

## **AMR IBRAHIM**

### **1. Name and academic rank**

Amr Ibrahim, Associate Professor, full time.

### **2. Education – degree, discipline, institution, year**

- Ph.D., Mechanical Engineering, University of South Australia, Australia, August 2009.
- M.S., Mechanical Engineering, Alexandria University, Egypt, July 2004.
- B.S., Mechanical Engineering, Degree of Honor, Alexandria University, June 2000.

### **3. Academic and Professional experience**

#### **3.1 Academic experience**

- Beirut Arab University, Lebanon, Associate Professor, Fall 2016-present, full time.
- Alexandria University, Egypt, Assistant Professor, 2009-2016, full time.
- Practical Supervisor, Workshop Coordinator, and Marker, University of South Australia, 2006-2009, part time.
- Tutor at the Department of Mechanical Engineering, Alexandria University, full time, 2000-2006, full time.

#### **3.2 Professional experience**

- Engineering Center for Consultancy, Alexandria University, 2000-2016, part time

### **4. Professional credentials, certificates, or licensing**

Egyptian Engineers Syndicate, member since 2000

ASME member

### **5. Professional development activities**

- Participated in ASME & AEE seminars and workshops
- Research interests

### **6. Contribution to the discipline**

#### **6.1 Recent Service activities**

- Member of BAU Faculty of Engineering Research Committee
- Mechanical Engineering lab coordinator
- Mechanical Engineering internship advisor
- Mechanical Engineering postgraduate advisor
- Reviewer for several international scientific journals.

## 6.2 Publications

### Journal Publications:

- Youssef A., and Ibrahim A., “A numerical investigation on enhancing the performance of a diesel engine fuelled with diesel-biodiesel blend using a diethyl ether as an additive”, *Journal of Engineering Reports*, in press, accepted on 28/4/2024, e12915. <http://doi.org/10.1002/eng2.12915> , John Wiley & Sons.
- Youssef A., and Ibrahim A., “An experimental evaluation for the performance of a single cylinder CI engine fueled by a Diesel-Biodiesel blend with alcohols and Zinc-Aluminate nanoparticles as additives”, *Journal of Materials Today: Proceedings*, in press, accepted on 5/4/2024, <https://doi.org/10.1016/j.matpr.2024.04.015>, Elsevier.
- Ibrahim A., “Optimizing a spark-ignition engine fuelled with methane using a two zone combustion model”, *Journal of Energy Storage and Saving*, vol 1, pp272-283, 2022, Elsevier.
- Ibrahim A., “An Experimental Study on Using Diethyl ether in a diesel engine operated with diesel-biodiesel fuel blend”, *Engineering Science and Technology, an International Journal*, vol 21, pp1024-1033, 2018, Elsevier.
- Ibrahim A., “Investigating the effect of using diethyl ether as a fuel additive on diesel engine performance and combustion”, *Journal of Applied Thermal Engineering*, vol 107, pp 853-862, 2016, Elsevier.
- Bassiony M.A., Ibrahim A., El-Kassaby M.M., “An experimental study on the effect of using gas-to-liquid (GTL) fuel on diesel engine performance and emissions”, *Alexandria Engineering Journal*, vol 55, pp 2115-2124, , 2016, Elsevier.
- Ibrahim A., “Performance and combustion characteristics of a diesel engine fuelled by butanol-biodiesel-diesel blends”, *Journal of Applied Thermal Engineering*, vol 103, pp 651-659, 2016, Elsevier.
- El-Adawy M., Ibrahim A., El-Kassaby M.M., “An Experimental Evaluation of Using Waste Cooking Oil Biodiesel in a Diesel Engine”, *Journal of Energy Technology*, vol 1, No. 12, pp 726-734, 2013, John Wiley & Sons.
- Ibrahim A., El-Adawy M., El-Kassaby M.M., “The Impact of Changing the Compression Ratio on the Performance of an Engine Fuelled by Biodiesel Blends”, *Journal of Energy Technology*, vol 1, No. 7, pp 395-404, 2013, John Wiley & Sons.

- Ibrahim A. ,”An Investigation on the Use of EGR in a Natural Gas SI Engine”, Journal and Proceedings of the Royal Society of New South Wales, vol 142, no. 3-4, 2011.
- Ibrahim A. and Bari S., “An Experimental Investigation on the Use of EGR in a Supercharged Natural Gas SI Engine”, Journal of Fuel, vol 89, pp 1721-1730, 2010, Elsevier.
- Ibrahim A. and Bari S., “Effect of Varying Compression Ratio on a Natural Gas SI Engine Performance in the Presence of EGR”, Journal of Energy & Fuels, vol 23, pp 4949-4956, 2009, ACS Publications, American Chemical Society.
- Ibrahim A. and Bari S., “ A Comparison between EGR and Lean-Burn Strategies Employed in a Natural Gas SI Engine Using a Two-Zone Combustion Model”, Journal of Energy Conversion and Management, vol 50, pp 3129-3139, 2009, Elsevier.
- Ibrahim A. and Bari S., “ Optimizing a Natural Gas SI Engine Employing EGR Strategy Using a Two-Zone Combustion Model”, Journal of Fuel, vol 87, pp 1824-1834, 2008, Elsevier.
- Ibrahim A., El-Kassaby M., Osman M., and Hanafy M., “ A Theoretical Investigation on the Effect of EGR vs. Excess Air on SI Engine Performance”, Alexandria Engineering Journal, vol 45, No. 2, 2006, Elsevier.

#### **International Conference Proceedings:**

- Youssef A. and Ibrahim A., ”An Experimental Evaluation for the Performance of a Single Cylinder CI Engine Fuelled by a Diesel-Biodiesel Blend with Alcohols and Zinc-Aluminate Nanoparticles as Additives”, The 3<sup>rd</sup> International Conference on Materials Science & Engineering, ICMSE 2023, Department of Mechanical Engineering, National Institute of Technology Jalandhar, India, 23-25 November 2023.
- Ibrahim A., Bari S., and Bruno F., “ A Study on EGR Utilization in Natural Gas SI Engines Using a Two-Zone Combustion Model”, Society of Automotive Engineers, SAE paper no. 2007-01-2041, Kyoto, Japan, 2007.
- Ibrahim A. and Bari S., “A Theoretical Investigation on Using EGR in Natural Gas SI Engines”, Proceedings of the International Conference on Mechanical Engineering, 29-31 December, 2007, Dhaka, Bangladesh.