

Mohy S. Mansour

PERSONAL INFORMATION

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ACADEMIC RANK

Professor, Mechanical Engineering department, The American University in Cairo

DEGREES

B.Sc. Mechanical Engineering, Cairo University, Giza Egypt, 1981
M.Sc. Mechanical Engineering, Cairo University, Giza Egypt, 1985
Ph.D. Mechanical Engineering, Sydney University, Sydney Australia, 1990

YEARS OF SERVICE AT AUC

2012 - Present Full time Professor - Mechanical Engineering Department
2005 - 2012 Part-time Professor - Mechanical Engineering Department
2002 - 2005 Full time Professor - Mechanical Engineering Department
1999 - 2002 Full time Associate Professor - Mechanical Engineering Department

OTHER RELATED EXPERIENCE:

Academic:

2002 - Present Professor Mechanical Engineering Department Cairo University
2010 - 2011 Vice-President BeniSuef University for Students and Educational Affairs
2009 - 2010 Dean Faculty of Engineering BeniSuef University - Egypt
2005 - 2008 Dean National Institute of Laser Enhanced Sciences, NILES-Cairo University
2003 - 2005 Chair, Engineering Applications of Lasers department, NILES-Cairo University
1997 - 2002 Associate Professor Mechanical Engineering Department Cairo University
1992 - 1997 Lecturer Mechanical Engineering Department Cairo University

Consulting:

1990 - present Mechanical Power Engineering works - Laser diagnostics and design

COURSES TAUGHT at AUC:

ENGR 261, Fundamentals of Fluid Mechanics
MENG 361, Fundamentals of Thermodynamics
MENG 362, Applied Fluid Mechanics
MENG 364, Fundamentals of Thermofluids
MENG 365, Applied Thermodynamics
MENG 466, Heat Transfer
MENG 412, Power Plant Technology
MENG 415, Internal Combustion Engines
MENG 490, Thesis I
MENG 491, Thesis II
MENG 512, Experimental Methods in Engineering
MENG 573, Cogeneration and Energy Storage

PRINCIPAL PUBLICATIONS IN LAST FIVE YEARS:

Total publications: 98 papers, Citations 1444, h-index: 19, i10-index: 32 (Google scholar; August 2016); Citations 1036, h-index: 17 (Scopus; July 2017)

Selected Journal Papers during the last five years

- E. Baudoin, X.S. Bai, B. Yan, C. Liu, A. Lantz, S.M. Hosseini, B. Li, A. Elbaz, M. Sami, Z.S. Li, R. Collin, G. Chen, L. Fuchs, M. Aldén, M.S. Mansour, "Effect of partial premixing on stabilization and local extinction of turbulent methane/air flames", The Seventh Mediterranean Combustion Symposium, Italy, 2011, Flow Turbulence Combust DOI 10.1007/s10494-012-9414-z (2012). Volume 90, Issue 2, March 2013, Pages 269-284
- M.S. Mansour, A. Elbaz, M. Samy, "The stabilization mechanism of highly stabilized partially premixed flames in a concentric flow conical nozzle burner", The Seventh Mediterranean Combustion Symposium, Italy, 2011, Experimental Thermal and Fluid Sciences, 43, pp. 55-62 (2012)

