

UNITED ARAB EMIRATES UNIVERSITY
FACULTY OF ENGINEERING – MECHANICAL ENGINEERING DEPARTMENT
Faculty Activity Summary

		Date:	November 2010	
Name:	Dr Mohamed Younes El-Saghir Selim			
Academic Rank:	Associate Professor (2002-present) Assistant Professor (1997-2002)	Mo/Yr Appointed at UAE University:	Sept. 1997	
Date of Initial UAE Univ. Appointment:	Sept. 1997			
Highest Academic Degree: (Include field, university, year)	PhD, Mechanical Engineering, Cambridge University, UK, 1992			
Special Fields and Research Interest:	Energy and Thermofluids: Renewable Fuels, Bio-fuels Combustion and Emission Control			
Address:	Dr Mohamed Younes El-Saghir Selim Associate Professor, Mechanical Engineering Department Faculty of Engineering, United Arab Emirates University P.O. Box 17555, Al-Ain, UAE Tel. (9713) - 7133566 Office, Fax (9713) - 7623158 Office Mobile: (971) 050 – 4494723, Email: Mohamed.Selim@uaeu.ac.ae Internet web site: http://www.engg.uaeu.ac.ae/mohamed.selim			

1. Academic Background

<u>Institution</u>	<u>Dates Attended</u>	<u>Major</u>	<u>Degree</u>	<u>Dates Awarded</u>
Cambridge University, UK	1989	ME	PhD	1992
Helwan University, Egypt	1986	ME	MSc	1988
Helwan University, Egypt	1980	ME	BSc	1985

2. Other

<u>Company, Firm, Agency</u>	<u>Position</u>	<u>Dates</u>
Loughborough University, UK, Mechanical Engineering Department, CFD Group	Post-Doctoral Fellow IDB Scholar	Sept. 1995 – Sept. 1996

3. Professional Activities

3.1 Scientific and Professional Societies

Member: Society of Automotive Engineers (SAE),
Member: American Society of Mechanical Engineers (ASME)
Member: SAE Journal Transaction review committee.

3.2 Professional Registration

Egyptian Society of Engineers

3.3 Honors, Prizes, and Awards (Provide year of award)

- Candidature for Eni Award in Renewable and Non-Conventional Energy, 2009.
- UAE University College of Engineering Award for Excellency in Community Services, September 2007.
- Inclusion in "Cambridge Bibliography Association" Handbook, 2007/2008
- Cambridge Commonwealth Trust & Cambridge Overseas Trust PhD Scholarship Award , 1989-1992
- "Ford of Britain" Prize for top PhD Students (monthly award), Cambridge University, Engineering Department, 1990-1992.
- Islamic Development Bank (IDB) Merit Scholarship Award for young scientists. Fellowship spent as post-doctoral fellow in the Mechanical Engineering Department, Loughborough University, UK. [the only scholarship offered to Egypt in 1995]
- Inclusion in Marquis' Who's Who in the World for the year 2005-2006
- Inclusion in Marquis' Who's Who in Science and Engineering, 2005-2006 (8th Edition)
- Inclusion in Marquis Who's Who in Science and Engineering in the 7th edition for the year (2003 / 2004).

3.4 Consulting:

- Updating one Gulf Standards for Emirates Authority for Standardization and Metrology for noise emission regulations Gulf Standards, **2009-2010**
- Updating three (3) Gulf Standards for Emirates Authority for Standardization and Metrology for light duty diesel engines emission regulations Gulf Standards 1040, 1041 and 1042, **2008-2010**
- Writing three (3) Gulf Standards for Emirates Authority for Standardization and Metrology for heavy duty diesel engines emission regulations, Gulf Standards 144, 145 and 146, **2007-2008.**
- Review and reports about NGV ISO standards done within the working team of the UAEU- Emirates Organization of Standardization [2006/2007]
- A study has been prepared to the Emirates Organization of Standardization about the emissions reduction and levels in vehicles. [2006/2007]
- A study has been prepared to the Emirates Organization of Standardization about the use of natural gas in vehicles. [2005/2006]
- A study submitted to the Ministry of Finance and Industry, Department of Standards about comparing new to old vehicles from air pollution point of view [2002]
- Working as consultant for HVAC, water distribution systems and fire fighting systems in Egypt from 1993 – 1997.

3.5 Presentations and Other

- Keynote presentation about safety standards of CNG vehicles in the UAE has been given in “NGV focus day at City Gas MENA Conference, Abu Dhabi, UAE, March 21-24, 2010”
- Presentation and review paper is written about “Safety and Inspection Standards of Beach Buggies”, has been given to Abu Dhabi General Abu Dhabi Police Authority, UAE, December 22nd, 2009.
- Presentation about "Diesel Emissions and Control" has been given to Emirates Standardization Authority, Abu Dhabi, February 2008.
- Presentation about renewable fuels for diesel engines given in Rennergex 2007 Conference, Dubai World Trade Center, February 5, 2007
- Presentation about air pollution control from vehicles given in Abu Dhabi Commerce Chamber, organized by Ministry of Economics, Consumer Protection Department, March 14, 2007
- Presentation about air pollution control from vehicles given in Abu Dhabi Commerce Chamber, organized by Emirates Standardization and Metrology Organization, December 11, 2006

4. Service Activities

(Include activities and indicate scope of involvement and responsibility, i.e., committee member, chairman, etc. Provide inclusive dates for activities.)

