

Curriculum vitae Gholamhossein Mohammadnezhad



PERSONAL INFORMATION

First name: Gholamhossein **Surname:** Mohammadnezhad Shirazi

Position: Associate Professor of Department of Chemistry, Isfahan University of Technology

Date of birth: 1979 Place of birth: Shiraz (Iran) Marital status: Married – One child (Romina)

CONTACT INFORMATION

Department of Chemistry, Isfahan University of Technology, Isfahan, 8415683111, Iran
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ACADEMIC EDUCATION

Ph.D. (Inorganic Chemistry) 2012
Department of Chemistry, Shahid Beheshti University, Tehran, Iran

Scientific Visiting Scholar

Prof. Dr. Winfried Plass, Friedrich-Schiller-Universität Jena (FSU), Germany, 2010

Top student of Shahid Beheshti University Ph.D programme in inorganic chemistry (final average of the educational part: 18.9 out of 20 equivalents to 94.5 out of 100).

Supervisor: Prof. Dr. M. M. Amini

Dissertation title: Synthesis and Characterization of Some Metal Alkoxide and Their Application in Preparation of Nano-oxides and Chiral Sugar-Based Vanadium Complexes.

M.Sc. in Inorganic Chemistry, 2005

Iran University of Science & Technology, Tehran, Iran

Supervisor: Prof. Dr. R. Rahimi

Thesis title: Synthesis of Titanium Mesoporous Silicate, Studying and Characterization

B. Sc. in Pure Chemistry, 2002, Isfahan University Isfahan, Iran

EMPLOYMENT HISTORY

Associate Professor at IUT, from 2017

Assistant Professor at IUT, 2012-2017

Research Assistant, 2006-2011, Shahid Beheshti University, Tehran, Iran

Teaching Assistant (TA) Payame Noor Varamin & Shahid Beheshti, Inorganic Chemistry lab., Organometallic

Courses Taught: Advanced inorganic chemistry, Inorganic chemistry I & II, General Chemistry for engineers, Inorganic Polymers, Industrial Chemistry, Synthesis of Nanomaterials, Solid state and surface chemistry, Spectroscopy of inorganic compounds

Single Crystal X-ray Lab. Assistant, 2006-2008, Shahid Beheshti University

Research Institute of Petroleum Industry (RIPI), 2009.04.23 - 2009.11.23

PROJECTS

- **Iran National Science Foundation (INSF) 2021-2023**
Anti-cancer properties and catalytic activity of sugar-based vanadium(V) complexes
- **Iran National Science Foundation (INSF) 2016-2020**
Synthesis, characterization and applications of pincer complexes
- **DFG, German Research Foundation/Initiation of international cooperation 2019**
Prof. Dr. Axel Klein, Universität zu Köln, Germany
- **DFG, German Research Foundation/Initiation of international cooperation 2018**
Prof. Dr. Winfried Plass, Friedrich-Schiller-Universität Jena (FSU), Germany.
- **Iran National Science Foundation (INSF) 2013-2015**
Synthesis of γ -alumina catalyst support from aluminum alkoxide molecular precursors
- **DFG, German Research Foundation/Initiation of international cooperation 2014**
Prof. Dr. Winfried Plass, Friedrich-Schiller-Universität Jena (FSU), Germany.
- **Ministry of Energy 2010**
Oxygen sensors based on nano-zeolite supports
- **University independent research project at Shahid Beheshti University 2010**
Synthesis and characterization of lead complexes with different ligands
- **Research Institute of Petroleum Industry (RIPI) 2009**
Desulfurization of gasoline using HDS process
- **Iran Polymer and Petrochemical Institute 2009**
Technical development of magnesium ethoxide as a catalyst for ethylene polymerization
- **University independent research project at Shahid Beheshti University 2009**
Synthesis, characterization, and structural investigation of aluminum-silicon heteronuclear alkoxides

