

Mir Babak Bahadori, Ph.D.

Assistant Professor of Phytochemistry



Medicinal Plants Research Center, Maragheh University of Medical Sciences,
Maragheh, Iran

Personal Details

Date of Birth: April 4, 1983

Place of Birth: Urmia; Iran

Nationality: Iranian

Sex: Male

Marital Status: Married

Research Experiences

- Feb 2018 – Present **Assistant Professor**
Maragheh University of Medical Sciences, Medicinal Plants
Research Center
- Sep 2015 – Mar 2018 **Researcher**
Urmia University of Medical Sciences, Faculty of Pharmacy, Urmia,
Iran
- Mar 2015 – Oct 2016 **Researcher**
Tabriz University of Medical Sciences, Research Center for
Pharmaceutical Nanotechnology (RCPN), Tabriz, Iran
- Aug 2014 – Sep 2015 **Visiting Scholar**
Tabriz University of Medical Sciences, Department of
Pharmacognosy, Faculty of Pharmacy, Tabriz, Iran

Teaching Experiences

General Chemistry, Organic Chemistry, Analytical Chemistry, Synthetic Chemistry, Polymer Chemistry, Textile Chemistry, Chromatography, Spectroscopy, Extraction and Processing of Medicinal Plants.

Skills & Activities

- Skills** Natural Product Chemistry, Chromatography, Phytochemicals Purification, Antioxidant Activity, Natural Product Drug Discovery, Medicinal Plants, Essential Oils, Gas Chromatography–Mass Spectrometry, Spectroscopy, Phytochemistry, Anti-Cancer Drug Design and Discovery, Herbal Medicine, Medicinal and Pharmaceutical Chemistry, Ethnopharmacology, Ethnobotany, Toxicology, Modeling and Docking
- Languages** Azerbaijani, English, Persian, Turkish
- Scientific Memberships** Scientific Society of Medicinal Plants, Iran
Iranian Chemical Society
Young Researchers and Elite Club
The Iranian Society of Pharmacognosy
- Interests** Climbing, Walking, Chess, Watching movies