4.1 Department

- Creator and Coordinator of the “Energy Research Group; ERG” with a team of faculty members from ME, EE, AE and CE Departments; September 2009.
- Co-chair of Symposium on Biofuels, to be held November 2010.
- Director of Master Program in Mech. Eng., 2007-present.
- Secretary of the SEE09 Symposium, UAEU May 2009
- Secretary of the ICTEA06 Conference, UAEU January 2006
- Chair of the Energy Conference Workshops, UAEU January 2000

- Chair of the scheduling committee
- Member of the advising committee

4.2 College

- Head of Post-graduate Department Committee and member of the College Post-graduate Committee for the M.Sc & PhD program, 2008-present
- Member of College Travel Committee, 2004 – present
- Workshop given to faculty from college of law (in Arabic) about Blackboard.

4.3 University

- Member of the UAEU University Committee for HVAC Maintenance Bids evaluations [2007]
- Head of the University Receiving Committee for equipment [2004-2005]

4.4 Community

- Member of UAE Standardization Organization Committee for Vehicles [2004-present]
- Member of UAE Standardization Organization Committee for using natural gas in vehicles [2004-2007]
- Member of the GCC National Committee for Vehicle Standardization (representing the UAE University) [2002-2003]
- Member of the UAE Ministry of Finance and Industry Vehicle Standardization Committee (representing the UAE University) [2000-2003]

4.5 National and International

- Member of UAE Standardization Organization Committee for Vehicles [2004-2010]
- UAE University representative in the GCC Committee of Vehicles Standards which met in Saudi Arabic, Riyadh. [2002-2003]

EDITORSHIPS

Journal Editorships

- <http://www.academicjournals.org/JPTAF/index.htm>
- <http://www.ripublication.com/ijaer.htm> Research India Publications
- <http://www.ripublication.com/ijdf.htm> Research India Publications
- <http://ijcser.org/>

- 4.6 Reviewer or evaluator for journals, publishers, research or accreditation agencies (include years served)
- Technical revision of many technical papers submitted to the Journal of "Fuel", "Energy and Fuels", IMechE, Renewable Energy, Int J. Sustainable Energy, IJFD Journal [2000-2010].
 - Technical revision of many technical papers submitted to the Transactions of Society of Automotive Engineers (SAE Journal) [2000-2005]
 - Technical revision of a technical paper for the 2005 ASME Heat Transfer Conference, July 17-22, San Francisco, CA, USA [2005]
 - Technical revision of 2 technical papers for the International Journal of Environment and Pollution (IJEP). [2005]
 - Acting as Associate Editor for the Int. Journal of Dynamics of Fluids.[2004-present]
 - Acting as Editorial board Member of IJAER (International Journal of Applied Engineering Research (IJAER)) [2006-present].
 - Revision of two technical papers for the ASME International Conference, ICE Divisions, April 1999.
 - Revision of three technical papers for the UAE University Engineering Journal [2002]
 - Refereeing paper submitted to Journal of King Saud University, Engineering Sciences [2002]
 - Refereeing paper submitted to Journal of Indian Academy of Sciences, Sadhana Journal of Engineering [2002-2003]
 - Technical revision of many technical papers submitted to the *Int. Journal of Dynamics of Fluids*, 2005/2006.
 - Technical revision of technical papers submitted to the *Fuel* Journal, Sept. 2005.
 - Technical revision of paper submitted to *Energy and Fuels*, February 2006.
 - Technical revision of paper submitted to *International Journal of Thermal Sciences*, February 2006.

5. M.Sc. thesis and/or examining committee memberships (excluding chairmanships).

<u>No</u>	<u>Student</u>	<u>Degree Title</u>	<u>Degree Year</u>
1	Abdalla AL-Aseeri	M.Sc. (Environmental Engineering Program), UAEU	Finished June 2008
2	Humaid Al-Kendi	M.Sc. (Environmental Engineering Program), UAEU	Going on
3	Afra Saeed Al-Ketbi	M.Sc. (Environmental Engineering Program), UAEU	Going on
4	Wafa Awad Al Shamsi	M.Sc. (Environmental Engineering Program), UAEU	Going on
5	Hosam Mohamed	M.Sc., Helwan University	Finished 1997
6	Abdel Kader Ahmed	M.Sc., Helwan University	Finished 1997

6. Active research fields at present (major fields only)

Internal combustion engines fuels, combustion and emissions control. Simulation of internal combustion engines, Engine cooling and heat transfer. Air pollution control.

