

EDUCATION

2015-now	Ph.D student in Physical Chemistry, Department of Chemistry, Nanocatalyst and environment Laboratory, Sharif University of Technology, Tehran, Iran Supervisor: Dr. S. Rahman Setayesh Thesis Title: Kinetics investigation of environmental pollutants degradation in advanced oxidation processes using metal oxide nanocatalysts
2012-2014	M.Sc. in Physical Chemistry, Department of Chemistry, Nano Catalyst and environment Laboratory, Sharif University of Technology, Tehran, Iran Supervisor: Dr. S. Rahman Setayesh
2007-2011	B.Sc. in Pure Chemistry, Department of Chemistry, Sharif University of Technology, Tehran, Iran

HONORS and AWARDS

- Ranked 1st in PhD students
- Ranked 14th among more than 848 participants in national universities entrance exam for Ph.D. degree, 2015.
- Ranked 65th among more than 17,000 participants in national universities entrance exam for M.Sc. degree, 2012.
- Ranked 847th among more than 400,000 participants in national universities entrance exam for B.Sc. degree, 2007.

TEACHING EXPERIENCES

2014-2018	Teaching assistance of Physical Chemistry Laboratory I, Department of Chemistry, Sharif University of Technology, Tehran, Iran.
2015-2018	Teaching assistance of Physical Chemistry Laboratory II, Department of Chemistry, Sharif University of Technology, Tehran, Iran.
2015-2019	Teaching assistance of Chemical Engineering Physical Chemistry Laboratory, Department of Chemistry, Sharif University of Technology, Tehran, Iran.
2016-2018	Teaching assistance of Physical Chemistry II, Department of Chemistry, Sharif University of Technology, Tehran, Iran.
2015-2018	Teaching assistance of Chemical Engineering Physical Chemistry, Department of Chemistry, Sharif University of Technology, Tehran, Iran.

RESEARCH EXPERIENCE

- Preparation, characterization and catalytic application of H₃PW₁₂O₄₀/Al₂O₃, H₃PMo₆W₆O₄₀/Al₂O₃, K₂.5H_{0.5}PW₁₂O₄₀, Cs₂.5H_{0.5}PW₁₂O₄₀ and Cs₂.5H_{0.5}PW₁₂O₄₀ in esterification reaction (some parts of this research has been published).
- Preparation, characterization and catalytic application of H₃PW₁₂O₄₀/TiO₂, H₃PMo₆W₆O₄₀ / TiO₂, K₂.5H_{0.5}PW₁₂O₄₀, Cs₂.5H_{0.5}PW₁₂O₄₀ and Cs₂.5H_{0.5}PW₁₂O₄₀ in photocatalytic degradation of methylene blue and Tinopal CBS-X under visible light
- Theoretical investigation of volatile organic pollutants adsorption on the surface of B and N doped graphene sheets (the resulted paper of this research is submitted at Vacuum Journal)
- Adsorption of aqueous solution xenobiotics on the graphene doped sheets: DFT study (the resulted paper of this research is submitted at Applied Surface Science Journal)
- Delafossite-alumina nanocomposite as a synergistic catalyst for catalytic wet peroxide oxidation and adsorption for treatment of contaminated water (the resulted paper of this research is submitted at Chemosphere)
- Iron vanadate nanocomposite synthesis as an efficient catalyst for the treatment of organic pollutants in water media, persulfate assisted electro-Fenton-like oxidation
- ZVI@zinc ferrite heterogeneous nanocatalyst for photo-electro-Fenton process in degradation of organic water pollutants
- Perovskite cobaltite-ceria nanocomposite for modified Fenton-like process in wastewater treatment

SUPERVISING ACTIVITIES

Supervising 4 post-graduate students.

Field of research:

- Synthesis and characterization of core-shell nanoparticles and kinetics investigation of oxygen evolution from water oxidation in the presence of these nanocatalysts.
- Theoretical investigation of adsorption of pollutants on the surface of graphene, doped graphene and defective graphene nanosheets (DFT study).
- Advanced oxidation processes (electro-Fenton) in degradation of water pollutants using metal oxide nanocatalysts.
- Kinetics investigation of oxygen evolution from water oxidation in the presence of bismuth vanadate nanocatalysts