Journal Publications

1. Leila Dinparast, Salar Hemmati, Gokhan Zengin, Ali Akbar Alizadeh, **Mir Babak Bahadori**, Hossein Samadi Kafil, Siavoush Dastmalchi: *Rapid, Efficient, and Green Synthesis of Coumarin Derivatives via Knoevenagel Condensation and Investigating Their Biological Effects*. ChemistrySelect 08/2019; 4(31):9211-9215., DOI:10.1002/slct.201901921
2. **Mir Babak Bahadori**, Cengiz Sarikurkcu, Omer Umit Yalcin, Mustafa Cengiz, Halil Gungor: *Metal concentration, phenolics profiling, and antioxidant activity of two wild edible Melanoleuca mushrooms (M. cognata and M. stridula)*. Microchemical Journal 08/2019; DOI:10.1016/j.microc.2019.104172
3. **Mir Babak Bahadori**, Bulent Kirkan, Cengiz Sarikurkcu, Olcay Ceylan: *Metabolite profiling and health benefits of Stachys cretica subsp. mersinaea as a medicinal food*. Industrial Crops and Products 05/2019; 131:85-89., DOI:10.1016/j.indcrop.2019.01.038
4. **Mir Babak Bahadori**, Somayeh Vandghanooni, Leila Dinparast, Morteza Eskandani, Seyed Abdulmajid Ayatollahi, Athar Ata, Hossein Nazemiyeh: *Triterpenoid corosolic acid attenuates HIF-1 stabilization upon cobalt (II) chloride-induced hypoxia in A549 human lung epithelial cancer cells*. Fitoterapia 03/2019; 134(April):493-500., DOI:10.1016/j.fitote.2019.03.013
5. **Mir Babak Bahadori**, Solmaz Asnaashari, Hossein Nazemiyeh: *Fatty Acid Profile of Roots and Aerial Parts of Ruscus hyrcanus Woronow*. Pharmaceutical Sciences 03/2019; 25(1):78-81., DOI:10.15171/PS.2019.12
6. Gokhan Zengin, Eulogio J. Llorent-Martínez, Lucía Molina García, Maria Luisa Fernández de Cordova, Abdurrahman Aktumsek, Sengul Uysal, Kannan RR Rengasamy, Muhammad Zakariyyah Aumeeruddy, **Mir Babak Bahadori**, Fawzi M. Mahomoodally: *Chemical profile, antioxidant, and enzyme inhibitory properties of two Scutellaria species: S. orientalis L. and S. salviifolia Benth.* Journal of Pharmacy and Pharmacology 02/2019; 71(2):270-280., DOI:10.1111/jphp.13030
7. Behvar Asghari, Sudabeh Mafakheri, M.M. Zarrabi, Sinem Aslan Erdem, Ilkay Erdogan Orhan, **Mir Babak Bahadori**: *Therapeutic target enzymes inhibitory potential, antioxidant activity, and rosmarinic acid content of Echium amoenum*. South African Journal of Botany 01/2019; 120(January):191-197., DOI:10.1016/j.sajb.2018.05.017
8. **Mir Babak Bahadori**, Bulent Kirkan, Cengiz Sarikurkcu: *Phenolic ingredients and therapeutic potential of Stachys cretica subsp. smyrnaea for the management of oxidative stress, Alzheimer's disease, hyperglycemia, and melasma*. Industrial Crops and Products 01/2019; 127:82-87., DOI:10.1016/j.indcrop.2018.10.066
9. Eulogio J. Llorent-Martínez, Maria Luisa Fernández de Cordova, Gokhan Zengin, **Mir Babak Bahadori**, Muhammad Zakariyyah Aumeeruddy, Kannan RR Rengasamy, Fawzi M. Mahomoodally: *Parentucellia latifolia subsp. latifolia: A potential source for loganin iridoids by HPLC-ESI-MSn technique*. Journal of Pharmaceutical and Biomedical Analysis 12/2018; 165., DOI:10.1016/j.jpba.2018.12.025
10. Gokhan Zengin, Bayram Atasagun, Muhammad Zakariyyah Aumeeruddy, Hammad Saleem, Adriano Mollica, **Mir Babak Bahadori**, Fawzi M. Mahomoodally: *Phenolic profiling and in vitro biological properties of two Lamiaceae species (Salvia modesta and Thymus argaeus): A comprehensive evaluation*. Industrial Crops and Products 11/2018; 128., DOI:10.1016/j.indcrop.2018.11.027
11. Gokhan Zengin, Alina Diuzheva, József Jekő, Zoltán Cziáky, Gizem Bulut, Ahmet Doğan, Mehmet Zeki Haznedaroglu, Kannan RR Rengasamy, Devina Lobine, **Mir Babak Bahadori**, Fawzi M. Mahomoodally: *HPLC-MS/MS-based metabolic profiling and pharmacological properties of extracts and infusion obtained from Amelanchier parviflora var. dentata*. Industrial Crops and Products 08/2018; 124., DOI:10.1016/j.indcrop.2018.08.042

