

Dr. Hadis Rezaee

PHD, CHEMICAL ENGINEERING

Tehran, Iran (Islamic Republic of)

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Hello, I am Dr. Hadis Rezaee, a performance-driven and self-motivated chemical engineering PhD candidate with over 5 years' experience in oil and gas process and bitumen. Currently working for the my thesis work for investigating the effect of Mn-Na₂WO₄/SiO₂ preparation Method on the performance of catalyst for Oxidative Coupling Methane. Enjoying overcoming challenges and aiming to apply my knowledge and decision-making skills to solve real-life situations for better performance and clean environment. Curiosity, aspiration for precision and passion for research has developed ingenious processes and products in the chemical world. I believe these qualities are what makes an enthusiastic and successful chemical engineering researcher.

Education

PhD of Science in Chemical Engineering

AZAD UNIVERSITY, BRANCH NORTH TEHRAN, IRAN

2015 → 2021

- CGPA: 19.31/20.0

Master of Science in Chemical Engineering

AZAD UNIVERSITY, BRANCH SHAHROUD, IRAN

2011 → 2014

- Highest in Thermodynamics | CGPA: 16.31/20.0

Bachelor of Science in Chemical Engineering

AZAD UNIVERSITY, BRANCH BIRJAND, IRAN

2005 → 2010

- CGPA: 14.80/20.0

Employment

Process Engineering Manager

PETRO GHIR AZHAND

Tehran Saffron Square A

April 2021 → Present

- Role — Part of mini refinery design team for producing gasoline, solvents, naphtha and kerosene from condensate as a feed.
- Key Works — Initiated communication and secured collaboration with Borsig for design of dewaxing unit for producing base oil and paraffin waxes products.
- Key Works — Negotiated with Chinese and European companies for the required and suitable equipment for the dewaxing unit.
- Key Works — Secured meeting with Uganda embassy at Tehran for coordination about appropriate projects in bitumen trade and mini refinery projects in that country.

Chemical Engineering Consultant

PETRO NITA RAH AZMA

2020 → 2021

- Role — R&D department manager.
- Role — Executive consultant | Consultation on procurement of materials
- Work — Collaborated with multiple stakeholders
- Key Work — Prepared samples for study and assessment | Maintenance, measurement of samples, design of experiments and new methodologies, analysis and interpretation of data.

Researcher of Chemical Engineering

NOVIN BASPAR

2016 → 2019

- Role — Technical expert in the laboratory.
- Work — Management, use and maintenance of laboratory equipment.
- Work — Reported findings to superiors and published results.

Research and Operation Skills

CATALYST SYNTHESIS, CHARACTERIZATION, AND PERFORMANCE EVALUATION.

REACTOR SYSTEM DESIGN AND FABRICATION

CORROSION CONTROL AND ANALYSIS

KNOWLEDGE ABOUT UPSTREAM, INTERMEDIATE AND DOWNSTREAM PETROLEUM ENGINEERING OPERATIONS.

KNOWLEDGE ABOUT PRINCIPLES, TYPES AND WORKING WITH GAS CHROMATOGRAPHY.

ABILITY TO INDEPENDENTLY DESIGN EXPERIMENTS, INCORPORATE AND INTERPRET DATA FOR SUCCESSFUL EXPERIMENTAL FINDINGS.

ANALYTICAL MEASUREMENTS

EXPERTISE IN PROCESS ENGINEERING AND COST BENEFIT ANALYSIS

PROFESSIONAL REPORT WRITING AND PRESENTATION.

Designing Software Skills

MOSAIC MODELING, MATLAB, ASPEN ADSORPTION, ASPEN PLUS, PHOTOSHOP, AUTOCAD

Languages

ENGLISH, PERSIAN

Data Management Skills

EXPERIMENTAL DATA MANAGEMENT, ANALYSIS AND INTERPRETATION.

Microsoft Office

EXCEL, OUTLOOK, ONENOTE, POWERBI, POWERPOINT, VISIO, WORD

Collaborative Practices Skills

MANAGEMENT AND ORGANIZATION, PLANNING AND ADVISORY SKILLS

PERSUASIVE LEADERSHIP AND EXTENSIVE COLLABORATION THROUGH HUMILITY, VERBAL COMMUNICATION AND GOOD INTERPERSONAL APPROACH

KEEN ON COMPLIANCE WITH ENVIRONMENT, SAFETY, HEALTH AND QUALITY PROGRAM REQUIREMENTS.

