



Dr. Ufaith Hussain Qadiri

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Present Address: Telangana Hyderabad Shamerpet India 500078

Objective

Research and development (Mechanical Engineering) position in a major Company/ or Faculty position in the areas of Mechanical Engineering applications thermodynamics, fluid dynamics and combustion of Internal Combustion Engines.

Education

PhD. Mechanical Engineering (Thermal Engineering, IC Engines, Emission control and Alternative Fuels) May 2019

National Institute of Technology Srinagar, India

- **Advisor:** Prof (Dr.) M.Marouf Wani
- **Thesis:** “Computational and Experimental Investigation with Alternative Fuels on a Spark Ignition Engine to improve its emission characteristics and performance”.

M. Tech. Mechanical Engineering (System Design) July 2012

National Institute of Technology Srinagar, India

- **Research Project:** “Experimental Investigation of Various Inlet Ducts on the performance of the Radial Blower / Centrifugal Blower”.
- CGPA: 7.1/10

B.E. Mechanical Engineering Jan 2010

University of Kashmir India

- Percentage: 65%

Academic Experience

Assistant Professor & Head of Department. 14/11/2022- Present

Mechanical Engineering Department

Sreenidhi University

Yamnampet, Ghatkesar Hyderabad - 501 301, Telangana

Academic Experience

Assistant Professor 01/03/2021- 14/11/2022
Mechanical Engineering Department
Malla Reddy Engineering College (Autonomous)
Kompally Hyderabad. India 500100

Academic Experience

Assistant Professor 24/01/2020- 28/02/2021
Mechanical Engineering Department
RGM College of Engineering & Technology
Nandyal – 518501, Kurnool AP India.

Academic Experience

Assistant Professor 01/09/2019- 31-12-2019

Mechanical Engineering/Automobile Engg

BS Abdur Rahman crescent Institute of science and technology.

Vandalur Chennai Tamil Nadu India 600048.

Academic Experience

Assistant Professor 10/2018-8/2019

Mechanical Engineering

SSM college of Engineering Pattan Baramulla India

Academic Experience

Assistant Professor 1/2013-7/2013

Dronacharya group of Institutions (Greater Noida)

- Giving lectures on Applied Thermodynamics for the 2nd year students of Mechanical Engineering.
- Giving Lectures on Non-Conventional Energy Resources for 3rd year students of Mechanical Engineering.
- Conducting Labs on Internal Combustion Engines, Fluid mechanics and Solid Works.

Industrial Experience

Trainee Engineer in Production Department (8/2012 – 12/2012)

ID Cards Smart Pvt Limited
White field, Bangalore India

Scientific Skills

Computer Skills

- Knowledge of AVL Boost Simulation Software for Internal Combustion Engines.
- Ansys 14.5 (Cold flow & Port flow simulations), CFD
- CAD 2D Solid Works.
- Design Modeller.

Laboratory and Instrumentation Skills

- Lab view and data acquisition systems
- Combustion gas analysers
- Thermal fluid Labs
- Renewable Energy like Bio fuels and Gaseous fuels
- Experiments on multi-cylinder and single cylinder SI engine
- Synthesis and characterization of micro-emulsions

Languages

English, Hindi, Urdu (reading and writing proficiency)

Interests

Cricket, Badminton, and Gym

Publications

- **Ufaith Qadiri**, Computational Investigations on MPFI Engine Fuelled Blended Ethanol, H₂O based Micro-Emulsions, and Conventional Gasoline, **Environmental Advances**,(Elsevier),April,2023,100367,ISSN2666,7657,<https://doi.org/10.1016/j.enadv.2023.100367>. **Q1**.
- **Ufaith Qadiri**, Numerical One - Dimensional Investigation on Multi-Cylinder Spark Ignition Engine fuelled CNG, Micro emulsions, and Hydrogen in Dual Fuel Mode. **Chinese Journal of Aeronautics**, March 2023 (Elsevier) **Q1**.

