

Curriculum Vitae

Educational Background:

Ph.D. in Organic Chemistry, Department of Chemistry, University of Kashan, Kashan, Iran.

Project title: *Preparation and characterization of hollow and coated magnetic nanocatalyst with organic groups and their application for the synthesis of pyranopyrazoles, spirooxindoles, pyranopyrimidinones under different conditions and investigation of some their medicinal properties*

Seminar title: *Chemical and Medical applications of Nuclear Magnetic Resonance (NMR)*

M.Sc. in Organic Chemistry, Department of Chemistry, University of Kashan, Kashan, Iran.

Project title: One pot synthesis of N-aryl pyrroles in the presence of ionic liquid N-methyl-2-pyrrolidonium hydrogen sulfate and sulfonated multi-walled carbon nanotubes catalysts under room temperature, microwave and ultrasonic irradiation

B.Sc. in Chemistry, Faculty of Science, University of Kashan, Kashan, Iran.

Published Research:

A. Articles:

1. M. Dadaei, H. Naeimi, "Nano cobalt ferrite encapsulated-silica particles bearing melamine as an easily recyclable catalyst for the synthesis of dihydropyrano [2,3-c]pyrazoles under green conditions", *Applied Organometallic Chemistry*, **2021**;e6365. DOI: 10.1002/aoc.6365

2. M. Dadaei, H. Naeimi, "Guanidine functionalized core–shell structured magnetic cobalt-ferrite: an efficient nanocatalyst for sonochemical synthesis of spirooxindoles in water", *RSC Adv.* **2021**, 11, 15360. DOI: 10.1039/d1ra00967b

3. M. Dadaei, H. Naeimi, "An Environment-Friendly Method for Green Synthesis of Pyranopyrazole Derivatives Catalyzed by CoCuFe₂O₄ Magnetic Nanocrystals under Solvent-Free Conditions", *Polycyclic Aromatic Compounds*. **2020**. DOI:

10.1080/10406638.2020.1725897

4. Naeimi, H. Dadaei, M., "Facile sonochemical heterocyclization of 2, 5dimethoxy tetrahydrofuran with primary amines using sulfonated MWCNTs as a recyclable catalyst in aqueous media", *Green Chemistry Letters and Reviews*, **2017**, 10, 412-419. DOI: 10.1080/17518253.2017.1394501

5. Naeimi, H. Dadaei, M., "Microwave Promoted Green Synthesis of Pyrroles Using N-Methyl-2-Pyrrolidonium Hydrogen Sulfate as an Efficient Catalyst under Solvent-Free Condition", **2017**, *Iran J Sci Technol Trans Sci*, DOI 10.1007/s40995-017-0175-3

6. Naeimi, H. Dadaei, M., "Efficient and Green Synthesis of N-aryl Pyrroles Catalyzed by Ionic Liquid [H-NMP] [HSO₄] in Water at Room Temperature", *J. Chin. Chem. Soc.* **2014**, 61, 1127-1132. DOI: 10.1002/jccs.201400039

7. H. Naeimi, M. Dadaei, "Functionalized multi-walled carbon nanotubes as an efficient reusable heterogeneous catalyst for green synthesis of N-substituted pyrroles in water", *RSC Adv.*, **2015**, 5, 76221. DOI: 10.1039/c5ra12185j **B. Contributions to Workshops, Seminars, and Conferences**

1. 2nd Iranian Catalyst Conference, Iranian Chemical Society, 2020

- 2. 6th National Congrees on Applied Research in Chemistry and Chemical Engineering, Shahid Beheshti University, 2020
- 3. 2nd International Conference on New Research Achievements in Chemistry and Chemical Engineering, AmirKabir University of Technology, 2016
- 4. 3th National Congrees on New Research in Chemistry and Nano science, Industrial and Mining Research Center, Tehran 2016
- 5. 2st Iranian Seminar of Organic Chemistry, Ilam University, 2014
- 20st Iranian Seminar of Organic Chemistry, Bu-Ali Sina University, Hamedan, 2013

Teaching Experiences:

- 1. General Chemistry
- 2. Laboratory of General Chemistry I

- 3. Laboratory of General Chemistry II
- 4. Laboratory of Organic Chemistry I
- 5. Laboratory of Organic Chemistry II
- 6. Laboratory of Separation and Identification of Organic Compounds

Abilities:

Expert in Nuclear Magnetic Resonance (NMR), Atomic Force Microscopy (AFM), Ion mobility spectrometry (IMS), Static Light Scattering / Laser Diffraction Particle Size (SLS), Thermogravimetric Analysis (TGA), Elemental analysis (CHNS)

Awards:

- 1. Top (highest scored) student in the Ph.D. comprehensive exam of Organic Chemistry
- 2. Selected Researcher in research week in Kashan University (2021)
- 3. The top (highest scored) expert of Kashan University (2023)
- 4. The top (highest scored) manager of Kashan University (2024)