**FULL CV**

**Dr. Yousef Beni**

**EDUCATION:**

**Postdoctoral Fellow; 2004-2008;** Department of biomedical and pharmaceutical sciences, University of Rhode Island, Kingston, Rhode Island**,** USA.**Research topics:** Organic and medicinal chemistry, toxicology including: (**a**) Developing new solid-phase methods for the selective phosphorylation of nucleosides and carbohydrates. (**b**) Synthesis and evaluation of modified oligonucleotides. (**c**) Interactions of toxic metals with protein tyrosine kinases (PTKs).

**PhD**, **1997-2002**, Organic Chemistry, Sharif University of Technology and Justus-Liebig University, Giessen, Germany, **Thesis title**: Oxidation of some organic compounds on solid phase.

**M.S., 1995-1997**, Organic Chemistry, Sharif University of Technology, **Thesis title:** Cobalt and manganese salts of *p-*aminobenzoic acid supported on silica gel as a versatile catalyst for oxidation by molecular oxygen. **Advisor:** Professor M. M. Hashemi.

**B.S., 1991-1995,** Applied Chemistry, Tabriz University.

**TEACHING POSITIONS AND COURSES TAUGHT:**

1. **Assistant professor of chemistry, 2012-present,** Dept. of Chemistry, Tennexssee State University, Nashville, TN. **Teaching**: Organic chemistry, laboratory of organic chemistry, laboratory of general chemistry.
2. **Assistant professor of chemistry, 2008-2012,** Dept. of Chemistry, Columbus State University, Columbus, GA. **Undergraduate level courses taught**: Organic chemistry 1 & 2, laboratory of organic chemistry 1 & 2, laboratory of survey of chemistry 1 & 2, laboratory of principles of chemistry 1 & 2, and independent study (a research based course). **Graduate level courses taught:** Spectroscopic identification of organic compounds, Polymer chemistry.
3. **Assistant professor of chemistry, 2002-2004;** Shahed University, College of Science.

**Undergraduate level courses taught**: Organic chemistry 1 & 2, laboratory of organic chemistry 1 & 2, principles of chemistry 1 & 2 and laboratory of principles of chemistry 1 & 2.

1. **Adjunct lecturer, 1997-2000;** Sharif University of Technology, Department of Chemistry.

**Undergraduate level courses taught**: Organic chemistry 1 & 2, principles of chemistry 1 & 2, spectroscopic identification of organic compounds, qualitative analysis of organic compounds.

1. **Adjunct lecturer, 1996-1998;** Rajaie University, college of science.

**Undergraduate level courses taught**: dye chemistry (lecture and lab), survey of organic chemistry, and survey of chemistry.

1. **Teaching assistant, 1995-1997,** Sharif University of Technology, Department of Chemistry.

**Undergraduate level courses taught**: Laboratory of organic chemistry 1 & 2.

**PATENT:**

1. **Beni, Y.** and Keykavous Parang; Modified oligonucleotidescontaining diphosphodiester internucleotide linkages. *WO 2007030227*, **2007.**

