Electrochemical and theoretical investigation on the corrosion inhibition of mild steel by thiosalicylaldehyde derivatives in hydrochloric acid solution”

Corrosion Science, 50 (2008) 2172-2181.

15- A. R. Ashrafi, **M. Hamadani**, Z. Tavangar and H. Sabzyan

“Symmetry of A Capped Nanotube”

Digest Journal of Nanomaterials and Biostructures, 4 (2009) 319-322.

16- **M. Hamadani**, A. Reisi-Vanani and A. Majedi

“Preparation and characterization of S-doped TiO₂ nanoparticles, effect of calcination temperature and evaluation of photocatalytic activity”

Materials Chemistry and Physics, 116 (2009) 376-382.

17- **M. Hamadanian**, A. Reisi-Vanani and A. Majedi

“Synthesis, characterization and effect of calcination temperature on phase transformation and photocatalytic activity of Cu,S-codoped TiO₂ nanoparticles”

Applied Surface Science, 256 (2010) 1837–1844.

18- **M. Hamadanian**, A. Reisi-Vanani and A. Majedi

“Sol-Gel preparation and characterization of Co/TiO₂ nanoparticles: Application to the degradation of methyl orange”

Journal of Iranian Chemical Society, 7 (2010) S52-S58.

19- M. Salavati-Niasari, S.N. Mirsattari, M. Monajjemi, **M. Hamadanian**

“Density Functional B3LYP and B3PW91 Studies of the Properties of Four Cyclic Organodibotanes With Tetramethylene Fragments”

Journal of structure, 51 (2010) 437-443.

20- **M. Hamadanian**, B. Khoshnevisan, F. Kalantari Fotooh

“Structure and electronic properties of Na-doped adamantane crystals”

Journal of Molecular Structure (THEOCHEM), 961 (2010) 48-54.

21- M. Oftadeh, **M. Hamadanian** Khozani, M. Radhoosh, M.H. Keshavarz

“DFT molecular orbital calculations of initial step in decomposition pathways of TNAZ and some of its derivatives with –F, –CN and –OCH₃ groups”

Computational and Theoretical Chemistry 964 (2011) 262–268.

22- M. Oftadeh, S. Naseh, **M. Hamadanian**

“Electronic properties and dipole polarizability of thiophene and thiophenol derivatives via density functional theory”

Computational and Theoretical Chemistry 966 (2011) 20–25.

23- **M. Hamadanian**, A.Sadeghi Sarabi, A. Mihammadi Mehra, V. Jabbari

“Efficient visible-light-induced photocatalytic degradation of MO on the Cr–nanocrystalline titania–S”

Applied Surface Science 257 (2011) 10639– 10644.

24- **M. Hamadanian**, A. Reisi-Vanani, M. Behpour, A.S. Esmaily

“Synthesis and characterization of Fe,S-codoped TiO₂ nanoparticles: Application in degradation of organic water pollutants”

Desalination, 281 (2011) 319–324.

25- **M. Hamadanian**, B. Khoshnevisan and F. Kalantari Fotooh

“Density functional study of super cell N-doped (10,0) zigzag single-walled carbon nanotubes as CO sensor”

Structural Chemistry, *In Press*.

26- **M. Hamadanian**, M. Behpour, A.S. Razavian and V. Jabbari

“Structural, morphological and photocatalytic characterisations of Ag-coated anatase TiO₂ fabricated by the sol–gel dip-coating method”

Journal of Experimental Nanoscience, *In press*.

27- **M. Hamadanian**, R. Sadeghi Sarabi, A. Mohammadi Mehra, V. Jabbari

“Photocatalyst Cr-doped titanium oxide nanoparticles: Fabrication, characterization, and investigation of the effect of doping on methyl orange dye degradation”

Materials Science in Semiconductor Processing, *In Press*.

28- **M. Hamadanian** and V. Jabbari

“Fabrication and characterization of dye-sensitized solar cells using electrospun TiO₂ nanofibre as a solar light harvesting layer”

International Journal of Sustainable Energy, *In Press*.

