# Dr. Bader Almansour

## Assistant Professor of Automotive and Marine Engineering Technology

**Education:**

2004, B.Sc., Kuwait University, Mechanical Engineering, Kuwait
2010, M.Sc., University of Leeds, Automotive Engineering, UK
2015, M.Sc., University of Central Florida, Mechanical Engineering, USA
2018, Ph.D., University of Central Florida, Mechanical Engineering, USA

**Number of years of service on this faculty:**

One Year
2018 - Present Assistant Professor of Automotive and Marine Engineering Technology.

**Other related experience:**

2005 to 2008, Engineer, Mechanical Design Dept., Kuwait National Petroleum Company, Kuwait.
2010 to 2013, Teaching Assistant, Faculty of Technological studies, Kuwait.
2016 to 2017, Research Assistant, Distributed Energy Research Center, Argonne National Laboratory, IL.

**Teaching interests:**

Fluid Mechanics, Thermodynamics, Heat Transfer, Internal Combustion Engines, Diesel Fuel Injection Systems, Applied Mechanics, Automotive Engines Technology, Gasoline Injection Systems, Automotive Technical Drawing.

**Courses taught at PAAET:**

Automotive Technical Drawing, Thermodynamics, Internal Combustion Engines, Diesel Fuel Injection Systems, Car Mechanics.

**Research interests:**

Internal Combustion Engines, Alternative Fuels, Laser & Prechamber Ignition Systems, Flame Speed Measurements, Lean Burn Natural Gas Engines.

**Principal publications of last five years:**

1. B. Almansour, S. Vasu, S. Gupta, Q. Wang, R. Van Leeuwen, C. Ghosh, "Performance of a Laser Ignited Multi-Cylinder Lean Burn Natural Gas Engine", Journal of Engineering for Gas Turbines and Power, 2017, 139(11), 111501.
2. B. Almansour, S. Vasu, S. Gupta, Q. Wang, R. Van Leeuwen, C. Ghosh, "Prechamber equipped laser ignition (PCLI) for improved performance in natural gas engines", Journal of Engineering for Gas Turbines and Power, 139(10), 101501.
3. B. Almansour, S. Alawadhi, S. Vasu, "Laminar burning velocity measurements in DIPK-an advanced biofuel", SAE International Journal of Fuels and Lubricants, SAE Paper No:2017-01-0863, 10(2):2017.
4. Bader Almansour, Sami Alawadhi, Subith S. Vasu, “Comparison of Laser and Spark Ignition: Laminar Burning Velocity Measurements in Natural Gas/air Mixtures”, The 4th Laser Ignition Conference 2016, Yokohama, Japan, May 2016.
5. Bader Almansour, Joseph Lopez, Luke Thompson, Ghazal Barari, Subith S. Vasu, “Laser Ignition and Flame Speed Measurements in Oxy-Methane Mixtures Diluted With CO2”, ASME Energy Resources Technology (ISSN 0195-0738).
6. Bader Almansour, Joseph Lopez, Luke Thompson, Ghazal Barari, Subith S. Vasu, “Ignition and Flame Propagation in Oxy-Methane Mixtures Diluted with CO2”, Proceedings of the ASME Turbo Expo 2015, Montreal, QC, paper no: GT2015-43355.
7. Bader Almansour, Luke Thompson, Joseph Lopez, Leonid Glebov, Subith S. Vasu, “Fundamental Laser Ignition and burning velocity Studies of Hydrocarbon Fuels”, presented at the 3rd Laser Ignition Conference 2015, Argonne National Lab, April 27-30 2015.

**Scientific and professional societies of which a member:**

1. Society of Automotive Engineers.
2. American Society of Mechanical Engineers.

**Honors and awards:**

- Best Student Paper Award, The 3rd Laser Ignition Conference (2015)
- Young Engineer ASME Turbo Expo Travel Award (2015)

**Institutional service in last five years:**

**Professional service in last five years:**

**Professional development activities in last five years:**

1. Attended “SAE World Congress Experience” Conference, Cobo Center, 4–6 April 2017 & 10–12 April 2018, in Detroit, United States.
2. Attended the “Spring Technical Meeting, Eastern States Section of the Combustion Institute” Conference, 13-16 March 2016, in Princeton, NJ.
3. Attending the “3rd Laser IgnitionConference”, Argonne National Laboratory, 27-30 April 2015, IL.
4. Attending the “Proceedings of the ASME Turbo Expo 2015” Conference, Palais des Congres, 15-19 June 2015, Montreal, Canada.
5. Joined the “2014 Princeton-Combustion Institute Summer School on Combustion”,22-26 June 2014, in Princeton, NJ.