6.1 Principal investigator (PI) on contracts and/or grants

<u>Contract or Grant Title</u>	<u>Budget No.</u>	<u>Funding Agency</u>	<u>Total/Annual Funding</u>	<u>Start Date</u>	<u>End Date</u>
M. Y. E. Selim et. al., "Development and Unification of Vehicles Inspection Standards", Dec. 2008 – May – 2009	Ministry of Interior	Ministry of Interior	AED 250,000	Dec. 2008	May 2009
M. Y. E. Selim, "Effects of Using Palm Oil (Raw and Methyl Ester) on Diesel Engine Roughness and Noise", 2010-2011	UAEU	UAEU Research Affairs	AED 20,000	Feb. 2010	Feb. 2011
Emad Elnajjar, Mohamed Y.E. Selim and Mohammad Hamdan , "Studying the Effects of different LPG fuel composition and Engine parameters on Dual Fuel Engines Cyclic Variability", 2010-2011	UAEU	UAEU Research Affairs	AED 20,000	Feb. 2010	Feb. 2011
M. Y. E. Selim, " Reducing the Viscosity of Jojoba Methyl Ester Diesel Fuel and Effects on Diesel Engine Performance and Roughness", 2009-2010	UAEU	UAEU Research Affairs	AED 20,000	Feb. 2009	Feb. 2010
M. Y. E. Selim and Mamdouh Ghannam, "Stability Behavior of Water-in-Diesel Fuel Emulsion and Effects on Diesel Engine Performance", 2008-2009	UAEU	UAEU Research Affairs	AED 24,000	Feb 2008	Feb 2009
M. Y. E. Selim (PI), "A Study on the alternative & regenerated energy resources in terms of their usages and environmental effects" 2007-2008	UAEU	UAEU Research Affairs	AED 20,000	Feb 2007	Feb 2008
M. Y. E. Selim (PI), " Improving the Performance of Dual Fuel Engines Running on Natural Gas by	UAEU	UAEU Research Affairs	AED 20,000	Feb 2006	Feb 2007

using Pilot Fuel Derived from Jojoba Seeds, 2006-2007					
M. Y. E. Selim (PI), "Air Pollution Measurements and Control from Diesel Engines", 2003-2004 , AED 28,000	UAEU	UAEU Research Affairs	AED 28,000	Feb 2004	Feb 2005
M. Y. E. Selim (PI), "Reduction of Diesel Engine Polluting Exhaust Emissions and Noise by Using Oxygenated Fuel Additives" Research project submitted to the UAEU Research Council for AED 30000 for 2002/2003 .	UAEU	UAEU Research Affairs	AED 30000	2002	2003
M. Y. E. Selim (PI), "Sensitivity of Dual Fuel Engine Combustion and Emission to the Gaseous Fuel Composition" Research project funded by the UAEU Research Council with AED 30000 for 2001/2002 .	UAEU	UAEU Research Affairs	AED 30000	2001	2002
M. Y. E. Selim (PI), "Experimental and CFD Simulation of Exhaust Gas Recycle in Dual Fuel Engine", (funded research by UAE University, 2000-2001 , AED 17,000	UAEU	UAEU Research Affairs	AED 17,000	2000	2001
M. Y. E. Selim (PI), "Nitrogen Oxides Pollutant Reduction from Dual Fuel Engine by Using Diesel/Water Emulsion", funded research by UAE University, 1999-2000 , AED 22,500	UAEU	UAEU Research Affairs	AED 22,500	1999	2000
M. Y. E. Selim (PI), "Performance and Exhaust Emission of a Dual Fuel Diesel Engine (Diesel / Natural Gas), funded research by UAE University, 1997-1998 , AED 15,200	UAEU	UAEU Research Affairs	AED 15,200	1997	1998

6.2 Co-principal investigator (Co-PI) on contracts and/or grants

<u>Contract or Grant Title</u>	<u>Budget No.</u>	<u>Funding Agency</u>	<u>Total/Annual Funding</u>	<u>Start Date</u>	<u>End Date</u>
M. Y. E. Selim (CI), A.M.O. Mohamed (PI) and M. Maraqa (CI), "Life Cycle Assessment Cost for Air Pollutants from ADCO's Refinery: Phase I", 2003-2004 , AED 39,600	UAEU	ADCO' Oil Company	AED 39,600	Sept 2004	March 2005
W. Fawzy and M. Y. E. Selim, "Preliminary Investigations on Measurement and Control of pollutants in exhaust gas of combustion systems", joint funded research by UAE University, 1999-2000 , AED 15,000	UAEU	UAEU Research Affairs	AED 15,000	1999	2000
A. Sharaf and M. Y. E. Selim, "Air Pollution Abatement Using an Electromagnetic Enhanced Zeolite Filter "joint funded research by UAE University, 1999-2000 , AED 25,000	UAEU	UAEU Research Affairs	AED 25,000	1999	2000

6.3. Publications. (List in chronological order with each publication shown with proper order of authors, inclusive page numbers, and in correct bibliographical form, **if you are not the first author what is the percentage of your contribution**)

(A) Chapter in a Book:

Mohamed Y. E. Selim, "Alternative Fuels for Transportation", Chapter title: LPG", Editor: A.S. Ramadhas, CRC Press / Taylors and Francis Group, USA, ISBN 978-1-4398195-7-9, October 13th, **2010**.

(B) Int. Journal Papers:

1) Y. Haik, Mohamed Y. E. Selim and T. Abdelrahman, Combustion of algae oil methyl ester in an indirect injection diesel engine, In press, Accepted in Energy Journal, November **2010**.

