

## PERSONAL INFORMATION

**Sogand Musivand**[in https://www.linkedin.com/in/sogand-musivand-50692555/](https://www.linkedin.com/in/sogand-musivand-50692555/)

Sex Female | Date of birth | Nationality

SOGAND.MUSIVAND@UNIROMA1.IT

## STUDIES APPLIED FOR

**PhD student since 1 November 2021 to 22 April 2024 at Sapienza university of Rome**

## WORK EXPERIENCE

**2016–2017 Laboratory Teacher assistant**  
Advanced Biotechnology Lab**2017–2018 Teacher Assistant**  
Kinetics and Reactor Design, Heat Transfer**19 Nov 2017–26 Dec 2018 Research Assistant**

## EDUCATION AND TRAINING

**Sep 2020 – January 2024 Doctoral student in Chemical Processes for Industry and Environment**  
sapienza University of Rome, Rome (Italy)

- Department of Chemical Materials and Environment Engineering'
- Thesis subject: plastic wastes management into valuable chemical products through thermochemical processes (HTL and Pyrolysis)

**25 Oct 2015–13 May 2018 Master of Science- Thesis Title: 'Biohydrogen, Acetone, Butanol and Ethanol production from cellulosic substrate by co culture of clostridium Acetobutylicum and Enterobacter aerogenes'.**  
Isfahan University of Technology, Isfahan (Iran)

- Work alone or as part of a team to ensure that project deadlines are met
- Interpret project plans, specifications and determine quantities of materials required to gain renewable energy
- Use test instruments to analyse material
- Providing relevant training to junior laboratory

**15 Oct 2011–22 Oct 2015 Bachelor of Science: chemical engineering**  
Sahand University of Technology, Sahand, East Azerbaijan Province (Iran)

- Research methods, Thesis Title: 'Chemical treatment of phenolic wastewater '.

- Organic chemistry, analytical chemistry, physical chemistry
- Mass and heat transfer
- Chemical engineering software
- Fundamentals of chemistry, polymer technology and oil engineering

PERSONAL SKILLS

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Mother tongue Persian

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B1	C1	C1	B2

B2

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 teams from research teams to sport and charity.
- 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

- Pass an internship at Elixir Pharmaceutical; Working in a research team providing relevant training to wastewater treatment

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

- HYSIS aspen
- Microsoft Project
- Tech plot
- Python

ADDITIONAL INFORMATION

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Research Interests Renewable Energy

Plastic waste depolymerization  
HTL processes  
Pyrolysis process  
Monomer recovery from plastic waste  
Synthesis of Nano materials  
Waste water treatment  
Characterization of Nanomaterials  
Biomass pre-treatment

Published Paper in Journal in  
2018:

Effects of graphene oxide-silicon oxide hybrid nanomaterials on rheological behavior of water at various time durations and temperatures: Synthesis ...

R Ranjbarzadeh, A Akhgar, **S Musivand**, M Afrand - Powder technology, 2018 - Elsevier

Published Paper in Journal in  
2022:

Biological production of hydrogen and acetone-butanol-ethanol from sugarcane bagasse and rice straw using co-culture of *Enterobacter aerogenes* and ...

H Tondro, **S Musivand**, H Zilouei, M Bazarganipour... - Biomass and ..., 2020 – Elsevier

Co-treatment of plastics with subcritical water for valuable chemical and clean solid fuel production

L Tai, **S Musivand**, B de Caprariis, M Damizia... - Journal of Cleaner ..., 2022 - Elsevier

Hydrotreating of oak wood bio-crude using heterogeneous hydrogen producer over Y zeolite catalyst synthesized from rice husk

R. Hamidi, Li. Tai, L. Paglia, M. Scarsella, M. Damizia, P. De Filippis, **S. Musivand**, B.DE Caprariis . Energy Conversion and ..., 2022 - Elsevier

Published Paper in Journal in  
2023:

Viable Recycling of Polystyrene via Hydrothermal Liquefaction and Pyrolysis

S Musivand, MP Bracciale, M Damizia, P De Filippis... - Energies, 2023 - mdpi.com

Coupled Biological and Thermochemical Process for Plastic Waste Conversion into Biopolymers

Marzulli F., **Musivand S.**, Arengi M., De Caprariis B., De Filippis P., Marchetti A., Majone M., Villano M., 2023. Chemical Engineering Transactions, 100, 469-474.

Published Paper in Journal in  
2024:

Chemical recycling of eyewear industry waste into cellulose acetate by hydrothermal treatment

M. P.Bracciale, B.de Caprariis, **S. Musivand**, M. Damizia, P.De Filippis., 2024, Industrial and Engineering Chemistry Research

International publications	conference	<p><b>S.Musivand</b>, H.Zlouei, " <i>A review on Bio Hydrogen production using the co- culture of Clostridium acetobutylicum and Enterobacter aerogenes</i> ", <i>7th International Conference ETEC</i></p> <p>K. Zargoosh, M. Sabeti, <b>S. Mosivand</b>, 24<sup>th</sup> Iranian Seminar of Analytical Chemistry, Azarbaijan Shahid Madany University, Tabriz 2017</p>
Pyro2022		<p>Chemical recycling of polystyrene to obtain styrene: Comparison between pyrolysis and hydrothermal liquefaction</p> <p>Effect of ethanol on the hydrothermal liquefaction process and chemical recovery of different polyurethane wastes</p>
Extracurricular activities		<p>-Sport: Swimming, Soccer, Table tennis</p> <p>-Music: Guitar</p> <p>-Art: Photography, Chiaroscuro</p>