

DR. AKRAM MOHAMMAD

Assistant Professor, Aeronautical Engineering Dept., King Abdulaziz University

Education

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Aerospace Engineering	IIT Bombay, India	2013
MS	Mechanical Engineering	VJTI Mumbai, India	2008
BS	Mechanical Engineering	Dr. BAM University, India	2005

Academic Experience

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part Time</i>
2013	2014	Tohoku University, Japan	Post-Doctoral Researcher		Full Time

Non Academic Industrial Experience(*including Consultations*)

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full or Part Time</i>
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Funded Research Projects and Patents from the Past Five Years

1. *Development of Micro Scale Combustors*, Department of Science and Technology (DST), India, 2009-13.
2. *Flame dynamics inside small scale combustors* in collaboration with Far Eastern federal University (FEFU), Vladivostok, Russia and IIT Bombay, 2012.
3. *Development of reduced/skeletal mechanism required for turbulent combustion simulation*, IHI Tohoku university collaborative project, Japan, 2013-14.
4. *Laser induced fluorescence diagnostic and modelling of methane-air flames*, Tohoku University, Japan, 2013-2014.

Certifications and Professional Registrations

Current Membership in Professional Societies and Organizations

<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.		

Honours and Awards

1. "Award for Excellence in Thesis Work" from IIT Bombay (51st Convocation 2013).
2. Consecutive win "The Research Person of the Year" award from Aerospace engineering dept. IIT Bombay (2011, 2012).
3. 6th ENRTIA Award for "Renewable and Sustainable Energy" (Group, 2012).
4. College 1st rank in B. E. (Mechanical Engineering) from Dr. BAMU (2005).
5. National merit scholarship holder (1996).

Institutional and Professional Services (*administration, committees, units, etc.*)

1.

Principal Publications/Presentations from the Past Five Years

1. Santosh K. Paidi, Bhavaraju Amrutha, Mohammad Akram, Sudarshan Kumar, Effect of N₂/CO₂ dilution on laminar burning velocity of H₂-air mixtures at high temperatures, International Journal of Hydrogen Energy, 38, 13812-13821, October 2013. Impact Factor (IF) 4.054
2. Mohammad Akram, Priyank Saxena, and Sudarshan Kumar, Experimental and computational determination of laminar burning velocity of LPG-air mixture at elevated temperatures, ASME Journal of Engineering for Gas Turbines and Power, 135 (9), 091501, August 2013. IF 0.679
3. Mohammad Akram, Priyank Saxena, and Sudarshan Kumar, Laminar burning velocity of methane-air mixtures at elevated temperatures, Energy and Fuels, 27, 3460–3466, May 2013. IF 2.853
4. Mohammad Akram, V. R. Kishore and Sudarshan Kumar, Laminar burning velocity of propane/CO₂/N₂-Air mixtures at elevated temperatures, Energy and Fuels, 26, 5509-5518, August 2012. IF 2.44
5. Mohammad Akram and Sudarshan Kumar, Measurement of laminar burning velocity of liquefied petroleum gas air mixtures at elevated temperatures, Energy and Fuels, 26, 3267-3274, June 2012. IF 2.44
6. Mohammad Akram, Sergey Minaev and Sudarshan Kumar, Investigations on the formation of planar flames in meso scale divergent channels and prediction of burning velocity at high temperatures, Combustion Science and Technology, 85, 645-661, March 2013. IF 0.857
7. Mohammad Akram and Sudarshan Kumar, Experimental studies on dynamics of methane-air premixed flames in meso scale diverging channels, Combustion and Flame, 158, 915-24, May 2011. IF 2.747
8. Mohammad Akram and S. Kumar, On the variation of laminar burning velocity temperature exponent, 24th ICDERS, Taipei, Taiwan (2013)
9. S. Paidi, B. Amrutha, Mohammad Akram and S. Kumar, Laminar burning velocity of H₂-N₂/CO₂-air mixtures at elevated temperatures, 24th ICDERS, Taipei, Taiwan (2013)
10. Mohammad Akram and S. Kumar, Laminar burning velocity of hydrocarbon fuels, 9th ASPACC, Gyangju, South Korea (2013).
11. Mohammad Akram and S. Kumar, Measurement of laminar burning velocity of liquefied petroleum gas air mixtures at elevated temperatures, ASME GTI2012, India (2012).
12. Mohammad Akram and S. Kumar, Determination of laminar burning velocity of LPG air mixtures at high temperatures using meso-scale diverging channels, 3rd ICAER, IITB, India (2011).
13. Mohammad Akram, R. Fursenko, S. Minaev and S. Kumar, Flame propagation in diverging micro-channels, 8th ICFD, Tohoku University, Sendai, Japan (2011)
14. Mohammad Akram and S. Kumar, Experimental studies on dynamics of methane-air premixed flame in different aspect ratio channels, 23rd ICDERS, Irvine, USA (2011)
15. Mohammad Akram and S. Kumar, Flame dynamics in meso scale diverging channels, 8th ASPACC, Hyderabad, India (2010).

Recent Professional Development Activities (*Workshops, training, etc.*)

1.

2.