2) H. E. Saleh and Mohamed Y. E. Selim, Shock tube investigation of propane-air mixtures with a pilot diesel fuel or cotton methyl ester, Fuel, Int. Journal, Volume 89, Issue 2, February **2010**, Pages 494-500, Feb., **2010**.

- 3) Mohamed Y. E. Selim, and Mamdouh Ghannam, A Combustion Study of Stabilized Water-in-Diesel Fuel Emulsion, Accepted in Energy Sources Journal, Part A, Recovery, Utilization, and Environmental Effects, Vol. 32, Issue 2, pp 1–19, Jan. **2010**.[\(download\)](#)
- 4) H. A. Moneib, M. Abdelaal, Mohamed Y. E. Selim, and O. A. Abdallah, NO_x Emission Control in SI Engine by Adding Argon Inert Gas to Intake Mixture, *Energy Conversion and Management*, Volume 50, Issue 11, November **2009**, Pages 2699-2708.[\(download\)](#)
- 5) Mohamed Y.E. Selim, Reducing the viscosity of Jojoba Methyl Ester diesel fuel and effects on diesel engine performance and roughness, Energy Conversion and Management Journal, Vol. 50, Issue 7, pp 1781-1788, July **2009**.[\(download\)](#)
- 6) M. T. Ghannam and M. Y. E. Selim, Stability Behavior of Water-in-Diesel Fuel Emulsion, Petroleum Science and Technology Journal, Vol. 27, Issue 4, pp 396–411, January **2009**. [\(download\)](#)
- 7) H. A. Moneib, M. Abdelaal, M. Y. E. Selim, and O. A. Abdallah, NO_x Emission Control in SI Engine by Adding Argon Inert Gas to Intake Mixture, Journal of Engineering and Applied Science 56 (2), pp. 147-167, **2009**.
8. Mohamed Y. E. Selim, H.E. Saleh and M. S. Radwan, "Improving the performance of dual fuel engines running on natural gas/LPG by using pilot fuel derived from jojoba seeds", Renewable Energy Journal, Vol. 33, pp 1173-1185, **2008**. [\(download\)](#)
9. Mohamed Y. E. Selim, “Effects of Engine Parameters and Gaseous Fuel Type on the Cyclic Variability of Dual Fuel Engines”, Fuel, an Int. Journal, 84, 961-971, **2005**. [\(download\)](#)
10. Mohamed Y. E. Selim, "Sensitivity of Dual Fuel Engine Combustion and Knocking Limits to Gaseous Fuel Composition", Energy Conversion and management Journal, Volume 45, Issue 3, pp. 411-425, **2004**. [\(download\)](#)
11. M. Y. E. Selim, Mohsen S. Radwan and Soliman M.S. Elfeky, " Combustion of Jojoba Methyl Ester in an In-Direct Injection Diesel Engine, Renewable Energy Journal, Vol. 28, Issue 9, July, pp. 1401-1420, **2003**. [\(download\)](#)
12. Mohamed Y. E. Selim, “Effect of Exhaust Gas Recirculation on Some Combustion Characteristics of Dual Fuel Engine”, Energy Conversion and Management, An International Journal, Volume 44, Issue 5, March 2003, Pages 707-721, **2003**. [\(download\)](#)
- 13· M. Y. E. Selim, “Pressure – Time Characteristics of Diesel Engine Fuelled with Natural gas”, Renewable Energy Journal, Oct-2000, volume 22, issue 4, Pages 473-489. [\(download\)](#)
14. M.Y.E.Selim, M.S.Radwan, M.Ismael and H.E.Saleh, “Laminar Burning Velocity of Some New Coal Derived Fuels’ ,International Journal of Energy Sources, Volume 23, Number 4, pp.345-362, May 2001. [\(download\)](#)
- 15· M.Y.E. Selim and A.H.B.Helali, “Effect of Coolant Additives on Thermal Loading of Diesel Engine”, Journal of Automobile Engineering, Vol. 215, pp 1131-1142, Proceedings of the Institution of Mechanical Engineers, Part D, 2001. [\(download\)](#)
- 16· M. Y. E. SELIM and S.M.S. Elfeky, “Effects of Diesel / Water Emulsion on Heat Flow and Thermal Loading in a Precombustion Chamber Diesel Engine”, Journal of Applied Thermal Engineering, Vol 21/15, pp 1565-1582 Jul 2001. [\(download\)](#)
17. M. Y. E. Selim and N. Collings, “Structure of Turbulence in a Model IC Engine: Effects of Inlet

Conditions”, SAE paper 961184, Journal of Engines, 1996. Also Presented in: SAE International Spring Fuels and Lubricants Meeting and Exposition, Dearborn, Michigan, USA, 6-8 May, 1996.

18· M. Y. E. Selim and N. Collings, “Measurements of Spatial Structure of BDC Turbulence in a Model IC Engine Using Flying Hot Wire”, SAE Journal of Engines, paper number 912405, 1992. Also Presented in: SAE Int. Fuels and Lubricants Meeting and Exposition, Toronto, Canada, October 7-10, 1991.