**PUBLICATIONS:**

1. Dash,C., **Beni,** Y., Hanley, M. J., Pandhare, J., Gotte, M., Le Grice, S. F. J., Parang, K., Inhibition of multi-drug resistant HIV-1 reverse transcriptase by nucleoside β-triphosphates, *Bioorg. Med. Chem. Lett.,* **2011,** 21, 3519–3522.
2. Gupta, A., Mandal, D., **Beni, Y.,** Parang, K., Bothun, G., Hydrophobicity Drives the Cellular Uptake of Short Cationic Peptide Ligands, *Eur. Biophys. J.,* **2011**, 40, 727–736.
3. **Beni,** Y., Tiwari, R., Swepsonc C., Pandharec, J., Dash, C., Donceld, G. F., Parang, K., Synthesis and anti-HIV activities of bis-(*cyclo*Saligenyl) pronucleotides derivatives of 3′-fluoro-3′-deoxythymidine and 3′-azido-3′-deoxythymidine, *Tet. Letters,* **2011***, 52,* 802-805.
4. **Beni,** Y., Dash,C., Hanley, M. J., Le Grice, S. F. J., Parang, K., Solid-Phase Synthesis of 5'-*O*-β,γ-Methylenetriphosphate Derivatives of Nucleosides and Evaluation of Their Inhibitory Activity Against HIV-1 Reverse Transcriptase, *Tet. Letters,*.**2010***, 51,* 3010–3013.
5. **Beni,** Y., Dash,C., Hanley, M. J., Le Grice, S. F. J., Agarwal., H. K., Parang, K., Synthesis and of Nucleoside 5'-*O*-α,β-Methylene-β-Triphosphates and evaluation of their potency towards inhibition of HIV-1 reverse transcriptase, *Org. Biomol. Chem.,*.**2010***, 8, 1271–1274*.
6. **Beni, Y**., Tiwari, R., Sun, G., Parang, K.; Synthesis of nucleoside mono-, di-, and triphosphoramidates from solid-phase cycloSaligenyl phosphitylating reagents. *Org. Lett*., **2009,** *11*, 2157-2160.
7. Ye,G., Schuler, A., **Beni,Y.,** Morgan, J. R., Faruqui,A., Huang, K., Sun,G., Zebala, J. A., Parang, K. Synthesis and evaluation of peptides containing iminodiacetate groups as binding ligands of the Src SH2 domain. *Bioorg. Chem.* **2009**, 37, 133-142.
8. **Beni, Y.;** Parang, K.; Solid-supported reagents for synthesis of nucleoside monothiophosphates, dithiodiphosphates, and trithiotriphosphates, *Current Protocols in Nucleic Acid Chemistry*,**2009***,* Unit 13.9, Supplement 33, Wiley.
9. **Beni, Y.;** Parang, K.; Solid-supported diphosphitylating and tr iphosphitylating reagents for nucleoside modiﬁcation, *Current Protocols in Nucleic Acid Chemistry*,**2008**, Unit 13.8, Supplement 33, Wiley.
10. **Beni, Y.;** Parang, K.; Synthesis and evaluation of oligodeoxynucleotides containing internucleotide diphosphodiester linkages, *Angew. Chem. Int. Ed.****,* 2007**, 46, 4739-4743.
11. **Beni, Y**.; Parang, K., Solid-phase synthesis of symmetrical 5′,5′-dinucleoside mono-, di-, tri-, and tetraphosphodiesters, *Org. lett.,***2007**, 9, 4483-4486*.*
12. Bhandari, R.; Saiardi, A.; **Beni, Y.;** Snowman, A. M.; Resnick, A. C.; Kristiansen, T. Z.; Molina, H.; Pandey A.; Werner, J. K.; Juluri, K. R.; Xu, Y.; Prestwich, G. D.; Parang, K.; Snyder S. H., Protein pyrophosphorylation by inisitol pyrophosphates is a posttranslational event, ***Proc. Nat. Acad. Sci. U.S.A.****,* **2007**, 104, 15305-15310.
13. **Beni, Y.,** Hanley, M. J., White, M., Ayrapetov, M., Lin, X., Sun, G., Parang, K., Metal-binding properties of a dicysteine-containing motif in protein tyrosine kinases, *ChemBioChem,* **2007**, 8, 1592-1605.
14. Kumar, A.; Ye, G.; **Beni, Y.**; Parang K., Synthesis of polymer-bound 4-acetoxy-3-phenylbenzaldehyde derivatives: Application in solid-phase organic synthesis, *J. Org. Chem.,* **2006,** 71, 7915-7918.
15. **Beni, Y.;** Parang, K., Solid-phase synthesis of dinucleoside and nucleoside-carbohydrate phosphodiesters and thiophosphodiesters**.***J. Org. Chem*., **2006**, 71, 6693-6696.
16. **Beni, Y.;** Parang, K., Application of a Solid-Phase *β*-Triphosphitylating Reagent in the Synthesis of Nucleoside *β*-Triphosphates, *J. Org. Chem.,***2006**, 71, 5837-5839.
17. Lin Xiaofeng; Wang Yuehao; **Beni, Y.;** Parang, K.; Sun Gongqin, Structural Basis for Domain-Domain Communication in a Protein Tyrosine Kinase, the C-terminal Src Kinase. *J Mol Biol.*, **2006**, 357, 1263-1273.
