

In The Name of God

Curriculum Vitae



Mina Jamzad, Ph.D
Assistant Professor

Department of Chemistry, Shahr-e-Qods branch, Islamic Azad University, Tehran,
Iran

Tel: +98-21-46896000

m.jamzad@qodsiau.ac.ir; minajamzadiau@gmail.com;

Educational Background:

Ph.D (2007) Islamic Azad University, Science and Research Campus, Tehran, Iran

Dissertation Title:

Essential Oil Composition of Some Labiatae species and Extraction, Isolation, purification and structure elucidation of the terpenoids of a valuable species

Advisor:

Professor Abdolhossein Rustaiyan, Department of Chemistry, Islamic Azad University, Science and Research Campus, Tehran, Iran.

Courses Taught:

Bachelor: Organic chemistry 1, 2, 3; General chemistry; Physical organic Chemistry, Synthesis of organic compounds; Spectroscopy; Specialized language.

Master: Advanced organic chemistry; Heterocyclic Chemistry; Synthesis of organic compounds.

PhD: Synthesis of organic compounds; Bioorganic chemistry.

Research Interests:

Phytochemistry; Natural Compounds (Isolation and identification of Flavonoids and Terpenoids); Biological Activity of Natural Compounds; Nano Science; Green Chemistry.

Publications:

1- Volatile Constituents of *Stachys pilifera* Benth. and *Stachys acerosa* Boiss.

From Iran

Shiva Masoudi, **Mina Jamzad**, Lida Attari, Abdolhossein Rustaiyan

Journal of Essential Oil Research, 2003, **15**, 189-190.

2- Volatile Constituents of *Nepeta heliotropifolia* Lam., *Mentha mozaffarianii* Jamzad and *Zizifora persica* Bunge. Three Labiatae Herbs Growing Wild in Iran.

Abdolhossein Rustaiyan, **Mina Jamzad**, Shiva Masoudi and, Nazak Ameri, Journal of Essential Oil Research, 2006, **18**, 348-351.

3-Composition of the Essential Oils of *Nepeta sessilifolia* Bunge and *Nepeta haussknechtii* Bornm. from Iran

Mina Jamzad, Shiva Masoudi, Ziba Jamzad and Abdolhossein Rustaiyan, Journal of Essential Oil Research, 2008, **20**, 533-535.

4-Volatile Constituents of Three *Salvia* Species: *Salvia sclareopsis* Bornm. ex Hedge., *Salvia brachysiphon* Stapf and *Salvia verbascifolia* M.Bieb. Growing Wild in Iran.

Mina Jamzad, Shiva Masoudi, Ziba Jamzad, Mohammad Yari, Abdolhossein Rustaiyan, Journal of Essential Oil Research, 2009, **21**, 19-21.

5-Chemical Composition of Essential Oils of Three *Stachys* Species Growing Wild in Iran: *Stachys asterocalyx* Rech. f., *Stachys obtusirena* Boiss. and *Stachys multicaulis* Benth.

Mina Jamzad, Mohammad Taghi Akbari Shiva Masoudi, Leila Azad and Abdolhossein Rustaiyan, Journal of Essential Oil Research, **21**, 2009, 101-104.

6- Composition of the Essential Oil of *Salvia compressa* Vent. and *Cyclotrichium Leblebici* from Iran *leucotrichum* (Stapf. ex Rech.f.)

Abdolhossein Rustaiyan, **Mina Jamzad**, Shiva Masoudi, Ziba Jamzad and Kambiz Larijani, Journal of Essential Oil Research, 2009, **21**, 222-224.

7-Volatile Constituents of *Micromeria persica* Boiss. , *Hymenocater platystegius* Rech. f. and *Scutellaria pinnatifida* A. Hamilt. ssp. *Pinnatifida*. Three Labiatae Herbs Growing Wild in Iran

Shiva Masoudi, Leila Azad, Bahare Arabshahi, **Mina Jamzad**, Hashem Akhlaghi, Alireza Motevalizadeh and Abdolhossein Rustaiyan, Journal of Essential Oil Research. 2009, **21**: 515-518.

