PERSONAL INFORMATION

Gholamreza Masoudi Rad

RESEARCH INTERESTS

Environmental Engineering	Biofuel production, Biomass conversion technologies, Water and Wastewater Engineering, Air Pollutants Control, Renewable Energies
Computational Fluid Dynamic	Fluid Mechanics, Heat Transfer, Combustion, Multiphase Flow, CFD

EDUCATION AND TRAINING

2021-Now

M.Sc. in Chemical Engineering (chemical engineering for innovative processes and products)

Total Average: 27.70/30

Sapienza University of Rome, Italy

Taught entirely in English

- Thesis: Modelling of Hydrodynamic cavitation for waste hydrocarbon cracking by the Method of CFD (Fluent)

Supervisors: Prof. G. Vilardi, Eng. Daniele Patrizi, Valentina Segneri

2014-2018

B.Sc. in Chemical Engineering

Total Average: 17.65/20

Petroleum University of Technology, Ahwaz, Iran

Ranked First among students of chemical engineering

- Thesis: Modelling of Turbulent Forced Convection Heat Transfer of Non-Newtonian Nanofluids by the Method of CFD

Supervisors: Prof. A. Shariati, Dr. B. Bazooyar

2020

Introduction to Programming with MATLAB

by École Vanderbilt University in Nashville, Tenn, US, from coursera

- 9 weeks of study, 3-4 hours/week, Grade Achieved: 100.00%

2020

Introduction to Household Water Treatment and Safe Storage

by École Polytechnique Fédérale de Lausanne, from coursera

- 5 weeks of study, 4-6 hours/week, Grade Achieved: 95.54%

HONORS AND AWARDS

2024 Jan - Now

Received scholarship from Sapienza University of Rome

Sviluppo di un modello CFD multifasico di un reattore per la valorizzazione termochimica di correnti di scarto.

2014-2018

1st Rank among B.Sc. Students of Chemical Engineering (summa cum laude)

Petroleum University of Technology, Total Average: 17.65/20

2014-2018

Received Scholarship

Petroleum University of Technology

2014

Top 1.0% In Nationwide Entrance Exam of Iranian Universities, Very Competitive with Nearly 220,000 Participants

2014

1st Rank Among High-School Students of Mathematics & Physics Group

Total Average: 19.63/20

WORK EXPERIENCE

2018-2020
Quality Control and Laboratory Inspector
National water and wastewater company of Iran
- Regular water and wastewater sampling and laboratory analysis

2017-2017
Summer Work Experience
Iranian Offshore Oil Company (IOOC), Falat Ghare Company (Bahregan)

2016-2016
Summer Work Experience
Catalytic Cracking Unit, Isfahan Refinery, Isfahan, Iran.

TEACHING ASSISTANCE

2017-2018
Heat transfer II under Dr. A. Shariati's supervision
Petroleum University of Technology

2017-2018
Applied mathematics under Dr. A. Shariati's supervision
Petroleum University of Technology

PUBLICATIONS

2021
Nanomaterial-Incorporated Polymer Composite for Industrial Effluent: from Synthesis to Application (Material Science and Material Engineering, Elsevier Chapter Book, 2021).
Author: Y. Tamsilian, M. Shirazi, Gh. Masoudi Rad

2021
Polymer nanocomposite characterization and applications (Material Science and Material Engineering, Elsevier Chapter Book).
Author: M. Shirazi, Gh. Masoudi Rad, Y. Tamsilian

ACADEMIC PROJECTS

2023
Automation of the fluidized bed reactor cleaning system of a pharmaceutical company
Conducted unsteady simulations of a reactor tank using ANSYS FLUENT and the DPM model to evaluate the efficacy of a rotating water jet for automated cleaning. Demonstrated expertise in fluid dynamics and engineering analysis for process optimization.

Sapienza University of Rome

2022
Numerical study of temporal evolution of the concentration field in a 2-d square cavity of side length L equipped with the velocity field deriving from the stream-function Using COMSOL
Sapienza University of Rome

2017
Applied Numerical Mathematics course project
In this project, MATLAB software was used to model an unsteady reactor. The concentration of limiting components and the temperature was calculated along the reactor, using the finite element method.

PERSONAL SKILLS

Mother tongue Persian (Farsi)

Other languages

	IELTS TEST WAS TAKEN ON JAN 28TH 2021				OVERAL
	Listening	Reading	Speaking	Writing	
English	8.5	8	7.5	6.5	7.5