18. **Beni, Y.;** Parang, K., Solid-phase reagents for selective monophosphorylation of carbohydrates and nucleosides *J. Org. Chem.,***2005**, 70, 1100-1103.
19. **Beni, Y.;** Parang, K., Polymer-bound oxathiaphospholane: a solid-phase reagent for regioselective monothiophosphorylation and monophosphorylation of nucleosides and carbohydrates, *Org. lett.,***2005**, 7, 1955-1958.
20. **Beni, Y.;** Parang, K., Selective diphosphorylation, dithiodiphosphorylation, triphosphorylation and trithiotriphosphorylation of unprotected carbohydrates and nucleosides. *Org. lett.,***2005**, 7, 5589-5592**.**
21. Hashemi, M. M.; Ghazanfari, D.; **Beni, Y.**; Karimi-Jaberi, Z.; Ezabadi, A., Oxidation of aldehydes into carboxylic acids and esters using 4-amino-2-chloroperbenzoic acid supported on silica gel. *Synth. Commun.,* **2005**, 35, 1103-1107.
22. Hashemi, M. M.; Rahimi, A; Karimi-Jaberi, Z.; **Beni, Y.**, A mild and efficient oxidation of benzylic alcohols without solvent using iodic acid supported on wet montmorillonite K10 or silica gel under microwave irradiation, *Acta Chim. Slov.,***2005**, 52, 86-87
23. Hashemi, M. M.; Rahimi, A.; **Beni, Y.,** Microwave-expedited synthesis of aromatic aldehydes and ketones from alkyl halides without solvent using wet montmorillonite K 10 supported iodic acid as oxidant, *Acta Chim. Slov.,* **2004**, 51, 333-336.
24. Hashemi, M. M.; **Beni, Y.**; Ghafuri, H.,Aromatization of Hantzsch 1,4-dihydropyridines by hydrogen peroxide in the presence of cobalt(II) acetate**,** *Monat. Chem.,* **2003**, 134, 107-110**.**
25. Hashemi, M. M.; **Beni, Y.,**Cobalt and manganese salts of *p-*aminobenzoic acid supported on silica gel: a versatile catalyst for oxidation by molecular oxygen, *Monat. Chem*., **2003**, 134, 411-418.
26. Mostaghim, R.; **Beni, Y.,** Novel oxidation of phenols to quinones by hydrogen peroxide in the presence of cobalt(II) and manganese(II) acetate, *Acta Chim. Slov.,* **2003**, 50, 569-572.
27. Hashemi, M. M.; **Beni, Y.,** Sodium hypochlorite-Dowex 1X8-200: a convenient oxidizing reagent. *Iran. J. Chem. & Chem. Eng*., **2002**, 21, 71-73**.**
28. Hashemi, M. M.; **Beni, Y.,** Regeneration of carbonyl compounds by oxidative cleavage of carbon-nitrogen double bonds with molecular oxygen in the presence of copper(I) chloride/kieselguhr as catalyst, *Synth. Commun.,* **2001**, 31, 295-299.
29. Mostaghim, R.; **Beni, Y.,** Synthesis of substituted 2,2' and 4,4'-bithiazoles in various solvents, *Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry,* **2001**, 40B, 498-499.
30. Hashemi, M. M.; **Beni, Y.**, Oxidation of alcohols and primary aliphatic amines to carbonyl compounds using sodium hypochlorite adsorbed on montmorillonite K10, *J. Chem. Res., Synop.,* **2000**, 224-225.
31. Hashemi, M. M.; **Beni, Y.,** Nickel(II) and iron(II)/Dowex 50W: an effective catalyst for the Baeyer-Villiger oxidation of ketones using molecular oxygen and benzaldehyde, *J. Chem. Res., Synop.,* **2000**, 196-197.
32. Hashemi, M. M..; **Beni, Y.,** Sodium Hypochlorite/Dowex 1X8-200: an effective oxidant for the oxidation of aromatic amines to quinones *J. Chem. Res., Synop.,* **1999**, 672-673.
33. Hashemi, M. M.; **Beni, Y.,** Copper(I) chloride/Kieselguhr: a versatile catalyst for oxidation of alkyl halides and alkyl tosylates to the carbonyl compounds, *J. Chem. Res., Synop.,* **1999**, 434-435.
34. Hashemi, M. M.; **Beni, Y.,** Aromatization of 1,4-dihydropyridines with oxygen or air using manganese and cobalt salts of p-aminobenzoic acid supported on silica gel as oxidizing catalysts, *Journal of Science of Iran,* **1998**, 9, 237-239.
35. Hashemi, M. M.; **Beni, Y.,** Oxidation of phenols to quinones by oxygen catalyzed by a mixture of cobalt and manganese salts of *p-*aminobenzoic acid supported on silica gel, *J. Chem. Res., Synop.,* **1998**, 138-139.