MAINTAIN STRONG COMMITMENT TO THE IMPLEMENTATION AND PERPETUATION OF VALUES AND ETHICS.

Interests

CORROSION ABATEMENT

ENVIRONMENTAL ENGINEERING

HETEROGENOUS CATALYSIS

STRUCTURE OF NANO CATALYSTS

ENERGY TRANSITION

HYDROCRACKING TECHNOLOGY

PROCESS DESIGN AND OPERATION

CHEMICAL REACTOR ENGINEERING

ELECTROLYTE SOLUTIONS AND IONIC LIQUIDS

PERFORMING LAB EXPERIMENTS

Publication Work

Research Thesis

INVESTIGATION ON THE EFFECT OF $Mn-Na_2WO_4/SiO_2$ PREPARATION METHOD ON THE PERFORMANCE OF CATALYST FOR OXIDATIVE COUPLING METHANE

- Synthesis of core shell catalysts and molten catalysts.

*Iran Polymer and Petrochemical
Institute, Ferdowsi University, Azad
University Tehran North Branch*

2021

- Catalytic activity of the synthesized catalysts in the OCM process.
- Layered loading with my catalysts for OCM process.
- Characterization of catalyst.

Research Thesis

Amir Kabir University

THE PRESENTMENT A NEW THERMODYNAMIC MODEL FOR COLLATION AND EXPECTANCY ELECTROLYTE SOLUTIONS ACTIVITY COEFFICIENTS BASED ON STATISTICAL THERMODYNAMICS

Paper

The 8th International Chemical Engineering Congress & Exhibition (IChEC 2014)

NONEXTENSIVE LOCAL COMPOSITION MODEL FOR EXCESS GIBBS ENERGY OF ELECTROLYTE SYSTEMS

2014

- Author

Iranian Chemical Society, Phys. Chem. Res., Vol. 6, No. 4, 773-784, December 2018

A NONEXTENSIVE ELECTROLYTE UNIQUAC MODEL FOR PREDICTION OF MEAN ACTIVITY COEFFICIENTS OF BINARY ELECTROLYTE SOLUTIONS

December 2018

- Author

CATALYST FOR NON-OXIDATIVE COUPLING OF METHANE

- Currently drafting

CATALYSTS FOR OXIDATIVE COUPLING OF METHANE

- Currently drafting

Review Paper

CATALYSTS FOR OXIDATIVE COUPLING OF METHANE

- Currently drafting

Patent

NANOCATALYST FOR OXIDATIVE COUPLING OF METHANE.

Book

CORROSION UNDER INSULATION AND FIREPROOFING

- Currently drafting

Projects

Research on the upgrading technologies for heavy oil and bitumen and select the apposite technology based on the condition.

Research on corrosion under insulation and fireproofing.

Research on OCM: core- shell catalysts, nano catalysts.

Synthesis of catalysts for OCM process.

Resistance of metro tunnels against Corrosion of sulphate and chloride in municipal sewage.

Salt removing from sewage of sugar factories.

Organic methods for removing enzyme for drying fruit industry especially Cantaloupe..

Production of an asphalt bitumen replacement additive to extend the life of the asphalt and reduce its cost.

Corrosion resistant of asphalt against organic materials such as gasoline and diesel.

Asphalt Resistance versus Salt Corrosion with Additives based on Sulfur.

Sulfur production for agricultural use.

Production of 5th generation disinfectant for coronavirus based on ammonium chloride compounds.

Certifications

Gas Chromatography

*Chemistry and Chemical
Engineering Research Center of Iran*

Inductively Coupled Plasma

*Chemistry and Chemical
Engineering Research Center of Iran*

MOSAIC modeling

*Chemistry and Chemical
Engineering Research Center of Iran*

Safety in nanotechnology and toxicity evaluation

References

Dr. Mir Esmail Masoum

North Tehran Branch, Iran

CHEMICAL ENGINEERING DEPARTMENT, ISLAMIC AZAD UNIVERSITY

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- Email: m_masoumi@iau-tnb.ac.ir
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Dr. Afshar Alihosseini

Central Tehran Branch, Iran

HEAD OF DEPARTMENT, CHEMICAL ENGINEERING DEPARTMENT, ISLAMIC AZAD UNIVERSITY

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- Tel: (0098) 912-201-9699

Dr. Gholam Reza Pazuki

Tehran Polytechnic

CHEMICAL ENGINEERING DEPARTMENT, AMIRKABIR UNIVERSITY OF TECHNOLOGY

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