29- **M. Hamadanian**, A. Gravand, M. Farangi and V. Jabbari

“Electrochemical impedance spectroscopy analysis of TiO₂ electrode thickness effect on characteristics of a dye-sensitized solar cell”

International Journal of Sustainable Energy, *In Press*.

C) Conference Papers

1- A. Zeini-Isfahani and **M. Hamadanian Khozani**,

“Photo-oxidation of benzyl alcohol with TiO₂ and TiO₂ coated by Pt, Pd, Ni, Co, Cu, and Ag”

Proceeding of 9th Iranian chemistry and chemical engineering congress, Tehran, September, 6-8, 1994, 69.

2- A. Zeini-Isfahani and **M. Hamadanian Khozani**,

“Photo-oxidation of Cyanide Ion by using TiO₂ and Pt/TiO₂”

Proceeding of 2nd Iranian Seminar of Physical Chemistry, Isfahan University, Isfahan, August, 29-31, 1995, 22.

- 3- **M. Hamadani Khozani**, A. H. Bamoniri, and S. Minaei,
“Quantum mechanical studies of enamines by using some semi-empirical methods”
Proceeding of 8th Iranian Seminar in Organic Chemistry, Kashan University, Kashan, May, 17-19, 2000, 204.
- 4- **M. Hamadani Khozani**, A. H. Bamoniri, and S. Minaei,
“Determination of percentage and structure stability of kinetic and thermodynamic products of some enamines by using quantumic data”
Proceeding of 9th Iranian Seminar in Organic Chemistry, Imam Hussein University, Tehran, October, 16-18, 2001, 359.
- 5- A. H. Bamoniri, **M. Hamadani Khozani**, and S. Minaei,
“Determination of structure stability of some highly oxygenated acyclic monoterpenes by using semi-empirical method AM1, PM3”
Proceeding of 9th Iranian Seminar in Organic Chemistry, Imam Hussein University, Tehran, October, 16-18, 2001, 59.
- 6- **M. Hamadani**, A. H. Bamoniri, and S. Minaei,
“Study of structure stability and yield of some enamines by using semi-empirical methods: MNDO, AM1, PM3, and MINDO/3”
Proceeding of 5th Conference of Physical Chemistry, Persian Gulf university, Boshehr, January 31-February 2, 2002, 157.
- 7- **M. Hamadani** and A. R. Ashrafi,
“The full non-rigid group theory for trimethylamine”
Proceeding of AAA63-Workshop on General Algebra and CYA17-Conference of Young Algebraists, February, 22-24, 2002, 3.
- 8- A. H. Bamoniri, **M. Hamadani Khozani**, and S. Minaei,
“Structural study of geometric isomers on some new acyclic monoterpenes by using AM1, PM3 methods”
Proceeding of the third congress of chemistry of Islamic azad university of Tehran, Tehran, 2002, A-19.
- 9- A. R. Ashrafi and **M. Hamadani**,
“The full non-rigid group theory for tetraamino platinum (II)”
Proceeding of the 17th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnic, Croatia, June, 24-29, 2002, 2.
- 10- **M. Hamadani** and A. R. Ashrafi,

“The full non-rigid group theory for cis- & trans-diamino dichloro platinum (II) and trimethylamine”
Proceeding of the 17th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnik, Croatia, June, 24-29, 2002, 30.

11- **M. Hamadanian**, Z Tavangar and H. Hedayati,

“Improved Description of One-Electron Orbital in AH₃ Systems by FSGO Method”

Proceeding of the 6th Iranian Physical chemistry Seminar, Urmia University, Urmia, August, 27-29, 2002, 277.

12- **M. Hamadanian** and A. R. Ashrafi,

“The full non-rigid group theory for trimethylamine”

Proceeding of the 6th Iranian Physical chemistry Seminar, Urmia University, Urmia, August, 27-29, 2002, 280.

13- **M. Hamadanian** and A. R. Ashrafi,

“Group Theory for TetraamminePlatinum(II) with C_{2v} and C_{4v} Point Group in the Non-Rigid System”

The 39th IUPAC Congress and the 86th Conference of the Canadian Society for Chemistry, Canada, August, 2003, PH. 9. P037, 363.