**PUBLISHED MEETING ABSTRACTS:**

1. **Beni, Y**., Love, J. M., From food antioxidants to gold nanoparticles, determination of antioxidants in natural and processed food by gold, *243rd ACS National Meeting & Exposition,* San Diego, CA, United States, March 25−29, **2012,** *Abstract #* ***228.***
2. **Beni, Y**. Pippas, G., Love, J. M., Evaluation of cancer preventer foods/spices by gold nanoparticles, Georgia Academy of Science Annual Meeting, Kennesaw, Georgia., United States, March 23 – 24, **2012,** *Abstract #* ***132*.**
3. **Beni, Y**., Williams T., Seeram, N., Parang K., Triphenylmethanol derivatives: synthesis and application as acid-base indicators for acid-base titrations, *63rd Southeastern Regional Meeting of the ACS (SERMACS)*. Richmond, VA, United States, October 26-29, **2011,** *Abstract #* ***239****.*
4. **Beni, Y**., Dash, C., Hanley, M. J., Le Grice, S. F. J., Agarwal, H. K., Parang, K., Structure-activity relationship studies of modified nucleoside β-triphosphates for polymerase and RNase H of HIV-1 reverse transcriptase, *43rd IUPAC World Chemistry Congress,* San Juan, PR, United States, July 30-August 7, **2011,** *Abstract #* ***592*.**
5. **Beni, Y**., Shirazi, A. N., Parang, K., Metal-binding properties of cyclic peptides, *43rd IUPAC World Chemistry Congress, San Juan, PR,* United States, July 30-August 7, **2011,** *Abstract #* ***594*.**
6. **Beni, Y**., Dash, C., Hanley, M. J., Pandhare, J., Gotte, M., Le Grice, S. F. J., Parang, K., Synthesis and evaluation of nucleoside β-triphosphates as multi-drug resistant HIV-1 RT inhibitors, *43rd IUPAC World Chemistry Congress, San Juan, PR, United States,* July 30-August 7, **2011,** *Abstract #* ***597*.**
7. **Beni, Y**., Dabke, R., Wendell G., Radical electropolymerization of pyrrole: Improvement of conductivity in polypyrrole homopolymers, *43rd IUPAC World Chemistry Congress,* San Juan, PR, United States, July 30-August 7, **2011,** *Abstract #* ***924*.**
8. **Beni, Y**., Love, J. M., Rugutt, J., Introducing Nanotechnology to Undergraduate Chemistry Curriculum, 42nd Middle Atlantic Regional Meeting of the American Chemical Society, College Park, MD, United States, May 21-24, **2011,** *Abstract #* ***MARM-134*.**
9. **Beni, Y**., Gina D. N. D., Improvement of conductivity in polythiophenes, *Joint 66th Southwest and 62nd Southeast Regional Meeting of the American Chemical Society,* New Orleans, LA, United States, December 1-4, **2010,** *Abstract #* ***SESW-351*.**
10. **Beni, Y**., Wendell C., Synthesis of modified conductivie polypyrroles, *Joint 66th Southwest and 62nd Southeast Regional Meeting of the American Chemical Society,* New Orleans, LA, United States, December 1-4, **2010,** *Abstract #* ***SESW-323*.**
11. **Beni, Y**., Tiwari, R., Parang K., Synthesis of bis(cycloSaligenyl) pronucleotides containing two nucleosides from bis(methoxymethyl)benzene-1,4-diol, *240th ACS National Meeting & Exposition,* Boston, MA, United States, August 22-26, **2010,** *Abstract #* ***ORGN 1075*.**
12. **Beni, Y**., Carrol, B., Parang K., Synthesis of lipophilic dodecyl bis(cycloSaligenyl) nucleoside monophosphate triesters, *240th ACS National Meeting & Exposition,* Boston, MA, United States, August 22-26, **2010,** *Abstract #* ***ORGN 1019.***
13. **Beni, Y**., Parang K., Synthesis of branched lipophilic thymidine β-triphosphate triester conjugates of anti-HIV nucleosides, *240th ACS National Meeting & Exposition,* Boston, MA, United States, August 22-26, **2010,** *Abstract #* ***ORGN 1020.***
14. **Beni, Y**., New indicators for the acid-base volumetric titrations, Georgia Academy of Science Annual Meeting, Columbus, GA, United States, March 26 – 27, **2010,** *Abstract #* ***CHEM* 002.**
