# Mohd. Tousif

(Male, Unmarried, DOB: 05/12/1992, Indian)

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## **Educational Qualifications**

Doctoral Study (Thesis about to submit)

Aug'16 - Current

Ph.D. in Mechanical Engineering, Indian Institute of Technology Madras, Chennai, India (Course work CGPA-8.8).

**Proposed Thesis:** Numerical study of interaction of Pulverized coal particles with methane-air flames.

Areas of specialization: Coal dust, Laminar flame speed, Devolatilization, Discrete Phase Modeling.

The thesis work has been financially supported in the form of **HTRA Fellowship** from the Ministry of Education, Government of India.

> P.G Study Aug'13-June'15

M. Tech. in Mechanical Engineering, Aligarh Muslim University, Aligarh, India. First class with distinction (CGPA-9.05).

Thesis: Computation of Heat Losses in inclined tubular solar collectors.

**Areas of specialization**: Thermal Engineering, Solar energy, Coding in C++, Advanced Heat Transfer, CFD.

The dissertation work has been completed with financial support in the form of **Fellowship** from the University Grants Commission, Government of India.

> U.G Study Aug'09 – July'13

B. Tech. in Mechanical Engineering, MJP Rohilkhand University, Bareilly, India. First class (CGPA- 8.02).

**Project:** Tribological Analysis of Friction and Wear in Cutting Tool Materials.

**Areas of specialization**: Mechanics of Solids, Fluid Mechanics, Thermodynamics, Machine Design, Production Technology, Industrial Engineering.

#### **Achievements/Distinctions**

- Qualified Graduate Aptitude Test in Engineering (GATE) in Mechanical Engineering: 2013, Department of Higher Education, Ministry of Human Resource Development (MHRD), Government of India, Percentile: 99.65.
- Qualified National Eligibility Test (NET) 2018 conducted by University Grants Commission, New Delhi, India for determining the eligibility of Indian nationals for the eligibility of Assistant Professorship, Junior Research Fellowship or both, for Indian universities and colleges.

### **Publication Details**

- Mohd. Tousif, A Harish, S Muthukumaran, V Ragahavan, Numerical study of interaction of coal dust with premixed fuel-lean methane-air flames, **Advanced Powder Technology**, September 2020.
- Mohd Tousif, S Muthukumaran, V Raghavan, Numerical study of the effects of preheated methane-air flames on entrained coal particles, **Powder Technology**, 2021 (manuscript ready for submission).

## Internship/industrial training experience

Research Design and Standards Organisation (RDSO), Lucknow
Industrial Training on 'Diesel Engine' at Engine Development Directorate of RDSO.

June'12 – July'12

> TATA Steels-Jamshedpur
Part time Project Associate –IIT Madras

Oct'19 - Nov'19

## **Conference Attended:**

- 1. Paper presentation, Asia Pacific Conference on Combustion, **ASPACC-2019** "Numerical Study of the effects of addition of coal particles on the characteristics of Lean Methane-air premixed flames", **Japan.** 2019
- 2. Paper Presentation, International Conference on "Innovative Research in Mechanical Engineering, Automotive and Aerospace Technology (MEAT-2016)" organised by Krishi Sanskriti, at JNU, New Delhi.
- Paper Presentation, National Conference on "Mechanical Engineering- Ideas, Innovations & Initiatives (NCMEI3-2016)" under DST-PURSE &TEQIP-II at AMU, Aligarh.

  2016

#### **Workshop Attended**

- Successfully completed the AI4Students workshop 'A course in Data Science, Machine Learning and Artificial Intelligence conceived by The MAX powered by Microsoft and Cloudthat.

  2021
- 2. Attended the National Workshop on 'Solid Waste Management' conducted by DRIIV, New Delhi.
- 3. Participated in webinar on 'E-Mobility and solar charging for E-Mobility' conducted by IEEE student chapter of Chouksey Engineering College.

2021

- **4.** Participated in Science Leadership Workshop organised by Central University of Punjab, Bhatinda. **2020**
- 5. Participated in five day online Faculty Development Program on 'Energy Conservation and Renewable Energy', conducted by school of Engineering & Technology, IGNOU, New Delhi.
- Participated in one week STTP Program on 'Personality Development with Yoga' sponsored by Yoga Vidya Gurukul, Nashik.
- Participated in the International webinar on 'Design Thinking and Innovation in Engineering & Technology' organised by TEOIP-III.
- Participated in Global Initiative of Academic Network (GIAN) course on 'Combustion and Engines' conducted by IIT Madras in collaboration with MHRD, GoI.
- 9. Attended workshop conducted by IIT Madras on Micro Nano Fluidics and Engineering. 2016

## **Certification**

- Received 1<sup>st</sup> prize in essay competition organized by IIT Madras on the topic 'Ethics and positive behavior in educational institutions'.

  2021
- 2. Participated in two day short course on OPENFOAM at IIT Madras, conducted by Marine Technology Society. 2019
- 3. Certificate of Excellence for RIO+24 War & Peace, issued by ICUN, Mumbai. 2018

#### **Scholar ID:**

**1.** Orcid ID : <a href="https://orcid.org/0000-0001-5892-5872">https://orcid.org/0000-0001-5892-5872</a>

2. Linkedin Id : <a href="https://www.linkedin.com/in/mohd-tousif-45b686b0">https://www.linkedin.com/in/mohd-tousif-45b686b0</a>

## **Journal Review:**

1. Safety in Extreme Environments Review (Springer nature journal)

#### **Skills & Competencies**

- 1. Software ANSYS Fluent, CPFD BARRACUDA
- 2. Open Source OpenFoam
- 3. Tools MATLAB, ImageJ
- 4. Languages C++, FORTRAN
- 5. **Teaching skill:** Worked as Teaching Assistant for the UG and PG courses and labs taught at IIT Madras. 2017-2021

## **Academic References**

#### Dr. V. raghavan

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IIT Madras, India

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### Dr. Naiem Akhtar

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