

Hamid Reza Shahsavari



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Date of Birth: June 02, 1984
Marital Status: Married

Educational Background:

Ph.D. in Inorganic Chemistry with Prof. Mehdi Rashidi	Shiraz University, Iran, 2012
M.Sc. in Inorganic Chemistry with Prof. Mehdi Rashidi	Shiraz University, Iran, 2008
B.Sc. in Pure Chemistry with Prof. Ali Reza Sardarian	Shiraz University, Iran, 2006

Professional Experiences:

Visiting Scientist; at Department of Chemistry, Universidad de La Rioja, Spain, with Prof. Elena Lalinde, September 2011 - June 2012

Assistant Professor of Inorganic Chemistry, Institute for Advanced Studies in Basic Sciences (IASBS) Zanjan, Since August 2013

Visiting Professor; at Department of Chemistry, Universidad de La Rioja, Spain, with Prof. Elena Lalinde, March 2015 - April 2015

Visiting Professor; at Department of DICASTeCh, Politecnico di Bari, Italy, with Prof. Piero Mastorilli, March 2017 - June 2017

Research Areas:

- I) Design of organometallic systems with transitions metals and study of their optoelectronic, biological properties and potential applications.
- II) Kinetic study on organometallic complexes.
- III) Study of catalytic properties of inorganic and organometallic compounds in some organic transformation.

Selected Publications:

1) Cyclometalated platinum(II) complexes bearing bidentate *O,O'*-di(alkyl)dithiophosphate ligands: Photoluminescence and cytotoxic properties

M. Fereidoon nezhad, B. Kaboudin, T. Mirzaee, R. Babadi Aghakhanpour, M. Golbon Haghighi, Z. Faghih, Z. Faghih, Z. Ahmadipour, B. Notash, **H. R. Shahsavari***

Organometallics, 2017, **36**, 1707–1717.

2) Photophysical properties of a series of cycloplatinated(II) complexes featuring allyldiphenylphosphane

H. R. Shahsavari*, R. Babadi Aghakhanpour, M. Babaghasabha, M. Golbon Haghighi, S. M. Nabavizadeh, B. Notash

New Journal of Chemistry, 2017, **41**, 3798–3810.

3) Combined kinetic-mechanistic and theoretical elucidation on oxidative addition of iodomethane to cycloplatinated(II) complexes: Controlling rate of *trans-cis* isomerization

H. R. Shahsavari*, R. Babadi Aghakhanpour, M. Babaghasabha, M. Golbon Haghighi, S. M. Nabavizadeh, B. Notash

European Journal of Inorganic Chemistry, 2017, 2682–2690.

4) Synthesis, Biological Evaluation, and Molecular Docking Studies on the DNA Binding Interactions of Platinum(II) Rollover Complexes Containing Phosphorus Donor Ligands

M. Fereidoon nezhad, M. Niazi, M. Shahmohammadi Beni, S. Mohammadi, Z. Faghih, Z. Faghih, **H. R. Shahsavari***

ChemMedChem, 2017, **12**, 456–465.

5) Cyclometalated platinum(II) complexes of 2,2'-bipyridine N-oxide containing a 1,1'-bis(diphenylphosphino)ferrocene ligand: structural, computational and electrochemical studies

H. R. Shahsavari*, M. Fereidoon nezhad,* M. Niazi, S. T. Mosavi, S. H. Kazemi, R. Kia,* S. Shirkhan, S. Abdollahi Aghdam, P. R. Raithby

Dalton Transactions, 2017, **46**, 2013–2022.

6) Carbon–sulfur bond reductive coupling from a platinum(II) thiolate complex

M. Niazi, **H. R. Shahsavari***, M. Golbon Haghighi, M. R. Halvagar, S. Hatami, B. Notash

RSC Advances, 2016, **6**, 95073–95084.

7) Reactivity of a half-lantern Pt₂(II,II) complex with triphenylphosphine: selectivity in a protonation reaction

M. Niazi, **H. R. Shahsavari***, M. Golbon Haghighi, M. R. Halvagar, S. Hatami, B. Notash

RSC Advances, 2016, **6**, 76463–76472.