15. **Beni, Y**., Grainger, W., Improvement of conductivity in polypyrrole homopolymers, Georgia Academy of Science Annual Meeting, Columbus, GA, United States, March 26 – 27, **2010,** *Abstract #* ***CHEM* 001.**
16. **Beni, Y**., Tiwari, R., Doncel G. F., Parang, K., Bis(cycloSaligenyl) derivatives of nucleosides: Synthesis and anti-HIV activities, *238th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 16-20, **2009,** *Abstract #* ***MEDI* 114.**
17. **Beni, Y.;** Tiwari, R., Parang, K., *Tris(2-(hydroxymethyl)phenol) derivatives: Synthesis and application as acid/base indicators, 238th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 16-20, **2009,** *Abstract #* ***ANYL 117.***
18. **Beni, Y.;** Tiwari, R., Parang, K., Using polymer-bound bi(*cyclo*Saligenyl) phosphitylating reagents for the synthesis of nucleoside mono-, di-, and triphosphates***,*** *238th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 16-20, **2009,** *Abstract #* ***ORGN 524.***
19. **Beni, Y.;** Tiwari, R., Parang, K., Application of polymer-bound salicyl alcohol for the synthesis of nucleoside mono-, di-, and triphosphoramidates***,*** *238th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 16-20, **2009,** *Abstract #* ***ORGN 424.***
20. **Beni, Y.**, Parang, K., Solid-Phase Phosphitylating Reagents: Design and Application in the Synthesis of Phosphorylated Biomolecules, *61th Southeastern Regional Meeting of the ACS (SERMACS)*. San Juan, PR, United States, October 20-24, **2009,** *Abstract #* ***BORG-473***
21. **Beni, Y**., Antisense ODNs Containing Diphosphodiester Internucleotide Linkages for Cancer Treatment, *8th Annual University-Wide Faculty Research Forum Series*, Columbus, GA, United States, February 5, **2009,** Forum #**3**, *Abstract #* ***2.***
22. **Beni, Y.**, Parang, K., Laboratory Teaching of Solid-Phase Reaction, *60th Southeastern Regional Meeting of the ACS (SERMACS)*. Nashville, TN, United States, November 12-15, **2008,** *Abstract #* ***CHED-552.***
23. **Beni, Y.,** Parang, K., Synthesis and evaluation of dendrimer modified oligodeoxynucleotides containing β-triphosphotriester internucleotide bridges, *236th ACS National Meeting & Exposition,* Philadelphia, PA, United States, August 17-21, **2008**, *Abstract #* ***ORGN-274.***
24. **Beni, Y.;** Tiwari, R., Parang, K., Application of polymer-bound salicyl alcohol for the synthesis of nucleoside 5'-*O*-monophosphates, *236th ACS National Meeting & Exposition,* Philadelphia, PA, United States, August 17-21, **2008**, *Abstract #* ***ORGN-660.***
25. **Beni, Y.;** Parang, K.,Circular dichroism, thermal denaturation, and nuclease stability studies of modified oligodeoxynucleotides containing mixed sequences of four nucleosides attached through diphosphodiester bridges, *234td ACS National Meeting & Exposition,* Boston, MA, United States, August 19-23, **2007,** *Abstract #* ***ORGN-151.***
26. **Beni, Y.,** Bhandari, R., Snyder, S. H.; Parang, K.,Synthesis of pyrophosphopeptides and methylphosphopeptides*, 234td ACS National Meeting & Exposition,* Boston, MA, United States, August 19-23, **2007**,*Abstract #* ***ORGN-903.***
27. **Beni, Y.**, Hanley, M., Agarwal, H. K.; Parang, K.,Applications of polymer-bound phosphitylating reagents in the synthesis of organophosphorus compounds*, 233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** ,*Abstract #* ***ORGN-240.***
28. **Beni, Y.;** Parang, K., Solid-phase synthesis of symmetrical dinucleoside monophosphodiesters, diphosphodiesters, triphosphodiesters, and tetraphosphodiesters*, 233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** *Abstract #* ***ORGN-640.***