- **Ufaith Qadiri**, Numerical 1-D simulations on Single-Cylinder stationary Spark Ignition Engine using Micro-Emulsions, Gasoline, and Hydrogen in Dual Fuel Mode, **Cleaner Chemical Engineering**, March 2022, (*Elsevier*) 100009, ISSN 2772-7823, <https://doi.org/10.1016/j.clce.2022.100009>
- **Ufaith Qadiri**, One-Dimensional Numerical Simulations of Single-Cylinder Spark Ignition Engine fuelled H₂O based Emulsion fuel, Methanol blends, and Gasoline Conventional. *Materials Science for Energy Technologies*. <https://doi.org/10.1016/j.mset.2022.01.003> (*Elsevier*) Article published on **20 Jan 2022**.
- **Ufaith Qadiri**, Computational parametric investigation on single cylinder constant speed spark ignition engine fuelled water-based micro-emulsion, ethanol blends, and conventional gasoline, *Materials Science for Energy Technologies*, (*Elsevier*) Volume 4, (2021), Pages 256-262,ISSN 2589-2991,<https://doi.org/10.1016/j.mset.2021.07.002>.
- **Qadiri, U.**, Pasha, A.A., Rahman, M.M., Raheem, M.A., Jameel, A.G.A., Pillai, S.N. (2021). Parametric investigation on single cylinder spark ignition engine fuelled methanol blends; Water-based micro emulsions and conventional gasoline. **International Journal of Heat and Technology**, (*IIETA*) Vol. 39, No. 3, pp. 919-924. <https://doi.org/10.18280/ijht.390327>
- Amjad Ali Pasha, Meshal Nuwaym Al-Harbi, Surfarazhussain S. Halkarni, Nazrul Islam, D. Siva Krishna Reddy, S. Nadaraja Pillai, & **Ufaith Qadiri**. (2021). CFD study of Convective Heat Transfer of Water Flow through Micro-Pipe with Mixed Constant Wall Temperature and Heat Flux Wall Boundary Conditions. *CFDLetters*, 13(7), 13–26. <https://doi.org/10.37934/cfdl.13.7.1326>
- **Qadiri, U.** (2020) ‘Performance and emission characteristics of single cylinder spark ignition engine fuelled ethanol-H₂O based micro-emulsion, blended ethanol, and CNG as an alternative fuel’, **Int. J. Vehicle Noise and Vibration**, (*InderScience*) Vol. 16, Nos. 3/4, pp.101–112. ISSN 1479-1471. 10.1504/IJVNV.2021.10040294
- **Qadiri, Ufaith**, Mohamad Marouf Wani, (2019) Performance Combustion and Emission Characteristics of 3-Cylinder SI Engine Fuelled Conventional Gasoline, Ethanol Blends, and Micro-emulsion Used as an Alternative Fuel. *Mathematical Modelling of Engineering Problems (IIETA)* (ISSN: 2369-0739 (Print); 2369-0747. Vol. 6, No. 4, December 2019, pp. 541-549
- **Qadiri, U.**, Wani, M.M. (2019). Computational investigation on single cylinder Spark ignition engine using gasoline-propane in dual fuel mode. **International Journal of Heat and Technology**, Vol.37, No.2, pp.457465. <https://doi.org/10.18280/ijht.370211>