14- G. R. Vakili Nezhaad and **M. Hamadanian**,

“Heat Capacities of Buckminster Fullerene”

The Second Conference of the Asian Consortium on Computational Materials Science (ACCMS2) Novosibirsk, Russia, July, 14-16, 2004, 164.

15- A. R. Ashrafi and **M. Hamadanian**,

“On Symmetry Properties of Some Chemical Graphs”

The Second Conference of the Asian Consortium on Computational Materials Science (ACCMS2) Novosibirsk, Russia, July, 14-16, 2004, 80.

16- **M. Hamadanian**, A. H. Bamoniri and K.Ostovar,

“Computational Study of Decomposition Pathways for OctaNitroCubane (ONC) by Using ab initio Method”

Proceeding of the 7th Iranian Physical chemistry Seminar, Isfahan University of Technology, Isfahan, March, 8-10, 2005, 219 (1-3).

17- **M. Hamadanian**, G.R Vakili-Nezhaad and M. Ghomashi,

“Calculation of Debye and Einstein Temperature for fullerene C₆₀”

Proceeding of the 7th Iranian Physical chemistry Seminar, Isfahan University of Technology, Isfahan, March, 8-10, 2005, 220 (1-3).

18- A. R. Ashrafi and **M. Hamadani**,

“On Symmetry of TetraamminePlatinum(II) with C_{2v} Point Group”

Proceeding of the 7th Iranian Physical chemistry Seminar, Isfahan University of Technology, Isfahan, March, 8-10, 2005, 221 (1-3).

۱۹- مسعود همدانیان, جواد صفایی قمی و محمدحسین زارعی,

"مطالعه واکنشهای دیلز آلدراکسازولیدینون با ۱ و ۳ بوتادین و برخی از مشتقات آن با استفاده از برخی روشهای مکانیک کوانتوم"

چکیده مقالات سومین همایش شیمی پیام نور, دانشگاه پیام نور اصفهان, اصفهان, ۲۶-۲۴ اردیبهشت ۱۳۸۴, ۱۶۰-۱۵۷.

20- **M. Hamadani** and A. H. Pakiari,

“Description of Cumulated Double Bond Orbital in Molecules by FSGO Method”

Proceeding of the third of Payam-e-Noor Chemical Seminar, Isfahan Payam-e-Noor University, Isfahan, May, 14-15, 2005, 164-167.

21- **M. Hamadani**, A.H. Bamoniri and N. Mohajeri,

“Theoretical Investigation of ¹H and ¹³C NMR Chemical Shift for Secondary Nitrozoamines and Dinitrozoamines”

Proceeding of the 8th Iranian Physical chemistry Seminar, Ferdowsi University of Mashhad, Mashhad, November, 21- 24, 2005, 141-143.

22- A. Zolfaghari, H. Sayahi, **M. Hamadani** and M. Ghassemzadeh,

“Electrodeposition of Titanium Oxide on Platinum and Stainless Steel Electrodes”

Proceeding of the 8th Iranian Physical chemistry Seminar, Ferdowsi University of Mashhad, Mashhad, November, 21- 24, 2005, 169-171.

23- **M. Hamadani**, M. Behpour and V. Farzadfar,

“Theoretical Interaction Studies of Three New Schiff Bases as Corrosion Inhibitor With Copper Surface”

Proceeding of the 8th Iranian Physical chemistry Seminar, Ferdowsi University of Mashhad, Mashhad, November, 21- 24, 2005, 358-361.

24- **M Hamadani**, M. Behpour and V. S. Farzadfar,

“Spatial and Theoretical Interaction Studies of Some Novel Schiff Bases as Corrosion Inhibitors with Iron Surface”

Proceeding of the 12th Iranian Seminar of Organic Chemistry, Ahwaz Jundi Shapour University of Medical Science, Ahwaz, March, 7-9, 2006, 576.