8- Essential oil composition of *Salvia indica* L., *Thymus caucasicus* Wind. Ex *Ronniger* subsp. *Grossheimii* (Ronniger) Jalas. and *Ballota nigra* L. three labiatae Species from Iran

Mina Jamzad, Abdolhossein Rustaiyan, Ziba Jamzad, and Shiva Masoudi Journal of Essential Oil Bearing Plants. 2011, **14** (1): 76 – 83.

9- Volatile constituents of two Labiateae species from Iran and antibacterial activity of the acetone extract of them

Mina Jamzad, Ziba Jamzad, Mohammad Yari, Maryam Shah beig, Bahman Ghadami, Journal of Essential Oil Bearing Plants. 2012, **15** (3): 380 – 386.

10- Variation in essential oil composition of *Mentha longifolia* var. *chlorodichya* Rech.f. and *Ziziphora clinopodiodes* Lam. growing in different habitats

Mina Jamzad, Ziba Jamzad, Fahimeh Mokhber, Salma Ziareh, Mohammad Yari, Journal of Medicinal plants Reasearch. 2013, **7**(22): 1618-1623.

11- Essential oil composition of the leaves and flowers of *Phlomis olivieri* Benth. and *Phlomis persica* Boiss. From Iran

Mina Jamzad, Ziba Jamzad, Fahimeh Mokhber, Salma Ziareh, Journal of Essential Oil Bearing Plants, 2013, **16**(4): 451-455.

12- Essential oil, fatty acids and anti-bacterial activity of *Sesbania punicea* from north of Iran.

Mina Jamzad*, Fariba Rostami, Amine Kazembakloo, Bahman Ghadami and Ali Shafaghat. *Journal of Medicinal Plants*, 2014, 8(40): 1208-1214.

13- Chemical composition of essential oil, total flavonoid content and antioxidant activity of *Salvia dracocephaloides* Boiss., from Iran.

Mina Jamzad*, Pardis Hafez-Taghva, Amineh Kazembakloo, Ziba Jamzad, *Journal of Essential Oil Bearing Plants*. 2014, 17(6): 1203-1210.

14- Antibacterial Activity of *Salvia reuterana* Constituents.

Mina Jamzad*, Abdolhosein Roostaiyan, Shiva Masoudi, Firoozeh Chalabian, Ziba Jamzad, *Journal of Pharmaceutical and Health Sciences*, 2014; 2(3), 103-109.

15- Chemical composition of *Hymenocallis elegans* Bunge. and *Lagochillusaucherii* Boiss. two labiateae species from Iran

Mina jamzad*, Behrooz Ghorbanalipoor, Pardis Hafez Taghva, Ziba Jamzad and Mohammad Yari, *Journal of Essential Oil Bearing Plants*. 2015, **18**(4): 833-839.

16- Total flavonoids contents and anti-bacterial activity of the extracts of two Labiateae species: *Nepeta menthoides* and *Thymus trautvetteri*

Shadi Ghandch and **Mina Jamzad***. *Journal of Medicinal Plants & By Products*. 2015, 1: 77-82.

17- Essential Oil Composition, Total Phenolic and Favonoid Contents, and Biological Activities of *Salvia aristata* Aucher ex Benth. Extracts.

Elham Emadipoor, **Mina Jamzad***, Kambiz Ghaffari, Bahman Ghadami, Ziba Jamzad. *Journal of Essential Oil Bearing Plants*, 2016, 19(6): 1426-1434.

18- Biologically synthesized silver nanoparticles by aqueous extract of *Satureja intermedia* C.A. Mey and the evaluation of total phenolic and flavonoid contents and antioxidant activity.

Somayeh Firoozi, **Mina Jamzad***, Mohammad Yari, *Journal of Nanostructure in Chemistry*. 2016, 6: 357–364.

19- Total phenolic and flavonoid contents, antioxidant and antimicrobial activity of *Nepeta binaludensis* Jamzad extracts.

Masoumeh Khaladgi, **Mina Jamzad*** and Pari Mirahmadpour, Jundishapur Journal of Natural Pharmaceutical Products, 2018, 13(2): e58500.