- **Ufaith Qadri** and M.Marouf Wani. (2019) “Experimental Investigation on Multi-Cylinder SI engine fuelled Conventional Gasoline, Ethanol blends, and Micro-emulsion as an Alternative fuel”. *Mathematical Modelling of Engineering Problems* (ISSN: 2369-0739 (Print); 2369-0747
- **Ufaith Qadri** and M.Marouf Wani. “Computational Parametric Investigation on Single Cylinder SI Engine using LPG and Gasoline in Dual Fuel Mode under Constant Speed & Varying Load” *Elixir Thermal Engg.* 85 (2015) 34533-34537.
- **Ufaith Qadri** and M.Marouf Wani. “Parametric Computational Investigation on Single Cylinder SI Engine Fitted to Generator Using dual fuel under Constant Speed and Varying Compression Ratio” *Elixir Mech. Engg.* 83 (2015) 33115-33119.
- **Ufaith Qadri** and M.Marouf Wani. “Computational and Parametric Investigation on Single Cylinder SI Engine Based Generator to Improve Its Performance and Emission Characteristics as Per the Future Emission Norm” *International Journal of I.C. Engines and Gas Turbines* 2 (2016) 1-10.
- **Ufaith Qadri** and M.Marouf Wani. “Comparative Parametric Investigation of Alkanes (CH₄, C₃H₈, C₄H₁₀) and Gasoline (C₈H₁₈) on Single Cylinder SI Engine to improve its Performance and Emission Characteristics” *Journal of Petroleum Engineering & Technology* 8 (2018) 1-10. ISSN: 2231-1785.
- **Ufaith Qadri** and M.Marouf Wani. “Parametric Investigation on Single cylinder Spark Ignition engine using Alternative fuel micro-emulsions and Conventional Gasoline” *International Journal of Engineering Research and Advanced Development* 4 (2018) 132-145.
- **Ufaith Qadri** and M.Marouf Wani. “Comparative Parametric and Emission Characteristics of Single Cylinder Spark Ignition Engine Using Gasoline, Ethanol, and H₂O as Micro Emulsion Fuels” *International Journal of Mechanical and Mechatronics Engineering* 11 (2017) 1830-1838
- **Ufaith Qadri** and M.Marouf Wani. “Computational Parametric Investigation on Single Cylinder Spark Ignition Engine using Blends of Gasoline-Ethanol-H₂O Micro Emulsions under Varying Percentage Load” *Research & Reviews: Journal of Engineering and Technology* 7 (2018) 30-38. E-ISSN: 2319-9873.
- **Ufaith Qadri** and M.Marouf Wani. “Performance and Emission Characteristics of Single Cylinder Spark Ignition Engine fuelled Gasoline-Propane with Varying Percentage Load and Varying Compression Ratio” *International Journal on Power Engineering and Energy* ISSN Print (2314 – 7318)

Patents Published

- **AN AUTO FAULT NOTIFICATION SYSTEM FOR A HYDROGEN FUEL ASSEMBLY FOR A DRONE SYSTEM. (Sep 2022)**
- **COMPRESSED AIR PRODUCTION AND ENERGY GENERATION USING VEHICLE SUSPENSION. (Sep 2022)**

Book Chapters

Experimental investigation of Micro-emulsions and Ethanol blends in PFI and GDI engines in Book Entitled **“Waste Recovery and Management: An Approach toward Sustainable Development Goals”** (CRC Press Taylor & Francis) Oct 2023.

Conferences

1. Poster presentation on “Computational and Parametric Investigation on Single Cylinder SI Engine Based Generator to improve its Performance and Emission Characteristics as per the Future Emission Norms” in *International Conference on Nanotechnology for better Living* held at NIT Srinagar Kashmir (25-29 May, 2016)

Seminar/ Workshops/Sttp/FDP

1. Presented a paper on “Performance and emission characteristics of SI engine” in a 3-day Workshop on “Physics in 21st Century” at Cluster University Srinagar, India (Oct 4-6, 2017).
2. INSPIRE programme by Department of Science and Technology (DST) at NIT Srinagar, Kashmir, India (Dec 26-30, 2017)
3. Short term course on “Transport Process” by Chemical Engineering Department, NIT Srinagar, India (Feb 20-24, 2018)
4. Conducted various Sttp/FDP in RGM College of Engineering and Technology.2021
5. Have given one FDP Presentation on Recent Trends in IC Engines and received an honorary amount of RS 6000 INR.

Presentations

Computational Parametric Investigation on Single Cylinder SI Engine using LPG and Gasoline in Dual Fuel Mode under Constant Speed & Varying Load

Parametric Computational Investigation on Single Cylinder SI Engine Fitted to Generator using dual fuel under Constant Speed and Varying Compression Ratio

Computational and Parametric Investigation on Single Cylinder SI Engine Based Generator to Improve its Performance and Emission Characteristics as Per the Future Emission Norms.

References

1. **Name:** Dr M Marouf Wani

Designation: Professor (Mechanical Engg Dept. NIT Srinagar, India)

Specialization: Internal combustion engines.

