

Mohy S. Mansour

PERSONAL INFORMATION

Tel : (0202) 2615-2826

E-mail: mansourm@aucegypt.edu, mansour@niles.edu.eg

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: 101 papers, Citations 1638, h-index: 21, i10-index: 33 (Google scholar; August 2018); Citations 1195, h-index: 19 (Scopus; Aug 2018)

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
- 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. Varea, 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, *Experimental Thermal and Fluid Sciences*, 95 (2018), 2-10.
- 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, *Combustion Science and Technology*, accepted, online: <https://doi.org/10.1080/00102202.2018.1452393> in press (2018)
- Remah ElRashedy, H. Imam, Khaled Elsayed, and Mohy Mansour “Spectroscopic investigation of plasma evolution induced by double pulse laser in distilled water”, *J. Plasma Phys.* (2017), vol. 83, 905830406, Cambridge University Press 2017
- Mohy S. Mansour, Heinz Pitsch, Stephan Kruse, Mohamed F. Zayed, Mohamed S. Senosy, Mrinal Juddoo, Joachim Beeckmann, Assaad R. Masri “A Concentric Flow Slot Burner for Stabilizing Turbulent Partially Premixed Inhomogeneous Flames of Gaseous Fuels” *Experimental Thermal and Fluid Sciences*, (<https://doi.org/10.1016/j.expthermflusci.2017.10.021> , 2017), 91, 214-229, 2018.
- Tawfik Badawy, Mahmoud Hamza, Abdalqader Ahmad, Mohy S. Mansour, Abdel-Hafez H. Abdel-Hafez, Hisham Imam, “New developed burner towards stable lean turbulent partially premixed flames” *Fuel*, 220 (2018) 942-957.
- Tawfik Badawy, Mahmoud Hamza, Mohy S. Mansour, Abdel-Hafez H. Abdel-Hafez, Hisham Imam, Mohamed A. Abdel-Raheemd, Chongming Wange, Thomas Lattimore “Lean turbulent partially premixed flames equivalence ratio distributions measurements using Laser-induced breakdown spectroscopy” *Fuel*, 237, 320-334, 2019.

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
- 11. Experimental Thermal and Fluid Science**
Volume 95, (July 2018)
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D'Anna
- 12. Flow, Turbulence and Combustion**
Volume ?, (November 2018)
Edited by Nevin Selçuk, Federico Beretta, Mohy S. Mansour and Andrea D'Anna