12. Behvar Asghari, Gokhan Zengin, **Mir Babak Bahadori**, Mahdi Abbas-Mohammadi, Leila Dinparast: *Amylase, glucosidase, tyrosinase, and cholinesterases inhibitory, antioxidant effects, and GC-MS analysis of wild mint (Mentha longifolia var. calliantha) essential oil: A natural remedy*. European Journal of Integrative Medicine 08/2018; 22., DOI:10.1016/j.eujim.2018.08.004
13. **Mir Babak Bahadori**, Morteza Eskandani, Maria de Mieri, Matthias Hamburger, Hossein Nazemiyeh: *Anti-proliferative activity-guided isolation of clerodermic acid from Salvia nemorosa L.: Geno/cytotoxicity and hypoxia-mediated mechanism of action*. Food and Chemical Toxicology 06/2018; 120(October):155-163., DOI:10.1016/j.fct.2018.06.060
14. Hamed Hamishehkar, **Mir Babak Bahadori**, Somayeh Vandghanooni, Ailar Nakhband, Morteza Eskandani: *Preparation, characterization and anti-proliferative effects of sclareol loaded solid lipid nanoparticles on A549 human lung epithelial cancer cells*. Journal of Drug Delivery Science and Technology 06/2018; 45(June):272-280., DOI:10.1016/j.jddst.2018.02.017
15. **Mir Babak Bahadori**, Gokhan Zengin, Shahram Bahadori, Leila Dinparast, Nasrin Movahhedini: *Phenolic composition and functional properties of wild mint (Mentha longifolia var. calliantha (Stapf) Briq.)*. International Journal of Food Properties 02/2018; 21(1), DOI:10.1080/10942912.2018.1440238
16. Gokhan Zengin, Eulogio J. Llorent-Martínez, Maria Luisa Fernández-de Córdoba, **Mir Babak Bahadori**, Andrei Mocan, Marcello Locatelli, Abdurrahman Aktumsek: *Chemical composition and biological activities of extracts from three Salvia species: S. blepharochlaena, S. euphratica var. leiocalycina, and S. verticillata subsp. amasiaca*. Industrial Crops and Products 01/2018; 111(January):11-21., DOI:10.1016/j.indcrop.2017.09.065
17. Mir Babak Bahadori, Gokhan Zengin, Shahram Bahadori, Filippo Maggi, Leila Dinparast: *Chemical composition of essential oil, antioxidant, antidiabetic, anti-obesity, and neuroprotective Properties of Prangos gaubae*. Natural product communications 12/2017; 12(12):1945-1948.
18. **Mir Babak Bahadori**, Leila Dinparast, Gokhan Zengin, Cengiz Sarikurkcu, Shahram Bahadori, Behvar Asghari, Nasrin Movahhedini: *Functional Components, Antidiabetic, Anti-Alzheimer's Disease, and Antioxidant Activities of Salvia syriaca L.* International Journal of Food Properties 09/2017; 20(8):1761., DOI:10.1080/10942912.2016.1218893
19. Sengul Uysal, Gokhan Zengin, Marcello Locatelli, **Mir Babak Bahadori**, Andrei Mocan, Giuseppe Bellagamba, Elisa De luca, Adriano Mollica, Abdurrahman Aktumsek: *Cytotoxic and Enzyme Inhibitory Potential of Two Potentilla species (P. speciosa L. and P. reptans Willd.) and Their Chemical Composition*. Frontiers in Pharmacology 05/2017; 8., DOI:10.3389/fphar.2017.00290
20. Sengul Uysal, Gokhan Zengin, Marcello Locatelli, **Mir Babak Bahadori**, Andrei Mocan, Giuseppe Bellagamba, Elisa De luca, Adriano Mollica, Abdurrahman Aktumsek: *Cytotoxic and enzyme inhibitory potential of two Potentilla species (P. speciosa L. and P. reptans Willd.) and their chemical composition*. Frontiers in Pharmacology 05/2017;
21. Shahram Bahadori, **Mir Babak Bahadori**, Gokhan Zengin, Filippo Maggi, Leila Dinparast, Abdurrahman Aktumsek: *Chemical Composition Profile of the essential oil from Hymenocrater bituminosus and its Health Functionality*. International Journal of Food Properties 04/2017;; DOI:10.1080/10942912.2017.1325901
22. **Mir Babak Bahadori**, Behvar Asghari, Leila Dinparast, Gokhan Zengin, Cengiz Sarikurkcu, Mahdi Abbas-Mohammadi, Shahram Bahadori: *Salvia nemorosa L.: A novel source of bioactive agents with functional connections*. LWT- Food Science and Technology 01/2017; 75(January):42-50., DOI:10.1016/j.lwt.2016.08.048
23. Nasrin Movahhedini, Gokhan Zengin, **Mir Babak Bahadori**, Cengiz Sarikurkcu, Shahram Bahadori, Leila Dinparast: *Ajuga chamaecistus subsp. scoparia (Boiss.) Rech.f.: A new source of phytochemicals for*