29. **Beni, Y.;** Parang, K.,Interactions of transition metals with cysteine-containing peptides, *233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** *Abstract #* ***INOR-256.***
30. **Beni, Y.**, Hanley, M., Agarwal,H. K.; Parang, K., Synthesis of nucleoside 5'-O-beta-triphosphates containing alpha-beta methylene bridge,*233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** *Abstract #* ***ORGN-641.***
31. **Beni, Y.;** Parang, K., Solid-phase synthesis of 5'-O-(alpha, beta-methylene)triphosphate and 5'-O-(beta, gamma-methylene)triphosphate derivatives of nucleosides, *233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** *Abstract #* ***ORGN-639.***
32. **Beni, Y.;** Parang, K., Selective solid-phase beta triphosphorylation of unprotected nucleosides, *232nd ACS National Meeting & Exposition,* San Francisco, CA, United States, September 10-14, **2006,** *Abstract #* ***ORGN-217.***
33. **Beni,Y.;**Parang, K., Synthesis of modified oligonucleotides containing diphosphate diester bridges, *232nd ACS National Meeting & Exposition,* San Francisco, CA, United States, September 10-14, **2006,** *Abstract #* ***ORGN-218.***
34. **Beni,Y.**; Parang, K.; White, M.; Sun, G., Studying the interactions of toxic metals with protein tyrosine kinases, *230th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 28-Sept. 1, **2005,** *Abstract #* ***MEDI-219.***
35. **Beni,Y.;**Parang, K.,Regioselective solid-phase synthesis of nucleosides and carbohydrates triphosphates and triphosphotrithioates, *230th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 28-Sept. 1, **2005,** *Abstract #* ***ORGN-587.***
36. **Beni,Y.;** Parang, K.,Regioselective solid-phase diphosphorylation and diphosphodithioation of unprotected nucleosides and carbohydrates. *230th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 28-Sept. 1, **2005,** *Abstract #* ***ORGN-589.***
37. **Beni,Y.;**Parang, K.,Regioselective solid-phase synthesis of dinucleoside and nucleoside-carbohydrate phosphodiesters and thiophosphodiesters using polymer-bound oxathiaphospholanes, *230th ACS National Meeting & Exposition,* Washington, DC, United States, Aug. 28-Sept. 1, **2005,** *Abstract #* ***ORGN-588.***
38. **Beni,Y.;**Hashemi M. M., Sodium hypochlorite / Dowex 1X8-200: a convenient oxidizing reagent, *1st National Congress of Chemistry,* Free University of Iran, Tehran, Iran, 1-2 Dec. **1999***, Abstract #* ***124.***
39. **Beni,Y.;**Hashemi M. M., Sodium hypochlorite / Dowex 1X8-200: an effective oxidant for the oxidation of aromatic amines to the quinones, *7th Iranian Seminar of Organic Chemistry*, Tehran, Iran, 12-13 Sep. **1999***, Abstract #* ***204***.
40. **Beni,Y.;**Hashemi M. M., Copper (I) chloride / Kieselghur: a versatile catalyst for the oxidation of alkyl halides to the carbonyl compounds, *7th Iranian Seminar of Organic Chemistry*, Tehran, Iran, 12-13 Sep. **1999***, Abstract #* ***205***.
41. **Beni,Y.;**Hashemi M. M., Oxidation of phenols to quinones by oxygen catalyzed by a mixture of cobalt and manganese salts of *p-*aminobenzoic acid supported on silica gel, *13th Iranian Chemistry and Chemical Engineering Congress*, Tehran, Iran, 16-18 Feb. **1999,** *Abstract #* ***OC 157***.
42. **Beni,Y.;**Hashemi M. M., Cobalt and Manganese salts of *p-*aminobenzoic acid supported on silica gel as a versatile catalyst for aromatization of Hantzsch 1,4-dihydropyridines to pyridines by molecular oxygen, *6th Iranian Seminar of Organic Chemistry,* Tabriz, Iran, 19-21 Aug. **1997,** *Abstract #* ***OC 122***.