- M. Mansour, H. Imam, K. Elsayed, A. Elbaz, W. Abbass, " The Application of Laser Induced Breakdown Spectroscopy for Quantitative Mixture Fraction Measurements in Combustion Systems " The Fifth International Energy, Exergy and Environmental Symposium, Luxor, Egypt (2011)
- Mohy Mansour, Dina El-Din Mostafa, Ayman Elbaz, Khaled Abdesabour, Tarek Echehki, " An experimental Study of the Effect of Partial Premixing Level on the Interaction Between the Flame Kernel and Flow Field" The Fifth International Energy, Exergy and Environmental Symposium, Luxor, Egypt (2011)
- A.M. Soliman, Mohy S. Mansour, Norbert Peters, Mohamed H. Morsy " Dissipation element analysis of scalar field in turbulent jet flow ", *Experimental Thermal and Fluid Sciences*, 37 (2012) 57–64.
- Khaled Elsayed, Hisham Imam, Amro Harfoosh, Yasser Hassebo, Yasser Elbaz, Mouayed Aziz, Mohy Mansour "Design and construction of Q-switched Nd:YAG laser for LIBS measurements" *Optics and Laser Technology - OPT LASER TECHNOL*, Vol 44, pp. 130-135 (2012) IF = 1.515
- M. Elbaz, Mohy Mansour, Diaaeldin Mohamed "Experimental Investigation of Flame Kernel in Turbulent Partial Premixed Flames" *AEIC*, Cairo, Dec. 2012
- Lotfia El Nadia, Salem Hegazy, Mohy S. Mansour "Enhanced Type-I Polarization-Entangled Photons for Laser Space Communication, Proceedings of the 4th International Conference MTPR-010, WSP Conf. Proc. Volume 1012, (2012)
- A.M. Elbaz, Mohy Mansour, Diaaeldin Mohamed, "Experimental Investigation of Flame Kernel in Turbulent Partial Premixed Flames" *International Journal of Applied Science (IJAS)*, Volume (3): Issue (2): pp. 21-34, (2012)
- A.M. Elbaz, Mohy Mansour, Khaled A. Elsayed and Diaaeldin Mohamed, " An Experimental Study of the Effect of Partial Premixing Level on the Interaction between the Flame Kernel and Flow Field" *International Journal of Applied Science (IJAS)*, Volume (4): Issue (1), (2013)
- Mohy Mansour, Ayman Elbaz and Mohamed Zayed, "Flame Kernel Generation and Propagation in Turbulent Partially Premixed Hydrocarbon Jet" *Combustion Science and Technology*, 186:698-711, 2014.
- Mansour, M., Imam, H., Elsayed, K.A., Elbaz, A.M., Abbass, W. "Quantitative mixture fraction measurements in combustion system via laser induced breakdown spectroscopy", *Optics Technology*, volume 65, year 2015, pp. 43-49.
- S. Kruse, E. Varea1, Ayman M. Elbaz, M. Mansour, G. Grünefeld, H. Pitsch "Simultaneous line Raman/Rayleigh measurements for mixture fraction determination in turbulent, partially premixed slot burner flames" *Proceedings of the European Combustion Meeting 2015*.
- Mansour, M.S., "Classification of the Mixing Field of Partially Premixed Flames Using Regime Diagram" *Combustion Science and Technology*, 188, 4-5, pp. 667-683, 2016.
- Mahmoud Moussa, A. M. Elbaz, Nahed Solouma, Mansour, M.S., "Partially Premixed Flames in a Concentric Flow Conical Nozzle Burner with Turbulence Generator" *The proceedings of the ninth Mediterranean Combustion Symposium*, Rhodes, Greece, 2015.
- A.M. Elbaz, M.F. Zayed, M. Samy, W.L. Roberts, and Mansour, M.S., "The Flow Field Structure of Highly Stabilized Partially Premixed Flames in a Concentric Flow Conical Nozzle Burner with Coflow" *Experimental Thermal and Fluid Sciences*, 73 (2016), 2-9.
- M.S. Mansour, A.M. Elbaz, W.L. Roberts, M. S. Senosy, M.F. Zayed, Mrinal Juddoo and Assaad R. Masri "Effect of the Mixing Fields on the Stability and Structure of Turbulent Partially Premixed Flames in a Concentric Flow Conical Nozzle Burner", *Combustion and Flames*, Volume 175, January 2017, Pages 180–200
- Tawfik Badawy, Mohy S. Mansour "Assessment of flame kernel propagation in partially premixed turbulent jet under different turbulence levels" *Fuel*, Volume 191, 1 March 2017, Pages 350–362.
- Mohy Mansour, Assaad Masri, Heinz Pitsch, Stephan Kruse, Mohamed Zayed, Mohamed Senosy, Mrinal Juddoo, "A Concentric Flow Slot Burner for Turbulent Flames of Partially Premixed and Inhomogeneous Mixtures of Gaseous Fuels" *10th U. S. National Combustion Meeting Organized by the Eastern States Section of the Combustion Institute*, April 23-26, 2017, College Park, Maryland
- A.M. Elbaz, M.S. Senosy, M.F. Zayed, W.L. Roberts, and M.S. Mansour "Highly Stabilized Partially Premixed Propane Flames in a Concentric Flow Conical Nozzle Burner with Coflow" *the tenth Mediterranean Combustion Symposium*, Naples, Italy, 2017

- S. Kruse, M.S. Mansour, E. Varea, G. Grünefeld, J. Beeckmann and H. Pitsch “Evaluation of partially premixed flame stability from mixture fraction statistics in a turbulent slot burner” the tenth Mediterranean Combustion Symposium, Naples, Italy, 2017

SCIENTIFIC AND PROFESSIONAL SOCIETIES:

- Member of the scientific council of the International Center for Heat and Mass Transfer “ICHMT”
- Combustion Institute, USA (International)
- Co-chairing the Mediterranean Combustion Symposium
- Chair of the International Exergy, Energy, and Environmental Symposium (IEEEES-5)
- Member at the Supreme Council of Universities – Egypt - Committee on Engineering Studies Sector
- Former Member at the Supreme Council of Universities – Egypt - Committee on Fundamental Sciences Sector (2005-2008)
- Syndicate of Engineers, Egypt
- Syndicate of Educational Careers, Egypt
- Invited external member of NILES council – Cairo university (period 2003-2005)
- Former member of the supreme council of antiquities [2007-2008]

HONORS AND AWARDS:

- Egyptian National Prize of Encourage in Engineering Sciences (1997).
- Sharing award with Dr. J-Y- Cheng for young researchers in *First Asia-Pacific Conference on Combustion, Osaka, Japan, (1997)*.
- Most popular doctor at mechanical Engineering Department, the American University in Cairo, (2001).
- Garrett Turbulent Combustion award, University of Sydney, Australia [1986- 1987]
- Peter Nicol Russell Postgraduate award, University of Sydney, Australia [1987 - 1990]

National Award:

- Egyptian National Prize of Encourage in Engineering Sciences (1997).

Editor:

- 1. Experimental Thermal and Fluid Science**
Volume 43, Pages 1-104 (November 2012)
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 2. Seventh Mediterranean Combustion Symposium 2011**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 3. Eighth Mediterranean Combustion Symposium 2013**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 4. Ninth Mediterranean Combustion Symposium 2015**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 5. Combustion Science and Technology, Volume 184, 7-9, 2012**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 6. Combustion Science and Technology, Volume 186, 4-6, 2014**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 7. Combustion Science and Technology, Volume 188, 4-6, 2016**
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 8. Laser Science and Applications, 2010**
Edited by Lotfia M. El-Nadi and Mohy S. Mansour
- 9. Experimental Thermal and Fluid Science**
Volume 56, Pages 1-74 (July 2014)
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna
- 10. Experimental Thermal and Fluid Science**
Volume 73, Pages 1-74 (July 2016)
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D’Anna