19. Mohamed Y. E. Selim, A Study of Some Combustion Characteristics of Dual Fuel Engine Using EGR, SAE Paper 2003-01-0766, Transactions of SAE, Journal of Engines, 2003. ([download](#))

20· S.M.S. Elfeky and M. Y. E. SELIM, “On the Possibility of Using Aluminum Alloy Water Cooled Cylinder Head in I. C. Engines by Using Finned Surfaces”, Engineering Research Journal, October 2000. ([download](#))

(C) Int. Conference Papers:

21) Yousef Haik , Mohamed Younes E. Selim, and Taher Abdulrehman, Combustion of Algae oil methyl ester and raw Algae oil in an indirect injection diesel engine, ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis, July 12-14, **2010**, Istanbul, Turkey.

22) Mohamed Younes E. Selim, Emad Elnajjar, Farag Omar, Effect of Dual Fuel Engine Parameters and Fuel Type on Engine Noise Emissions, ASME 2010 10th Biennial Conference on Engineering Systems Design and Analysis, July 12-14, **2010**, Istanbul, Turkey.

23) Mohamed Y. E. Selim, Y. Haik, S.-A. B. Al-Omari and H. Abdulrahman, Biodiesel Oil Derived From Jojoba Solid Waste, World Renewable Energy Congress XI 25-30 September **2010**, Abu Dhabi, UAE, pp. 150-156.

24) Mohamed, Y. E. Selim, Salah B. Al-Omari and Abdallah J. Al-Aseery, Effects of Steam Injection to Dual Fuel Engine on Performance, Noise and Exhaust Emission, SAE Paper 2009-01-1831 / 09SFL-0039, SAE 2009 Powertrains, Fuels & Lubricants Meeting, Florence, Italy, June 15 – 17, **2009**. ([download](#))

25) Mohsen Abdelaal, Hany Moneib, Mohamed, Y. E. Selim, Osama A. Abdallah, Effects of Diluting the Intake Air of SI Engine with Argon Inert Gas on the NO_x Emissions and Performance, SAE Paper 2009-01-1186, The SAE 2009 World Congress, Detroit, Michigan, USA, April 20-23, **2009**. ([download](#))

26. Mohamed Y. E. Selim and H. E. Saleh, Performance of Dual Fuel Engine Running on Jojoba Oil as Pilot Fuel and CNG or LPG, 2007 ASME-JSME Thermal Engineering Summer Heat Transfer Conference July 8-12, **2007**, Vancouver, British Columbia, CANADA

27. Mohamed Y. E. Selim and H. E. Saleh, On the Use of Jojoba Methyl Ester as Pilot Fuel for Dual Fuel Engine Running on Gaseous Fuels, SAE ICE2007, 8th Int. Conf. on Engines for Automobiles, September 16-20, **2007**, Capri, Napoli, Italy. ([download](#))

28. Mohamed Y. E. Selim and Mamdouh T. Ghannam, Performance and Engine Roughness of a Diesel Engine Running on Stabilized Water Diesel Emulsion, SAE ICE2007, 8th Int. Conf. on Engines for Automobiles, September 16-20, **2007**, Capri, Napoli, Italy. ([download](#))

29. Mohamed Y. E. Selim, A. B. Helali and S. Elfeky, "Enhancement of Coolant Side Heat Transfer in Water Cooled Engines by Using Finned Cylinder Heads ", Proceedings of the ASME ICE Division Fall Conference, Ottawa, Canada, September 11-14, **2005**. ([download](#))

30. M. Y. E. Selim, "Combustion Noise Measurements and Control from Small Diesel and Dual Fuel Engines", SAE Small Engine Technology Conference, Graz, Austria, 27-30 September, 2004.

31. Mohamed Y. E. Selim, "Combustion Noise Measurements and Control from Diesel and Dual Fuel Engines", Proceedings of The 18th International Congress on Acoustics ICA, Kyoto International Conference Hall, April 4 to 9, 2004, Kyoto, Japan

32. M. Y. E. Selim, Mohsen S. Radwan and Soliman M.S. Elfeky, " Effect of Fuel Additives on Jojoba Methyl Ester Properties, Ignition Delay and Performance in a Direct Injection Diesel Engine ", HPC Conference, Cyprus, October 2004.

33. Mohamed Y. E. Selim, "A Study of Some Combustion Characteristics of Dual Fuel Engine Using EGR", SAE Paper 2003-01-0766, 2003 SAE World Congress, Detroit, Michigan, March 3-6, 2003

34. M.Y.E. Selim, "An Experimental Investigation of Combustion Noise From Dual Fuel Engine Running on Diesel/Natural Gas", ASME International Spring Conference, ICED, Texas, Son Antonio, USA, April 9-12, 2000.

35. M.Y. E. Selim and A.H.B. Helali, " Thermal Evaluation of Some Liquid Coolants Under Real Engine Conditions," ASME International Spring Conference, ICED, Texas, Son Antonio, USA, April 9-12, 2000.