- antidiabetic, skin-care, and neuroprotective uses*. *Industrial Crops and Products* 12/2016; 94., DOI:10.1016/j.indcrop.2016.08.028
24. **Mir Babak Bahadori**, Peyman Salehi, Ali Sonboli: *Comparative study of the essential oil composition of Salvia urmiensis and its enzyme inhibitory activities linked to diabetes mellitus and Alzheimer's disease*. *International Journal of Food Properties* 12/2016;, DOI:10.1080/10942912.2016.1263862
 25. **Mir Babak Bahadori**, Hassan Valizadeh, Behvar Asghari, Leila Dinparast, Shahram Bahadori, Mahdi Moridi Farimani: *Biological activities of Salvia santolinifolia Boiss. A multifunctional medicinal plant*. *Current Bioactive Compounds* 10/2016; 12(4):297-305., DOI:10.2174/1573407212666160426161112
 26. **Mir Babak Bahadori**, Leila Dinparast, Gokhan Zengin: *The Genus Heracleum: A Comprehensive Review on Its Phytochemistry, Pharmacology, and Ethnobotanical Values as a Useful Herb*. *Comprehensive Reviews in Food Science and Food Safety* 10/2016;, DOI:10.1111/1541-4337.12222
 27. **Mir Babak Bahadori**, Leila Dinparast, Hassan Valizadeh, Mahdi Moridi Farimani, Samad Nejad Ebrahimi: *Bioactive constituents from roots of Salvia syriaca L.: Acetylcholinesterase inhibitory activity and molecular docking studies*. *South African Journal of Botany* 09/2016; 106:1-4., DOI:10.1016/j.sajb.2015.12.003
 28. Leila Dinparast, Hassan Valizadeh, **Mir Babak Bahadori**, Somaieh Soltani, Behvar Asghari, Mohammad-Reza Rashidi: *Design, synthesis, α -glucosidase inhibitory activity, molecular docking and QSAR studies of benzimidazole derivatives*. *Journal of Molecular Structure* 06/2016; 1114(15 June):84-94., DOI:10.1016/j.molstruc.2016.02.005
 29. Morteza Eskandani, **Mir Babak Bahadori**, Gokhan Zengin, Leila Dinparast, Shahram Bahadori: *Novel Natural Agents from Lamiaceae Family: An Evaluation on Toxicity and Enzyme Inhibitory Potential linked to Diabetes Mellitus*. *Current Bioactive Compounds* 04/2016; 12(1):34-38., DOI:10.2174/1573407212666151231183118
 30. **Mir Babak Bahadori**, Hassan Valizadeh, Mahdi Moridi Farimani: *Chemical Composition and Antimicrobial Activity of the Volatile Oil of Salvia santolinifolia Boiss. From Southeast of Iran*. 03/2016; 22(1):42-48., DOI:10.15171/PS.2016.08
 31. Leila Dinparast, Hassan Valizadeh, Esmail Vessally, **Mir Babak Bahadori**: *Synthesis, characterization and DFT studies of diethyl 4-hydroxy-6-nitro-4H-chromene-2,3-dicarboxylate*. *Journal of Molecular Structure* 02/2016; 1105:118., DOI:10.1016/j.molstruc.2015.10.044
 32. **Mir Babak Bahadori**, Hassan Valizadeh, Behvar Asghari, Leila Dinparast, Mahdi Moridi Farimani, Shahram Bahadori: *Chemical composition and antimicrobial, cytotoxicity, antioxidant and enzyme inhibitory activities of Salvia spinosa L.* *Journal of Functional Foods* 10/2015; 18(10):727., DOI:10.1016/j.jff.2015.09.011
 33. Mahdi Moridi Farimani, **Mir Babak Bahadori**, Sheyda Ahmadi Koulaei, Peyman Salehi, Samad Nejad Ebrahimi, Hamid Reza Khavasi, Matthias Hamburger: *New ursane triterpenoids from Salvia urmiensis Bunge: Absolute configuration and anti-proliferative activity*. *Fitoterapia* 08/2015; 106(October):1-6., DOI:10.1016/j.fitote.2015.07.017
 34. Hassan Valizadeh, Ali Sonboli, Fatemeh Mahmoodi Kordi, Hossein Dehghan, **Mir Babak Bahadori**: *Cytotoxicity, antioxidant activity and phenolic content of eight fern species from North of Iran*. 06/2015; 21(1):18-24., DOI:10.15171/PS.2015.12
 35. **Mir Babak Bahadori**, Fatemeh Mahmoodi Kordi, Atousa Aliahmadi, Shahram Bahadori, Hassan Valizadeh: *Antibacterial evaluation and preliminary phytochemical screening of selected ferns from Iran*. 03/2015; 2(2):53-59.
 36. **Mir Babak Bahadori**, Mortaza Mirzaei: *Cytotoxicity, antioxidant activity, total flavonoid and phenolic contents of Salvia urmiensis Bunge and Salvia hydrangea DC. ex Benth.* 02/2015; 2(2):27-32.