20- Total Phenolic and Flavonoids Contents, Radical Scavenging Activity and Green Synthesis of Silver Nanoparticles by *Laurus nobilis* L. Leaves Aqueous Extract

Sanaz Kashkouli, **Mina Jamzad*** and Azita Nouri, Journal of Medicinal Plants and By-products. (2018) 1: 25-32.

21- Green synthesis of zinc oxide nanoparticles: a comparison, Shabnam Fakhari, Mina Jamzad* and Hassan Kabiri Fard, Green Chemistry Letters and Reviews. 2019, 12(1): 19-24.

Conferences:

1- Volatile Constituents of *Stachys pilifera* Benth. and *Stachys acerosa* Boiss. From Iran, ISEO 2003, Grass, Italy.

2- Chemical composition and antibacterial activity of the essential oils from leaves, stems and flowers of *salvia verticillata*, Chemistry and Industry, Islamic Azad University, Islamshahr Branch, 2006.

3- Volatile constituents of two Labiateae species and antibacterial activity of the acetone extract of them, ISEO 2011, Turkey.

4- Comparison of essential oil composition of *Mentha longifolia* var. *chlorodictya* Rech.f. from two localities of Iran, 18th Iranian Seminar of Organic Chemistry, Zahedan, 2011.

5- Essential oil composition of the leaves and flowers of *Phlomis olivieri* Benth. and *Phlomis persica* Boiss. From Iran, 18th Iranian Seminar of Organic Chemistry, Zahedan, 2011.

6- Comparison of the essential oil composition of three population of *Ziziphora clinopodioides* Lam. From Iran. 18th Iranian Seminar of Organic Chemistry, Zahedan, 2011.

- 7- Antibacterial activity of *Salvia reuterana* Constituents. 18th Iranian Seminar of Organic Chemistry, Zahedan, 2011.
- 8- Antibacterial activity of the essential oils of aerial parts and roots of two *Salvia* species from Iran., 4th International congress of Biochemistry and Molecular Biology, Mashhad, 2011.
- 9- Chemical composition of the essential oils of flower, leaf and stem of *Callistemon citrinus* (Curtis) Skeels. 23th Iranian Seminar of Organic Chemistry, Hamedan, 2013.
- 10- Chemical composition of *Hymenocraea elegans* Bunge. and *Lagochilus aucheri* Boiss. two labiateae species from Iran. 23th Iranian Seminar of Organic Chemistry, Hamedan, 2013.
- 11- Essential oil composition and total flavonoid content in the *Chaenomeles japonica* (Thumb.) Lindley fruit. 23th Iranian Seminar of Organic Chemistry, Hamedan, 2013.
- 12- Volatile compounds of leaf and fatty acids from seed of *Sesbania punicea*(Cav.) Benth. 23th Iranian Seminar of Organic Chemistry, Hamedan, 2013.
- 13- Antibacterial activity of the aerial parts of *Salvia xanthocheila* Boiss. and *Salvia verticillata* L. International Congress of Natural Products, Mashhad, 2013.
- 14- Anti-oxidant activity of the extracts of leaves, stems and flowers of *Callistemon citrinus* from North of Iran. International Congress of Natural Products, Mashhad, 2013.
- 15- Total phenolic and flavonoid contents, fatty acid composition and antioxidant activity of *Pterocephalus canus* Extract. International conference on new research findings in chemical science and chemical engineering, Tehran, 2015.
- 16- Total phenolic and Flavonoid contents, and antioxidant activity of *Salvia aristata* Aucher ex Benth. Extracts. 3rd National & 1th International Congress on Applied research in Chemistry & Chemical Engineering, Tehran, 2016.
- 17- Green Synthesis of Silver Nanoparticles by Aqueous Extract of *Laurus nobilis* L. Leaves and Evaluation of Total Phenolic and Flavonoid Contents and Radical Scavenging Effect. 24th Iranian Seminar of Organic Chemistry, Tabriz, 2016.
- 18- Green synthesis of Iron oxide nanoparticles by *Laurus nobilis* L. aqueous extract. 25th Iranian Seminar of Organic Chemistry, Tehran, 2017.
- 19- Green synthesis of Zinc oxide nanoparticles by *Laurus nobilis* L. aqueous extract. 25th Iranian Seminar of Organic Chemistry, Tehran, 2017.