36. M.Y.E. Selim, "Thermal Loading and Temperature Distribution of A Pre Combustion Chamber Diesel Engine Running on Gasoil / Natural Gas", Int. ASME conference, ICE Division, April, 25-28, 1999, Columbus, Indiana, USA. ([download](#))

37. Mohamed Y. E. Selim, An Experimental Investigation of Combustion Noise from Dual Fuel Engines Running on Diesel/Natural Gas, Int. Energy Conference, UAEU, Al-Ain, May 2000.

38. M.Y.E. Selim, S. Das, and J.C. Dent, "Application of CFD to the Matching of In Cylinder Fuel Injection and Air Motion in a Four Stroke Gasoline Engine", SAE paper 971601, SP-1276, Spring Fuels & Lubricants Meeting, Regent Hayatt Hotel, Dearborn, Michigan, USA, May 1997. ([download](#))

Also Published in: Engineering Research Journal, Helwan University, Egypt, Vol.51, January 1997

39. M.Y.E.Selim, M.S.Radwan, S.K.Dandoush, and A.M.A.Kader, "Ignition Delay Period of Jojoba Diesel Engine Fuel", SAE paper 972975, SAE International Fall Fuels & Lubricants Meeting, Adam's Mark Hotel, Tulsa, Oklahoma, USA, October, 13-16, 1997.

40. M.Y.E. Selim and N. Collings, "Structure of Turbulence in a Model IC Engine: Effects of Inlet Conditions", Presented at SAE Spring Fuels & Lubricants Meeting, Regent Hayatt Hotel, Dearborn, Michigan, USA, SAE paper 961184, May 1996. ([download](#))

41. M. Y. E. Selim and N. Collings, "Measurements of Spatial Structure of BDC Turbulence in a Model IC Engine Using Flying Hot Wire", Presented at SAE Int. Fuels and Lubricants Meeting and Exposition, Toronto, Canada, October 7-10, 1991.

42. AR. AF. Ibrahim, M. S. Radwan, M. F. Sedrak, and M. Y. E. Selim, "A Study on Turbulence Generators for the Intake Manifold of Diluted Spark-Ignition Engines", SAE paper 921667, Int. SAE Off-Highway & Power Plant Congress & Exposition, Milwaukee, Wisconsin, USA, September 14-17, 1992.

Also Published in: Engineering Research Journal, Helwan University, Cairo, Egypt, Vol. 7, 1989.

(D) Educational Papers:

Journals:

43. Mohamed Y. E. Selim and Sameera Al-Zarooni, Does secondary school grade predict the performance of engineering students? AJEE (**Australasian Journal of Engineering Education**), Vol. 15, Issue No. 3, pp. 1 – 10, Nov., 2009.
- 44-. Abdel-Hamid I. Mourad and Mohamed Y. E. Selim, On the Awareness of Engineering Students with ABET accreditation Elements, Volume 4 Issue 2, **Journal of Education Research**, 2010.

Conferences:

- 45- Mohamed Y. E. Selim and Abdel-Hamid I. Mourad, On the Awareness of Engineering Students with ABET accreditation Elements, The 10th Biennial INQAAHE Conference, The Commission for Academic Accreditation, Beach Rotana Hotel, Abu Dhabi, UAE, March 30th – April 2nd, 2009.
- 46-a. Mohamed Younes E. Selim and Mohamed a. Al-Bayywomi, Application of ethics criteria to engineering profession: case study of engineering students at the UAE University, Proceedings of The ASME – ESDA 2010 Conference, Istanbul, Turkey, July 12-14, 2010.
- 46-b. Mohamed Younes E. Selim and Mohamed a. Al-Bayywomi, Application of ethics criteria to engineering profession: case study of engineering students at the UAE University, SEE09 Symposium, May 16-18, 2009. Submitted to Science and Engineering Ethics Journal, Feb. 2010.
47. Mohamed Y. E. Selim, K. El-Sawy, and Y. Haik, On the use of electronic academic advising tools to promote higher quality engineering education, SEE09 Symposium, May 16-18, 2009.

(E) Submitted Papers:

48. Mohamed Y. E. Selim, S.-A. B. Al-Omari, S. M. S. Elfeky and M. S. Radwan, Remains of jojoba fruit as a renewable solid biomass fuel in furnaces, submitted to Int. Journal of Sustainable Energy, Nov. 2010.
49. Mohamed Y. E. Selim, Y. Haik, S. –A. B. Al-Omari, Renewable biodiesel jojoba oil extracted from jojoba fruit solid waste, submitted to Int. Comm. In Heat and Mass Transfer, Jan. 2010.
50. Emad Elnajjar, Mohamed Y. E. Selim and Farag Omar, Effect of Dual Fuel Engine Parameters and Fuel Type on Engine Noise Generation, Submitted to Energy Sources Journal, September 2010.
51. Salah B. Al-Omari, Mohamed Y. E. Selim and A. A. J. Al-Aseery, Performance of Dual Fuel Engine with LPG as Main Fuel and Effects of Increased Intake Vapor, Submitted to Sustainable and Renewable Energy Journal, October 2010.