- 25- **M. Hamadanian** and R. Habibpour,
“Computational study of explosion parameters for cyclic nitramines and their fluorinated derivatives”
Proceeding of the 9th Iranian Physical chemistry Seminar, Guilan University, Rasht- Zibakenar, June, 13-15, 2006, 134-136.
- 26- A. Zolfaghari, H. Sayahi, **M. Hamedanian**, M. Behpour and M. Ghassemzadeh,
“Study of Photocatalytic Activity and Photocorrosion Effect of Nano Layer of Titanium Oxide on Stainless Steel”
Proceeding of the 9th Iranian Physical chemistry Seminar, Guilan University, Rasht- Zibakenar, June, 13-15, 2006, 99-101.
- 27- Ali Reza Ashrafi and **M. Hamadanian**,
“Symmetry Property of Bis Benzene Chromium(0) with D_{6d} Point Group”
Proceeding of the 9th Iranian Physical chemistry Seminar, Guilan University, Rasht- Zibakenar, June, 13-15, 2006, 347-348.
- 28- **M. Hamadanian**, M. Behpour and G. R. Vatankhah,
“New Schiff Bases as Corrosion Inhibitor for Copper Objects to Assist Curators in Treatments of Related Artworks: Theoretical Studies”
The 21th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnik, Croatia, June, 19-24, 2006, 27.
- 29- **M. Hamadanian**, M. Ghorbani and A. R. Ashrafi,
“Conting the Number of Hetero Fullerenes C_{n-k}X_k, for n = 180, 240, 260, 320, 540”
The 21th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnik, Croatia, June, 19-24, 2006, 28.
- 30- **M. Hamadanian**, M. Oftadeh and R. Habibpour,
“Investigation of explosive performance of mono-, bi- and tri-cyclic nitramines by ab-initio computational methods”
The 21th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnik, Croatia, June, 19-24, 2006, 29.
- 31- M. Salavati-Niasari, **M. Hamadanian** and E. Zamani,
“Thermodynamic Theoretical Calculation, Synthesis and Liquid Phase Oxidation of Cyclohexanol Using *tert*-Butylhydro proxide Over Host/Guest Nanocomposite Materials”

The 21th Dubrovnik International course & Conference on the interfaces among Mathematics, Chemistry and Computer Sciences, Dubrovnik, Croatia, June, 19-24, 2006, 69.

32- **M. Hamadanian**, M. Behpour and A. Razavian,

“Preparing Ag-TiO₂ Nano-Photocatalyst and immobilized on the Surface substrate by sol-gel method”

Frist sharjah international conference on Nanotechnology and its applications, Sharjah, United arab Emirates, April, 10-12, 2007, 106.

33- A. Kahani, **M. Hamadanian** and O. Vandadi,

“Deposition of Magnetite Nanoparticles in Activated Carbons and preparation of Magnetic Activated Carbons”

Frist sharjah international conference on Nanotechnology and its applications, Sharjah, United arab Emirates, April, 10-12, 2007, 80.

34- G.R. vakili-nezhaad, **M. Hamadanian** and M. Ghomashi,

“Calculation of the Heat Capacities of Solid Phase Buckminster Fullerene by Using Semi-empirical methods”

Frist sharjah international conference on Nanotechnology and its applications, Sharjah, United arab Emirates, April, 10-12, 2007, 48.

35- **M. Hamadanian** and H. Sabzyan,

“A Semiempirical Study of Perfluoroporphyrin Complexes with 3d Metal Ions”

Proceeding of the 10th Iranian Physical Chemistry Seminar, University of Isfahan, Isfahan, April, 23-27, 2007, 303-305.

36- F.S. Hashemi, **M. Hamadanian**, M. Hassannejad and F. Forooghian,

“Determination of the best molar ratio in the Support of Ziegler-Natta Catalyst with Quantum Mechanic Methods”

Proceeding of the 10th Iranian Physical Chemistry Seminar, University of Isfahan, Isfahan, April, 23-27, 2007, 306-308.

37- M. Oftadeh and **M. Hamadanian**,

“The Investigation of the Deflagration Pathway of CHNOF Explosives of Mono and Di Cyclic nitramine Compounds by Ab initio and semiempirical calculations”

41st IUPAC World Chemistry Congress, Turin, Italy, August, 5-11, 2007, 134.