Supervised theses:

1. Essential oil composition of two Labiateae species: *Salvia brachyantha* and *Stachys byzantina* and evaluation of antibacterial activity.
2. Identification and comparison of the essential oil composition of two Labiateae species: *Thymus transcaspicus*, *Mentha longifolia* by GC/MS.
3. Essential oil composition of *Ziziphora clinopodiodes* (Labiateae) by GC/MS and evaluation of the growing area effect on the essential oil chemical composition.
4. Identification of the terpenoids from flower, leaf and stem of *Callistemon citrinus* and a study of anti-oxidant activity of the leaves.
5. Identification of terpenoids and Quantitative analysis of flavonoids in the fruit of *Chaenomeles japonica*
6. Identification of monoterpenes and sesquiterpenes of the leaves and fatty acids of the seeds of *Sesbania puniceae* (Fabiaceae)
7. Identification of terpenoids in the essential oil of two Labiateae species : *Lagochilus aucheri* Boiss., *Hymenocratter elegans* Bunge.
8. Identification, quantification and comparison of volatile compounds from the aerial parts of *Salvia aristata* Aucher ex Benth. (Labiateae) collected from two different areas and study their antibacterial activity.
9. The effect of solvent and extraction methods on total flavonoid content of two Labiateae species: *Satureja intermedia* C.A.Mey and *Satureja bachtiarica* Bunge.
10. Total flavonoid contents and antibacterial activity of the extracts of two Labiateae species: *Thymus trautvetteri*, *Nepeta menthoides*
11. Identification of fatty acids and evaluation of total flavonoid contents of the extract of the aerial part of *Pterocephalus canus* Coult Ex Dc.
12. Evaluation of total phenolic and flavonoid contents and anti-oxidant activity of hydroalcoholic extract of *Nepeta binaludensis* (Labiateae).
13. Total phenolic and flavonoid contents and anti-oxidant activity of hydroalcoholic extract of *Salvia aristata* (Labiateae).
14. Phytosynthesis of silver nanoparticles by aqueous extract of the aerial part of *Satureja intermedia* C.A.Mey and evaluation of their antibacterial activity.
15. Identification of volatile compounds of two Compositae species: *Achillea oxyodonta* and *Achillea biebersteinii*

16. Evaluation of total phenolic and flavonoid contents by colorimetric method and synthesis of silver nanoparticles by aqueous extract of *Laurus nobilis*.
17. Green synthesis of Zinc Oxide nanoparticles by aqueous extract of *Laurus nobilis*.
18. Green synthesis of Iron nanoparticles by aqueous extract of *Protulaca oleraca* and evaluation of its reactivity towards chlorinated organic solvent contaminants in water.
19. Synthesis of dialkyl 4(4-nitro phenyl)- 2,6-dimethyl pyridine -3,5- dicarboxylate derivatives .
20. Isolation and identification of flavonoids components from *Froriepia subpinnata* extract.
21. Synthesis of dialkyl, 4-(4-amino-phenyl) - 2, 6 - dimethyl pyridine- 3, 5- dicarboxylate derivatives by using Nifedipin as precursor.

Advised Theses:

1. Study of cycloaddition reaction dimethyl keten with 2-piron by density functional theory.
2. Investigation of some selected Azida-Alkyne [3+2]-cycloaddition reactions a DFT approach and comparison with experimental results.
3. Computational study of new N-Heterocycle carbenes and P- Heterocycle carbenes.
4. Synthesis of 4-aminophthalimide supported on superparamagnetic nanoparticles.
5. Investigation of poly pyrroles nano composite synthesis modified by platinum nano particles.

Research project:

Essential oil composition of the aerial part of *Salvia dracocephaloides* Boiss. (Labiatae) and flavonoid content and antioxidant activity of hydroalcoholic extract of it (2014).