Other Educational Activities:

- Graduation project sponsorship for 50,000 AED for heat pipes applications in air conditioning. Also the GP won many prizes in the gulf countries exhibitions and competitions.
- Involvement of undergraduate students in research.
- Attended many workshops on active learning.
- Develop new online advising package that uses the website of the UAEU to help ME advisors and students (check time conflict and check pre-requisites for suggested courses)
- Developed one course for engineers about HVAC.

6.4 Books and monographs. (Limit to textbooks, research monographs, conference / symposium / congress proceedings, handbooks, etc., of which you are an author or an editor.)

- Proceedings of the Int. Conference on Thermal Engineering Theory and Applications (ICTEA06 Conference, Al-Ain Hilton, 3-5 January 2006)
- Proceedings of the Symposium on Engineering Education (SEE09 Symposium, UAE University, 16-18 May 2009)
- A chapter about "LPG alternative fuels" is written

6.5 Other technical publications (book and paper reviews, reports, theses, and dissertations.)

- 1 M.Sc. Thesis supervised between 2003-2008, UAE University, UAE
- 2 M.Sc. Theses supervised between 1993-1997, Helwan University, Egypt.
- PhD Thesis, Cambridge University, 1992.
- M.Sc. Thesis, Helwan University, 1989.

6.6 Other research activities

- Formed Energy Research Group; ERG, within the Mech. Eng. Department and other Departments within the UAE University and other Faculty from other universities, 2009.
- Examiner to three M.Sc theses, for Chemical and Petroleum Program, UAE University 2009-2010.
- Established a nucleus for research sponsorship with EMARAT Gas Company, Dubai, 2010.
- Submitted research proposal to Emirates Foundations for research project worth AED 225,000, February 2010.
- Attended in WETEX energy, water and environment exhibition, Dubai, March 2010.
- Submitted one proposal for PhD student supervision at the UAE University, March 2010.

7. Seminars and lecture presentations (such as short courses, workshop, invited talk and departmental seminars, which are NOT listed in any category above).

- Keynote lecture about CNG vehicles standards, City Gas MENA 2010, 21 - 24 March 2010, Sheraton Abu Dhabi Hotel & Resort, Abu Dhabi, UAE
- SAE 2009 Powertrains, Fuels & Lubricants Meeting, Florence, Italy, June 15 – 17, 2009.
- The SAE 2009 World Congress, Detroit, Michigan, USA, April 20-23, 2009.
- The 10th Biennial INQAAHE Conference, The Commission for Academic Accreditation, Beach Rotana Hotel, Abu Dhabi, UAE, March 30th – April 2nd, 2009.
- Presentation of one technical paper at the 2007 ASME-JSME Thermal Engineering Summer Heat Transfer Conference July 8-12, 2007, Vancouver, British Columbia, CANADA
- Presentation of one technical paper at the SAE ICE2007, 8th Int. Conf. on Engines for Automobiles, September 16-20, 2007, Capri, Napoli, Italy
- Presentation of one technical paper at the ASME ICE Division Fall Conference, Ottawa, Canada,

September 11-14, 2005.

- Presentation about "Role of Standards in Protecting Consumers from Air Pollution, ESMA, UAE, Abu Dhabi, December 11, 2006.
- Presentation about "On the Use of Renewable Fuels in Diesel Engines", RENERGEX 2007 Conference and Exhibition, Dubai World Trade Centre, 5-7 February 2007

8. Other Activities

Attended Conferences:

1. ASME – ESDA 2010 Conference, Istanbul, Turkey, July 12-14, **2010**.
2. World Renewable Energy Congress, XI 25-30 September **2010**, Abu Dhabi, UAE.
3. City Gas MENA, 21 - 24 March **2010**, Sheraton Abu Dhabi Hotel & Resort, Abu Dhabi, UAE
4. SAE 2009 Powertrains, Fuels & Lubricants Meeting, Florence, Italy, June 15 – 17, **2009**.
5. The 10th Biennial INQAAHE Conference, The Commission for Academic Accreditation, Beach Rotana Hotel, Abu Dhabi, UAE, March 30th – April 2nd, **2009**.
6. SAE ICE2007, 8th Int. Conf. on Engines for Automobiles, September 16-20, **2007**, Capri, Napoli, Italy
7. ASME-JSME Thermal Engineering Summer Heat Transfer Conference July 8-12, **2007**, Vancouver, British Columbia, CANADA
8. ASME ICE Division Fall Conference, Ottawa, Canada, September 11-14, **2005**
9. SAE Small Engine Technology Conference, Graz, Austria, 27-30 September, **2004**.
10. 18th International Congress on Acoustics, Kyoto, Japan, April 4-9, **2004**.
11. 2000 ASME Spring Technical Conference (ICE Division), San Antonio, Texas, USA, April 9-12, **2000**.
12. 2000 1st International Energy Conference, UAE University, Faculty of Engineering, Al-Ain Hilton, May 7-9, **2000**
13. 1999 ASME Spring Technical Conference (ICE Division), Columbus, Indiana, USA, April 24-28, **1999**.
14. International SAE Spring Fuels & Lubricants Meeting, Dearborn, Michigan, USA, May 6-8, **1996**
15. International SAE Fuels and Lubricants Meeting and Exposition, Toronto, Canada, October 7-10, **1991**.