**ORAL PRESENTATIONS:**

1. **Beni, Y**., Love, J. M., From food antioxidants to gold nanoparticles, determination of antioxidants in natural and processed food by gold, *243rd ACS National Meeting & Exposition,* San Diego, CA, United States, March 25−29, **2012,** *Abstract #* ***228*** (*Accepted for the oral presentation*)***.***
2. **Beni, Y**., Love, J. M., Rugutt, J., Introducing Nanotechnology to Undergraduate Chemistry Curriculum, 42nd Middle Atlantic Regional Meeting of the American Chemical Society, College Park, MD, United States, May 21-24, **2011,** *Abstract #* ***MARM-134*.**
3. **Beni, Y.**, Parang, K., Solid-Phase Phosphitylating Reagents: Design and Application in the Synthesis of Phosphorylated Biomolecules, *61th Southeastern Regional Meeting of the ACS (SERMACS)*. San Juan, PR, United States, October 20-24, **2009,** *Abstract #* ***BORG-473***
4. **Beni, Y**., Antisense ODNs Containing Diphosphodiester Internucleotide Linkages for Cancer Treatment, *8th Annual University-Wide Faculty Research Forum Series*, Columbus, GA, United States, February 5, **2009,** Forum #**3**, *Abstract #* ***2.***
5. **Beni, Y.**, Parang, K., Laboratory Teaching of Solid-Phase Reaction, *60th Southeastern Regional Meeting of the ACS (SERMACS)*. Nashville, TN, United States, November 12-15, **2008,** *Abstract #* ***CHED-552.***
6. **Beni, Y.**, Hanley, M., Agarwal, H. K.; Parang, K., Applications of polymer-bound phosphitylating reagents in the synthesis of organophosphorus compounds*, 233rd ACS National Meeting & Exposition,* Chicago, IL, United States, March 25-29, **2007,** ,*Abstract #* ***ORGN-240.***

