

## PERSONAL INFORMATION Seyedmohammad Mousavi

STUDIES APPLIED FOR PhD student since 2022 at Sapienza university of Rome

### WORK EXPERIENCE

2023–2024 Researcher assistant  
CONSER spa, Rome, Italy

### EDUCATION AND TRAINING

Jan 2022 – Present PhD in Chemical Engineering  
Sapienza University of Rome  
Thesis: Hydrothermal Liquefaction of lignocellulosic biomass using waste red mud as catalyst

Mar 2024 –Oct 2014 Visiting PhD in Chemical Engineering  
Aalborg university  
Research: Upgrading and hydrotreating of Fe-Assisted HTL biocrude to biofuel using synthesis sulfided NiMo catalyst

Sep 2012–Oct 2019 Bachelor and Master of Science: Chemical engineering  
Ferdowsi University of Mashhad, Iran  
Master Thesis: Simulation and optimization of operating parameters for gas refinery plant using Aspen Plus and MATLAB

### PERSONAL SKILLS

Mother tongue Persian

#### Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
	C1				
Italian	B1	B1	A2	A2	A2
	A2				

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user  
Common European Framework of Reference for Languages - Self-assessment grid

## Communication skills

- Team work: I have worked in various types of research and industrial teams.
- Experienced at giving presentations to large audiences.
- Excellent verbal and written communication skills both in an office environment and with external stakeholders.

## Organisational / managerial skills

- Multitasking and Team leadership
- Handle responsibility and the ability to work under pressure
- Creative thinking; Reviewing, reporting, and research

## Job-related skills

Work as Researcher assistant in CONSER spa, Rome, Italy

## Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Independent user	Proficient user

Digital skills - Self-assessment grid

MATLAB/Simulink

Microsoft Office (Outlook, Excel, Word, PowerPoint) /

ASPEN PLUS

## ADDITIONAL INFORMATION

### Research Interests

Hydrothermal liquefaction of waste Biomass  
Simulation and TEA of chemical and industrial plants  
Renewable Energy  
Biomass pre-treatment

### Published Paper in Journals

- [2024]  
Techno-economic assessment of gasoline production from Fe-assisted lignocellulosic biomass hydrothermal liquefaction process with minimized waste stream, Energy Conversion and Management, Vol. 320, Nov. 2024
- [2024]  
Red mud as hydrogen producer in hydrothermal liquefaction of pinewood: minimization of process wastes by recycling the water and hydrochar phases, Renewable energy, Vol.232, Oct. 2024
- [2023]  
Catalytic hydrothermal liquefaction of Brachychiton populneus biomass for the production of high-value biocrude, MDPI, Processes, 2023
- [2023]  
Simulation on hydrothermal liquefaction of Pinewood to produce bio-crude in a zero-waste process scheme, CET, 2023

## Oral Presentations in International conference

**[ 20/08/2024 – 23/08/2024] Sendai, Japan**

10th International Conference on Engineering for Waste and Biomass Valorisation

**[ 21/05/2023 – 24/05/2023] Naples, Italy**

16th International Conference on CHEMICAL AND PROCESS ENGINEERING

## SCHOOLAND WORKSHOPS

*-Hydrogen Summer School held by ENEA, Rome, Italy. 2022*

*-Hydrothermal Liquefaction summer school held by Aalborg University, Denmark, 2024*

*-Bioenergy PhD School held by AIDIC & ENEA, Nova Siri, Italy, 2024*

## Extracurricular activities

-Sport: Swimming, Soccer, Volleyball, Padel

-Music

-Movie

## References

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Name: **Paolo de Filippis** | Full Professor

Department of Chemical, Material and Environmental Engineering, Sapienza University of Rome

Name: **Benedetta De Caprariis** | Associate Professor

Department of Chemical, Material and Environmental Engineering, Sapienza University of Rome

Name: **Daniele Castello** | Associate Professor

Department of Energy, Aalborg University, Denmark

Name: **Roya Hamidi** | Post doc

Department of Chemical, Material and Environmental Engineering, Sapienza University of Rome

Name: **Martina Damizia** | Assistant Professor

Department of Chemical, Material and Environmental Engineering, Sapienza University of Rome