38- **M. Hamadanian** and M. Oftadeh,

“The Investigation of the Deflagration Pathway of CHNOF Explosives of tri-Cyclic nitramine Compounds by Ab initio and semiempirical calculations”

41st IUPAC World Chemistry Congress, Turin, Italy, August, 5-11, 2007, 140.

۳۹- محسن بهپور، مسعود همدانیان و فایزه السادات رضوی

"ساخت نانو ذرات تثبیت شده بر روی سطح فلز تیتانیم و وارد نمودن نقره در شبکه نانو ذرات و بررسی اثر تجزیه فوتوشیمیایی متیل اورانژ به

عنوان یک مدل"

دومین همایش دانشجویی نانو تکنولوژی، دانشگاه کاشان، کاشان، ایران، ۱۶-۱۴ شهریور ماه ۱۳۸۶، صفحه ۱۰۶.

40- **M. Hamadanian**, Z. Tavangar, A.R. Ashrafi and H. Sabzyan,

“Computing Distance Matrix and Wiener Index of a Capped Nanotube”

The Frist Conference and Workshop on Mathematical Chemistry, Tarbiat Modares University, Tehran, Iran, January, 29-31 2008, 142-145.

41- Z. Tavangar, **M. Hamadanian**, A.R. Ashrafi and H. Sabzyan,

“Symmetry of a Capped Nanotube”

The Frist Conference and Workshop on Mathematical Chemistry, Tarbiat Modares University, Tehran, Iran, January, 29-31 2008, 335-337.

42- **M. Hamadanian**, M. Behpour and A. Razavian,

“Photocatalytic Activity of the Metal Coated Titanium Oxide Nano Particles as Nano Layer on Glass Substrate”

IXth Netherlands Catalysis and Chemistry Conference, Noordwijkerhout, University of Twente, Netherland, March, 3-5 2008, 204.

43- **M. Hamadanian**, A.Reisi-Vanani,

“Preparation & Charactrization of Fe, S and Fe-s co-Doped TiO₂ Nanoparticles and Evaluation of Photocatalytic Activity”

Xth Netherlands Catalysis and Chemistry Conference, Noordwijkerhout, University of Twente, Netherland, March, 2-4 2009, 208.

۴۴- محسن بهپور، مسعود همدانیان، سید مهدی قریشی و اسرالسادات رضویان،

"بررسی خاصیت فتوکاتالیستی لایه نازک دی اکسید تیتانیم تهیه شده به دو روش متفاوت سل ژل با استفاده از آب اکسیژنه و یا پلی اتیلن

گلیکول"

اولین همایش سراسری نقش علوم پایه در فناوری نانو، دانشگاه امام حسین (ع)، تهران، ایران، ۱۹-۱۸ آذر ماه ۱۳۸۸، صفحه ۲۸۴-۲۸۱.

۴۵- مسعود همدانیان، عادل ریسی- وانانی،

"بررسی اثر دمای کلسینه کردن در تهیه، تغییر فاز و رفتار نور کاتالیزگری نانوذرات S/TiO₂"

اولین همایش سراسری نقش علوم پایه در فناوری نانو، دانشگاه امام حسین (ع)، تهران، ایران، ۱۹-۱۸ آذر ماه ۱۳۸۸، صفحه ۵۷۷-۵۷۵.

۴۶- مسعود همدانیان، عادل ریسی- وانانی،

"تهیه و شناسایی نانوذرات TiO₂ دوپ شده با کبالت و بهینه کردن مقدار کبالت برای تجزیه ی متیل اورانژ در حضور نور مرئی و فرابنفش"

اولین همایش سراسری نقش علوم پایه در فناوری نانو، دانشگاه امام حسین (ع)، تهران، ایران، ۱۹-۱۸ آذر ماه ۱۳۸۸، صفحه ۵۸۰-۵۷۸.

۴۷- عادل ریسی- وانانی و مسعود همدانیان،

"تهیه و شناسایی نانوذرات TiO₂ خالص و بهینه کردن آن با دوپ کردن با کبالت ، گوگرد و آهن -گوگرد و بررسی رفتار نور کاتالیزگری آنها

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