Email: maroufwani@yahoo.com

2. **Name:** Dr. Afkham Mir

Designation: Assistant Professor (Chemical Engg, BITS Pilani Hyderabad India)

Specialization: Material Science

Email: mirafkham@gmail.com

3. **Name:** Dr Babar Ahmad

Designation: Professor (Mechanical Engineering Department)

Specialization: MEMS

Email: babar@nitsri.ac.in

Cover Letter

Dear Madam/Sir,

I am Ph.D. in Mechanical Engineering with specializations in **Thermal Engineering / (IC Engines, Alternative Fuels)**. National Institute of Technology Srinagar India. I have received my PhD degree on May 2019. Now I am writing research papers based on my work. My interest lies broadly in the area of Internal Combustion Engines, Engine Simulation, and Experimental work. More specifically, during my doctoral studies I have worked on modelling, Simulation, and Experimental techniques for performance and emission characteristics of IC Engines. Furthermore, I have extensive hands on experience in Thermodynamics, AVL Boost, Ansys and various Experimental Investigations. For my dissertation, I have worked on **“Computational and experimental Investigation with Alternative Fuels on a Spark Ignition Engine to improve its Emission Characteristics and Performance”**. In this direction, during the last couple of years I have published papers in various International peer

reviewed journals, like **Chinese Journal of Aeronautics (SCI) Q1(Elsevier)**, **Environmental Advances, (Elsevier) Q1**, **Cleaner Chemical Engineering (Elsevier)**, **Materials Science for Energy Technologies (Elsevier)**, **International Journal of vehicle Noise and Vibration (Inder science)**, **International Journal of Heat and Technology, Elsevier (IIETA)**, **Mathematical Modelling of Engineering Problems Elsevier (IIETA)**, **International journal of I C engines and Gas Turbines**, **Journal of Petroleum Engineering & Technology**, and some papers are under review process in various International Peer Reviewed Journals. Moreover, I have few more papers in submission and in preparation. Each of the above work describes a complete and practical approach that significantly improves the current state of the art. Before joining PhD, I received my 2 year Master of Technology degree in **Mechanical System Design** from National Institute of Technology, Srinagar in 2012. Throughout my stay at NIT I have tried to maintain a steady grade point average (GPA). I worked as Assistant professor in Dronacharya college of Engineering & Technology India. I have taught various under graduate level students in the department of mechanical engineering. I have also worked in SSM College of Engineering as Assistant Professor after I submitted my PhD thesis. I am presently working as Assistant Professor at Sreenidhi University Hyderabad, India. I am interested in getting a full-time position as faculty. I shall consider myself privileged if I get an opportunity to work at your College/University and I trust that I will be able to contribute my best. Attached above you will find my CV. I look forward to receiving your reply.

Research Statement & Teaching Philosophy

I am keeping it brief; I am **PhD** in Mechanical Engineering from National Institute of Technology Srinagar India. I defended my PhD thesis on **23 May 2019**. My interest lies broadly in the area of Internal Combustion Engines, Engine Simulation, and Experimental work of Turbo machinery and Test beds. More specifically, during my Doctoral studies I have worked on modelling, Simulation, and Experimental techniques for performance and emission characteristics of IC Engines. Furthermore, I have extensive hands on experience in Thermodynamics, AVL Boost, Ansys and various Experimental Investigations. For my dissertation I have worked on **“Computational and Experimental Investigation on a Spark**

Ignition engine with Alternative Fuels to improve its Emission Characteristics & Performance”

I am applying for the Assistant Professor/Associate Professor in the Department of Mechanical Engineering. I have received my Doctorate on May 2019 and I am presently working as Assistant Professor in Mechanical Engineering Department in Sreenidhi University Hyderabad India. I am also presently writing Research Papers and conduct research on state of the Art technology Hydrogen fuel for net zero emissions and submitting them to International peer reviewed Journals for publications. I already possess the Master of Technology in Mechanical system design, in 2012, and have completed my Bachelor of Engineering in Mechanical engineering in the year 2009. I have the experience of Assistant professor in mechanical engineering in Dronacharya college of Engineering & Technology Greater Noida India, SSM College of Engineering, BS Abdur Rahman institute of science and Technology, RGM college of Engineering and Technology. I have also worked as the junior Engineer in ID cards smart pvt ltd Bangalore India. I have 6 years of research experience in the field of Mechanical Engineering (Internal Combustion engines) on single cylinder and multi cylinder Spark Ignition engines and 5 years of Teaching experience. Out of which 4 years are post PhD.