

CURRICULUM VITAE

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Contact Information

Name and Surname: Atekeh Tarahhomi

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Present Status:

Assistant Professor of Inorganic Chemistry

Education:

Ph.D (Inorganic Chemistry): Department of Chemistry, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

Title: Syntheses, theoretical, spectroscopic and structural studies of new phosphoramidates having the C(O)NHP(O) and P(O)(N¹)(N²)(N³) skeletons and their using as oxygen donor ligands in preparation of new complexes

M.Sc. (Inorganic Chemistry): Department of Chemistry, Faculty of Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

Title: Theoretical studies on polyoxometalate compounds with the formula [PdV₆O₁₈]⁴⁻ and [Mo₇O₁₆(O₃PCH₂PO₃)₃]⁹⁻

B.Sc. (Pure Chemistry): Department of Chemistry, Faculty of Sciences, Shiraz University, Shiraz, Iran

Teaching Experience:

For Undergraduate:

1. General Chemistry
2. Inorganic Chemistry I, II & III
3. Inorganic Chemistry Lab. I & II

For Graduate:

1. Advanced Inorganic Chemistry
2. Metal Organic Chemistry
3. Recent Topics in Inorganic Chemistry
4. Crystallography
5. Computational Chemistry

Research Interests:

1. Synthesis of New Phosphoramides and their coordination compounds
2. Crystal Structure and CSD analysis of Phosphoramides and their coordination compounds
3. Synthesis and Spectroscopic study (IR, NMR and Mass) of New Phosphorus-Nitrogen compounds and their Coordination Chemistry
4. Computational Analysis on Inorganic Compounds
5. Synthesis of New Inorganic Nano-structures

List of Some Selected Publication (from 2016 to 2018):

1. Synthesis and crystal structures of new phosphoric triamides: study of intermolecular interactions by semi-empirical calculations and Hirshfeld surface analysis

Atekeh Tarahhomi, Arie van der Lee, *Monatsh Chem.* (2018), <https://doi.org/10.1007/s00706-018-2186-y>.

2. A new six-coordinate organotin(IV) complex of OP[NC₅H₁₀]₃: A comparison with an analogous five-coordinate complex by means of X-ray crystallography, Hirshfeld surface analysis and DFT calculations

Atekeh Tarahhomi, Arie van der Lee, *J. Coord. Chem.* (2018), <https://doi.org/10.1080/00958972.2018.1461847>.

3. Synthesis, crystal structure and Hirshfeld surface analysis of new phosphoric triamide [2-F-C₆H₄C(O)NH]P(O)[NHCH(CH₃)₂]₂,

Atekeh Tarahhomi, Arnold L. Rheingold, James A. Golen, *J. Appl. Chem.* (2017) 11, 23–30.

4. Synthesis and characterization of two new phosphoric triamides: structural study of OP[NHC₅H₉]₃

Atekeh Tarahhomi, Mehrdad Pourayoubi, Arnold L. Rheingold, James A. Golen, *J. Appl. Chem.* (2017) 12, 243–252.

5. A new Z' = (2 + 0.5 + 0.5) amidophosphoester structure: Hirshfeld surface analysis of symmetry-independent molecules,

Mojtaba Keikh, Mehrdad Pourayoubi, Atekeh Tarahhomi, Arie van der Lee, *Z. Kristallogr.* (2017) 232: 453–462.

6. The first coordination compounds of OP[NC₄H₈O]₃ phosphoric triamide ligand: structural study and Hirshfeld surface analysis of Sn^{IV} and Mn^{II} complexes,

Mehrdad Pourayoubi, Atekeh Tarahhomi, James A. Golen & Arnold L. Rheingold, *J. Coord. Chem.* (2017) 70: 1285–1302.

7. Syntheses and structures of four new mixed-amide phosphoric triamides,

Mojtaba Keikh, Mehrdad Pourayoubi, Atekeh Tarahhomi, Arie van der Lee, *Acta Cryst. Section C* (2016) C72: 251–259.

Papers Presented at Conferences and Seminars

1. Hirshfeld surface analysis of co-crystal P(O)(NHC₆H₁₁)₃(C₆H₁₁NH₃)⁺(CH₃COO)⁻ and proton transfer [C₆H₁₁NH₂CH₃]⁺[4-CH₃C₆H₄S(O)₂NP(O)[N(CH₃)(C₆H₁₁)₂]⁻,

Atekeh Tarahhomi, *19th Iranian Seminar of Chemistry, Shiraz, Shiraz University, Iran 2017.*