37. Fatemeh Mahmoodi Kordi, Hassan Valizadeh, Zahra Hosseinzade, **Mir Babak Bahadori**: *Furocoumarins from Heracleum rawianum in Iran*. 01/2015; 3(1):1-6.
38. Hassan Valizadeh, Fatemeh Mahmoodi Kordi, Reza koohkan, **Mir Babak Bahadori**: *Isolation and structure elucidation of coumarin and cinamate derivatives from Lycium ruthenicum*. 06/2014; 2(4):277-282.
39. Hassan Valizadeh, Fatemeh Mahmoodi kordi, Zahra Alizadeh, **Mir Babak Bahadori**: *Isolation and Structure Elucidation of Secondary Metabolites from Echinophora platyloba DC from Iran*. Journal of Medicinal Plants 05/2014; 13(49):15-21.
40. Mahdi Moridi Farimani, Samad Nejad Ebrahimi, Peyman Salehi, **Mir Babak Bahadori**, Ali Sonboli, Hamid Reza Khavasi, Stefanie Zimmermann, Marcel Kaiser, Matthias Hamburger: *Antitrypanosomal Triterpenoid with an ??-Lactone E-Ring from Salvia urmiensis*. Journal of Natural Products 09/2013; 76(9), DOI:10.1021/np400337a
41. Ali Sonboli, **Mir Babak Bahadori**, Hossein Dehghan, Leila Aarabi, Parisa Savehdroudi, Mina Nekuei, Narges Pournaghi, Foroogh Mirzania: *Chemotaxonomic Importance of the Essential-Oil Composition in Two Subspecies of Teucrium stocksianum Boiss. from Iran*. Chemistry & Biodiversity 04/2013; 10(4), DOI:10.1002/cbdv.201200088
42. M Moridi Farimani, Salman Taheri, Samad N Ebrahimi, **Mir Babak Bahadori**, Hamid R Khavasi, Stefanie Zimmermann, Reto Brun, Matthias Hamburger: *ChemInform Abstract: Hydrangenone, a New Isoprenoid with an Unprecedented Skeleton from Salvia hydrangea.*. Organic Letters 12/2011; 14(1):166-9., DOI:10.1021/ol202953b
43. M. Moridi Farimani, **Mir Babak Bahadori**, Salman Taheri, Samad N Ebrahimi, Stefanie Zimmermann, Reto Brun, Gholamreza Amin, Matthias Hamburger: *Triterpenoids with Rare Carbon Skeletons from Salvia hydrangea: Antiprotozoal Activity and Absolute Configurations*. Journal of Natural Products 10/2011; 74(10):2200-5, DOI:10.1021/np200559c

Conference Proceedings

1. Behvar Asghari, **Mir Babak Bahadori**, Gokhan Zengin: *Phenolic content, α -amylase and α -glucosidase inhibitory effect of Phlomis herba-venti and Phlomis olivieri*. 2nd International Gazi Pharma Symposium Series (GPSS-2017); 10/2017
2. **Mir Babak Bahadori**, Gökhan Zengin, Leila Dinparast, Shahram Bahadori: *An Investigation of Enzyme Inhibitory Activity of Lamiaceae Plants Linked to Type 2 Diabetes*. 5th National Congress on Medicinal Plants; 05/2016
3. **Mir Babak Bahadori**, Hassan Valizadeh, Leila Dinparast, Mahdi Moridi Farimani, Samad Nejad Ebrahimi: *Isolation and Identification of Biologically Active Compounds from Salvia syriaca*. 5th National Congress on Medicinal Plants; 05/2016
4. **Mir Babak Bahadori**: *Essential Oil Composition, Antidiabetic and Antimicrobial Potential of Salvia spinosa and Salvia nemorosa*. 4th National Congress on Medicinal Plants, Tehran, Iran; 05/2015
5. **Mir Babak Bahadori**, Hassan Valizadeh, Mahdi Moridi Farimani, Behvar Asghari: *α -glucosidase and α -amylase inhibitory effect and essential oil composition of Salvia santolinifolia*. 4th National Congress on Medicinal Plants, Tehran, Iran; 05/2015
6. Faeghe Farhadi, Fatemeh Mahmoodi Kordi, Hossein Hashempour, Hossein Maroofi, **Mir Babak Bahadori**, Hassan Valizadeh: *Polar Secondary Metabolites from Aerial Parts of Leutea kurdistanica*. 3rd National Congress on Medicinal Plants, Mashhad, Iran; 05/2014

