University Academic Curriculum Vitae

Personal information

Name: **Mohsen Fatehi**
Place of birth:
Date of birth:
Nationality: Iran
Number of children:
Year of birth of the children:
Parental, sick or other leave period(s) (see attached list):

- Type of leave:
- from xx.xx.xxxx to xx.xx.xxxx

Address:
Telephone numbers:

- Mobile:
- Private:
- Office:

E-Mail:

Education since leaving school

- 2008, Mechanical Engineering, Heat and Fluids, Bsc; (Islamic Azad University of Tabriz)
- 2012 Mechanical Engineering, Energy Conversion, Msc; (Isfahan University of Technology)
- 2022-Now, Sustainable Energy and Technology, Phd; (Free University of Bolzano)

Present appointment

- Title of appointment
- start of appointment
- Level of appointment (in national / international context)
- employer (University, research institute, status of university / institute)
- brief description of responsibilities

Professional experience

Chronological list of all previous employments (each with job title, starting and finishing dates, level, employer, responsibilities)

From / to	Job title	Name of academic Institution	Academic level	responsibilities
2012-2014	Energy Expert	SAMAN ENERGY Co.	--	Energy Auditing & Study
2014-2022	Mechanical Expert-Rotary Equipment	MAPNA Group	--	Gas Turbine Design and Optimization

In the case of practice-related projects carried out in co-operation with studios, agencies or other people, please specify your own contribution to and role in the project.)

Where applicable: Design competitions and awards received
(Only list competitions that were won or those with a relevant placement and/or award, with name and date of competition)

Participation in exhibitions (where applicable)

List of major exhibitions, Title, date, location.
Turbo Expo 2024, June 2024, London, United Kingdom

Experience in academic teaching

- Teacher Assistant in Advanced Methods for Fluid Machine design lectured by Dr. Caligiuri Carlo, Free University of Bolzano. (2024)
- Second Supervisor in master thesis “Modelling and design adaptation of a micro-gas turbine combustor for ammonia combustion”, Free University of Bolzano, 2024
- Second Supervisor in bachelor thesis “CFD simulation of syngas combustion and flame”, Free University of Bolzano, 2024

Other academic responsibilities

- Research Assistant in Optimization of Fuel Consumption in Combustion Chamber of Turbo-compressors, Isfahan University of Technology (IUT), 2012
- Research Assistant in Numerical simulation of compressor and turbine blades of MGT-40 gas turbine, Isfahan University of Technology (IUT), 2013

Memberships

Membership of academic or professional bodies (including membership of Editorial Boards of scientific publications; membership of scientific committees for international conferences)

Research and scholarships

- Summary of current research and scholarship
- Summary of research and scholarship during the previous five years
- Summary of significant achievements in research and scholarship
- Research grants and contracts

Date granted	Award Holder(s)	Funding Body	Title	Amount received

Publications

- Fatehi, M, Campaldini, G, & Renzi, M. "Micro Gas Turbine Fed With Ammonia As Fuel: Performance Analysis and NOx Emissions Reduction." *Proceedings of the ASME Turbo Expo 2024: Turbomachinery Technical Conference and Exposition*. *Volume 3A: Combustion, Fuels, and Emissions*. London, United Kingdom. June 24–28, 2024. V03AT04A002. ASME. https://doi.org/10.1115/GT2024-121302
- Fatehi, M., Campaldini, G., Renzi, M. (2024). Performance Analysis of a Micro Gas Turbine Fed by Ammonia as Fuel with Steam Injection. In: Concli, F., Maccioni, L., Vidoni, R., Matt, D.T. (eds) Latest Advancements in Mechanical Engineering. ISIEA 2024. Lecture Notes in Networks and Systems, vol 1124. Springer, Cham. https://doi.org/10.1007/978-3-031-70462-8_24

- Mohsen Fatehi, Massimiliano Renzi, Modelling and development of ammonia-air non-premixed low NOX combustor in a micro gas turbine: A CFD analysis, International Journal of Hydrogen Energy, Volume 88, 2024, Pages 1-10, ISSN 0360-3199, https://doi.org/10.1016/j.ijhydene.2024.09.071.
- Fatehi, Mohsen / Norouzi, Kianoush, **Failure Analysis of the Blades of a GE-F6 Gas Turbine,** 2022, *Advanced Structural Mechanics* , Vol. 1, No. 1 Shahrekord University p. 56-70 https://doi.org/10.22034/asm.2022.13834.1003.

Publications <u>about</u> the applicant	Articles published by others in magazines, etc. about the applicant or his/her projects
Further data	Presentations at scientific conferences over past 3 years (invited or selected, keynote, nature and status of conference)
Entrepreneurship	Spin-offs, patents and entrepreneurship
Statement of interest	o Numerical Modelling of 2D and 3D Turbulent Flows o Combustion o Hydrogen based and alternative fuel combustion. o Mixing and reaction in turbulent flows o Gas Turbine o Turbo Compressor
Language competence	• IELTS Academic 7.0/9.0 (Listening: 7.5/9, Reading: 6.5/9, Writing: 6.5/9, Speaking: 6.5/9)

Date Signature