**INSTRUMENTAL AND ANALYTICAL EXPERTISE:**

* **NMR spectrometry**, Acquisition and analysis of 1D (**1H, DEPT, 13C, 33S, 113Cd and 31P NMR**) and 2D (**COSY, HMQC, NOESY, HMBC, TOCSY**) specta**,** Bruker NMR spectrometer (400 MHz), using Topspin (Bruker), and MestRenova processing software for 1 and 2D NMR spectra.
* **ICP-Mass X-series,** Thermo Electron Corporation.
* **Dynamic light scattering (DLS) Zetasizer,** Malvern Instruments.
* **Microcalorimetry,** TA Instruments.
* **ESI-MS**, High-resolution PE Biosystems Mariner API time-of-flight electrospray MS.
* **MALDI-MS**, Ciphergen SELDI-TOF protein chip workstation with proteinchip software.
* **Triple peptide synthesizer**, Protein Technologies PS3 automated peptide synthesizer.
* **Multiple peptide synthesizer**, Advanced ChemTech, MBS 396.
* **CEM Microwave Accelerated Reaction System (MARS),** with organic reaction system.
* **HPLC (analytic and prep) and method development,** preparative Shimadzu LC-8A liquid chromatograph and **semi prep.** Hitachi model D-7000.
* **CombiFlash Rf200 Chromatography System,** Teledyne ISCO Flash Chromatography system, normal and reverse phase.
* **FT-IR spectrometry,** Thermo-Nicolet 550 FT-IR coupled with Nic-Plan microscope.
* **FT-IR spectrometry,** PerkinElmer Spectrum 100 FT-IR with ATR sampling accessories.
* **UV-VIS,** Beckman Coulter DU 800UV/Visible Spectrophotometer W/Peltier Temperature Controller.
* **CD,** Jasco 810 spectropolarimeter with Jasco spectra manager.
* **Instrumental automatic flash chromatography,** Varian Chroma Zone SI.
* **FPLC purification of proteins and peptides,** ÄKTA FPLC with UNICORN™ Manager.
* **Cell viability analysis,** Beckman Coulter Vi-CELL series.
* **Luminescence Spectrometry,** Perkin Elmer LS 55 Luminescence spectrometer.
* **Automated Precise protein sequencer**, Model 491, Applied Biosystems.
* **Typhoon, universal gel, blot and microarray imager with blue excitation source**, Model 9410.

**ATTENDED WORKSHOPS AND TRAINING PROGRAMS:**

* **CEM Analytical Workshop**, CEM Corporation, Marriott Courtyard, Montgomery, AL, November **2010**.
* **Dynamic light scattering (DLS) Zetasizer,** Malvern Instruments, College of Engineering, URI, Kingston, RI, June **2010.**
* **Rigaku X-ray diffraction**, 2nd Annual Yale-Rigaku Symposium on X-ray Diffraction, Yale Univ., New Haven, CT, June **2010.**
* **TA Instruments' Microcalorimetry,** TA Instruments – Waters LLC, Milford, MA, May **2010**.
* **QSTAR® Elite Hybrid LC/MS/MS System for Small Molecules,** Applied Biosystem, RI-INBRE core facility, URI, Kingston, RI, June **2009**.
* **Two Dimensional Electrophoresis,** GE Healthcare, RI-INBRE core facility, URI, Kingston, RI, July **2007**.
* **Invitrogen Real-time PCR,** RI-INBRE core facility, URI, Kingston, RI, January **2007** and April **2005**.
* **Odyssey infrared imaging system,** LI-COR Biosciences, RI-INBRE core facility, URI, Kingston, RI, November **2006**.
* **Flow cytometry,** BD Biosciences, RI-INBRE core facility, URI, Kingston, RI, July **2006**.
* **SELDI-TOF** **workshop on protein chip arrays & their applications,** RI-INBRE core facility, URI, Kingston, RI, June **2005**.
* **ICP-Mass X-Seriestraining course workshop,** Thermo Electron Corporation, RI-INBRE core facility,URI, Kingston, RI, December **2004**&February**2005**.
* **Advanced NMR techniques workshop including Bruker Topspin NMR spectraprocessing program,** Bruker Biospin, Providence, RI, February. **2005**.
* **Advanced medicinal chemistry course;** URI, Kingston, RI, fall**2005**.
* **Prep HPLC (Shimadzu LC-8A),** professional training, URI, Kingston, RI, June **2004**.
* **Advanced Chemtech multiple peptide synthesizer (ACT 396),** professional training, URI, Kingston, RI, July **2004**.
* **Prudent practices and laboratory waste management training**, URI, Kingston, RI, June **2004**.
* **HPLC and EI-Mass spectroscopy workshop,** Chemistry Department, Shahid Beheshti University, Tehran, Iran, September. **2003**.
* **Peptide chemistry and technology special course, ORPEGEN® Pharma, Heidelberg, Germany,Sep. - Dec. 2003 on**: (1)Production development and pharmaceutical manufacturing of peptide drug substances, API. (2) Legal implications of Good Manufacturing Practice, GMP, in pharmaceutical industry.