RESEARCH EXPERIENCE & TECHNICAL SKILLS

- Associate editor of "Inorganic Chemistry Research" journal.
- Editor of Inorganic Chemistry section of the "Canadian Chemical Transactions" journal.
- Reviewer for journals: Dalton transactions, Journal of Molecular Structure, Journal of Iranian Chemical Society, American Journal of Chemistry, Nanoscience and Nanotechnology, American Journal of Materials Science and International Journal of Materials and Chemistry.
- Member of Iranian Chemical Society (ICS).
- Member of Iranian crystallography and mineralogy.
- Award for presentation on 2nd Iranian Congress on Chemistry.
- Certification on the first Workshop of "Applied Issues on Heterogeneous Catalyst and Fixed Bed Reactor" in Iran Polymer and Petrochemical Institute.
- Synthesis of highly ordered novel nanostructure materials: MCMs, SBA,...
- Ability of working with air and moisture sensitive materials with Schlenk technique.
- Certification on ICDL1 and 2 courses.
- Certification on chemical software: Chem. Office, ISIS Draw, ACD lab, Gaussian 98, Hyper Chem., MOPAC7.

SELECTED PUBLICATIONS

1. **Mohammadnezhad, G.***, Ahfad, N., Farokhpour, H., Schmitz, S., Haseloer, A., Buchholz, A., Plass, W., Klein, A.* (2021): Dinuclear Ni (II) and Cu (II) complexes of 8-quinoline-1H-pyrazole-3-carboxamide: crystal structure, magnetic properties, and DFT calculations. In: *European Journal of Inorganic Chemistry*, 18, 1786-1795.
2. **Mohammadnezhad, G.***, Amirian, A. M., Görls, H., Plass, W., Sandleben, A., Schäfer, S., Klein, A.* (2021): Redox instability of copper (II) complexes of a triazine-based PNP pincer. In: *European Journal of Inorganic Chemistry*, 12, 1140-1151.
3. **Mohammadnezhad, G.***, Esfandiari, M., Steiniger, F. (2020). End-grafted Cu-NNN pincer complexes on PAMAM dendrimers-SiO₂: synthesis and characterization. In: *New Journal of Chemistry*, 44(35), 15054-15065.
4. **Mohammadnezhad, G.***, Momeni, M. M., Nasiriani, F. (2020). Enhanced photoelectrochemical performance of tin oxide decorated tungsten oxide doped TiO₂ nanotube by electrodeposition for water splitting. In: *Journal of Electroanalytical Chemistry*, 876, 114505.
5. Dinari, M.*, Soltani, R., **Mohammadnezhad, G.*** (2017). Kinetics and thermodynamic study on novel modified-mesoporous silica MCM-41/polymer matrix nanocomposites: effective adsorbents for trace Cr^{VI} removal. In: *Journal of Chemical & Engineering Data*, 62(8), 2316-2329.
6. **Mohammadnezhad, G.***, Abad, S., Soltani, R., Dinari, M.* (2017). Study on thermal, mechanical and adsorption properties of amine-functionalized MCM-41/PMMA and MCM-41/PS nanocomposites prepared by ultrasonic irradiation. In: *Ultrasonics sonochemistry*, 39, 765-773.
7. **Mohammadnezhad, G.***, Akintola, O., Plass, W., Steiniger, F., Westermann, M. (2016). A facile, green and efficient surfactant-free method for synthesis of aluminum nanooxides with an extraordinary high surface area. In: *Dalton Transactions*, 45(15), 6329-6333.
8. **Mohammadnezhad, G.***, Debel, R., Plass, W.* (2015). Molybdenum (VI)-promoted sulfoxidation in the presence of tridentate sugar-based Schiff-base ligands. In: *Journal of Molecular Catalysis A: Chemical*, 410, 160-167.
9. **Mohammadnezhad, G.**, Böhme, M., Geibig, D., Burkhardt, A., Görls, H., Plass, W.* (2013). Chiral vanadium (V) complexes with 2-aminoglucose Schiff-base ligands and their solution configurations: synthesis, structures, and DFT calculations. In: *Dalton Transactions*, 42(33), 11812-11823.
10. **Mohammadnezhad, G.**, Amini, M. M.*, Khavasi, H. R. (2010). A single source precursor for low temperature processing of nanocrystalline MgAl₂O₄ spinel: synthesis and characterization of [MgAl₂(μ₃-O)(μ₂-OⁱPr)₄(OⁱPr)₂]₄. In: *Dalton Transactions*, 39(45), 10830-10832.