8) Bimetallic clusters and extended chains featuring Pt(II)-Tl(I) bonds: Effect of the pyridine-2-thiolate and cyclometalated ligands in the luminescence and mechanochromism

J. R. Berenguer, E. Lalinde,* A. Martín, M. T. Moreno,* S. Sánchez, **H. R. Shahsavari**

Inorganic Chemistry, 2016, **55**, 7866-7878.

9) Photophysical responses in Pt₂Pb clusters driven by solvent interactions and structural changes in the Pb^{II} environment

J. R. Berenguer, E. Lalinde,* A. Martín, M. T. Moreno,* S. Ruiz, S. Sánchez, **H. R. Shahsavari**

Inorganic Chemistry, 2014, **53**, 8770-8785.

10) Solvent-induced lone pair activity tuning and vapoluminescence in a Pt₂Pb cluster

J. R. Berenguer, E. Lalinde,* A. Martín, M. T. Moreno,* S. Ruiz, S. Sánchez, **H. R. Shahsavari**

Chemical Communications, 2013, **49**, 5067-5069.

Selected Conferences Presentation:

1) Synthesis, molecular docking studies on DNA binding interactions and cytotoxic activity evaluations of novel thiolated Gold(I) complexes containing phosphine ligands as potential anticancer agents

A. Nezafati, A. Yazdani¹, M. Fereidoonhezad, **H. R. Shahsavari**

20th Iranian Pharmacy Students' Seminar, Tehran, Iran, April 2017.

2) Different cycloplatinated(II) complexes with allyldiphenylphosphine as ancillary ligand: photophysical study

R. Babadi Aghakhanpour, **H. R. Shahsavari**, M. Babaghasabha, M. Golbon Haghighi, S. M. Nabavizadeh, B. Notash

The 19th Iranian Chemistry Congress, Shiraz, Iran, February 2017.

3) Synthesis, molecular docking Studies on DNA binding interaction and biological evaluations of phosphine gold(I)-thiolate complexes as potential anticancer agents

A. Yazdani, M. Fereidoonhezad, **H. R. Shahsavari**, A. Alamdarloo,

The 3rd Molecular Medicine Congress, Isfahan, Iran, December 2016.

4) Synthesis of novel platinum complexes: biological evaluations and molecular docking studies on DNA binding interaction

T. Mirzaei, M. Fereidoonhezad, **H. R. Shahsavari**, H. Mirzaei

The 14th Iranian Biochemical Congress, Tehran, Iran, August 2016.

5) Synthesis, biological evaluations and DNA binding studies on cycloplatinated complexes containing thiolate and phosphine ligands as potential anticancer agents

Z. Ahmadipour, M. Fereidoonhezad, **H. R. Shahsavari**

The 14th Iranian Biochemical Congress, Tehran, Iran, August 2016.

Research Projects:

- 1) The reactivity of different Ag(I) salts toward cycloplatinated(II) complexes: study of photophysical properties, biological activity and transphobia effect (GR-INSF- 95834232)
- 2) SH bond activation by Na and Tl metals and its application for preparing of organoplatinum compounds: photophysical and electrochemistry study, (GR-INSF-93026027)
- 3) Active palladium bis pyridine complex catalyzed Suzuki- Miyaura coupling in water under phosphine free conditions, (GR-INSF-92027596)

Courses Taught:

1. General and Inorganic Chemistry Laboratories, (B.Sc.)
2. General Chemistry Courses, (B.Sc.)
3. Inorganic Chemistry Courses, (B.Sc.)
4. Organometallic Chemistry, (B.Sc. & M.Sc.)
5. Advanced Inorganic Chemistry, (M.Sc.)
6. Inorganic Reaction Mechanism, (M.Sc.)
7. Application of Spectroscopy in Inorganic Chemistry (M.Sc.)
8. Advanced Topics in Inorganic Chemistry (Ph.D.)
9. Photochemistry (Ph.D.)
10. Inorganic Polymer (Ph.D.)