7. Reza Koohkan, Fatemeh Mahmoudi Kordi, **Mir Babak Bahadori**, Hassan Valizadeh: *Phytochemical Investigation of Lycium Ruthenicum from Iran*. 3rd National Congress on Medicinal Plants, Mashhad, Iran; 05/2014
8. Zahra Hosseinzadeh, Hassan Valizadeh, Fatemeh Mahmoodi Kordi, **Mir Babak Bahadori**: *Furanocoumarins from Aerial Parts of Heracleum rawianum*. 3rd National Congress on Medicinal Plants, Mashhad, Iran; 05/2014
9. Zahra Alizadeh, Fatemeh Mahmoudi Kordi, Hassan Valizadeh, **Mir Babak Bahadori**, Mehdi Moridi Farimani: *Isolation and Structure Elucidation of Secondary Metabolites from Echinophora platyloba Dc. from Iran*. 3rd National Congress on Medicinal Plants, Mashhad, Iran; 05/2014
10. Sheyda Ahmadi Koulaei, Mahdi Moridi Farimani, Peyman Salehi, **Mir Babak Bahadori**, Samad Nejad Ebrahimi: *Phytochemical study on hexane extract of Salvia urmiensis*. 20th Iranian seminar of Organic chemistry, Hamedan, Iran; 06/2013
11. Peyman Salehi, **Mir Babak Bahadori**, Mahdi Moridi Farimani, Sheyda Ahmadi Koulaei: *PHYTOCHEMICAL INVESTIGATION, DETERMINATION OF ANTIOXIDANT ACTIVITY, PHENOL AND FELAVONOID CONTENTS OF SALVIA URMIENSIS BUNGE*. 1st National Congress on Medicinal Plants, Kish Island, Iran; 05/2012
12. Hassan Valizadeh, **Mir Babak Bahadori**, Ali Sonboli, Hossein Dehghan: *DETERMINATION OF ANTIOXIDANT ACTIVITY OF SOME IRANIAN FERN SPECIES*. 1st National Congress on Medicinal Plants, Kish Island, Iran; 05/2012
13. A. Sonboli, M. Kanani, **Mir Babak Bahadori**, H. Dehghan, L. Arabi, P. Savehdoroudi, N. Pournaghi, M. Nekuei: *Comparative Essential Oil Composition of Two Subspecies of Teucreum stucksianum Boiss. from Iran*. ISEO, Anthalia, Turkey; 09/2011
14. M. Moridi Farimani, **Mir Babak Bahadori**, S. Taheri: *Hydrangdione C, a novel triterpenoid with an unprecedented skeleton from Salvia hydrangea DC. ex Benth*. 59th International Congress GA- Antalya, Turkey; 09/2011, DOI:10.1055/s-0031-1282579
15. M. Moridi Farimani, **Mir Babak Bahadori**, S. Taheri, S. Nejad Ebrahimi, M. Hamburger: *Antiplasmodial and antitrypanosomal triterpenoids from Salvia hydrangea with rare carbon skeletons*. 59th International Congress GA- Antalya, Turkey, on 04-09 September, 2011, Antalya, Turkey; 09/2011, DOI:10.1055/s-0031-1282576
16. Mahdi Moridi Farimani, Salman Taheri, **Mir Babak Bahadori**: *Antimalarial triterpenoids with rare carbon skeletons from Salvia hydrangea*. The First National Seminar on the Role of Basic Sciences on Health Promotion, Tehran, Iran; 03/2010