9. Taught Courses

1. Applied Thermodynamics (Thermo2)
2. Air Pollution Control (Graduate Course)
3. Selected Topics in Environmental Engineering (Graduate Course)
4. Heat Engines
5. Combustion and Fuel Technology
6. Automotive Engineering
7. Refrigeration and Air Conditioning
8. Air Conditioning Systems
9. Power Plants
10. Heat Transfer
11. Graduation Projects (1)
12. Graduation Projects (2)

13. Engineering Thermodynamics (Thermo1)
14. Physics and Engineering Applications (1) [Design Project]
15. Mathematics and Engineering Applications (1) [Teaching the engineering applications]
16. Mathematics and Engineering Applications (2) [Teaching the engineering applications]
17. Fundamentals of Engineering 1-B [Design Project]
18. Technical Installations (for Arch. Eng. Dept)

10. Courses and Teaching Improvements:

- Many educational videos have been given to students for the whole course of "Heat Engines" to enhance the understanding of the course materials.
- Air Conditioning design projects have been given to students studying A/C Systems course to design a complete A/C System for buildings in Dubai and Abu Dhabi.
- Development of Ref. and A/C Course (Laptop Course) using many software as EES, Matlab, Excel, Psych, and others. Developing PowerPoint presentation lectures and using Blackboard in this course and other courses.
- Many experimental projects have been prepared and offered to students taking the course of "Heat Engines" and "Refrigerating and Air Condition."
- An educational innovation project has been funded by the UAE University to develop the teaching method of "Heat Engines" course. Three experimental projects have been designed, built for students to use data acquisition systems in internal combustion engines projects, to promote self learning by students.
- An educational innovation project has been funded by the UAE University to develop the teaching of the engineering applications for "Mathematics and Engineering Applications 1" by the using Matlab and other software to promote self learning by students. This has been done within the "Laptop Project"
- An educational innovation project has been funded by the UAE University to develop the teaching of the engineering applications for "Mathematics and Engineering Applications 2" by the using Matlab and other software to promote self learning by students. This is done within the "Laptop Project"
- Coordination of co-teaching the four mathematics courses in the faculty of engineering with the faculty of science, since 1999 till 2006.
- Head of the College "Math. Task Force" to develop the co-taught four courses of mathematics and engineering applications
- Use of Blackboard-5 and Blackboard-6 to manage the courses taught at UAE University
- Building web-site for some courses taught at the UAE University

11. Computer Skills:

- Platform: Unix, Windows 95 and 98, 2000, XP
- Language: Fortran 77/90
- Software: AutoCAD – MatLab – Maple - MSOffice (Word/Excel/Power Point) – Front Page – Authorware - Blackboard "Course Management in Internet" – Macromedia – Grapher
- Data Acquisition Software : Labview
- CFD package: "Kivavrel2" for unix - used through SUN workstation

12. ABET Activities at UAE University:

- Experience in outcome assessment and ABET documentation during the three accreditation cycles since 1997.
- Member of advising committee for ABET and head of scheduling committee.
- Performing "Educational Outcome Assessment" for the following courses taught:
 - Heat Engines – Automotive Engineering – Refrigeration and Air Conditioning - Air Conditioning Systems – Mathematics and Engineering Applications (1) - Mathematics and Engineering Applications (2) - Mathematics and Engineering Applications (3) - Mathematics and Engineering Applications (4) – Applied Thermodynamics
- Head of the College Math. Task Force which is working on the development of the four mathematics and engineering applications courses to improve the co-teaching process and considering the ABET2000 advisory board comments and previous ABET comments
- Head of Department's committee on one of the ABET criteria
- Working with mechanical engineering focus group to produce a feedback mechanism to improve the teaching of all thermo-fluids courses
- Performing course mapping for ABET2000 a-k criteria for all the Mech. Eng. Courses
- Attending many workshops to assess the educational outcomes for the course and for the program
- Helping the department before and during the first accreditation by ABET, 1997-1998
 - Member of Department Committee to develop the Mechanical Engineering Curriculum to meet the ABET requirements since 1997-1998
- Member of Department Committee to produce the Outcome Assessment Plans. The department plans, objectives and intended outcomes have been established to meet the University requested format.

13. Sample of Students Evaluation

Instructor Information:

Instructor:	Mohamed Selim	Instructor ID:	000001816
College:	Engineering	Department:	Mechanical Engineering

Course Information:

CRN:	12665	Section:	51
Course Title:	Applied Thermodynamics	Course Code:	MECH311
Enrollment:	9	Respondents:	6 students (67%)

Question*	Section	Section	Course	Department	College	University
	Average	St.Dv	Average	Average	Average	Average
Q1. The instructor made content easy to understand.	4.67	0.52	4.53	4.36	4.17	4.34
Q2. The text book and other materials were helpful in learning.	4.83	0.41	4.59	4.36	4.04	4.11
Q3. The instructor actively involved students in learning.	4.33	0.52	4.59	4.41	4.25	4.36
Q4. The instructor's methods of evaluating students were based on course objectives.	4.50	0.55	4.53	4.44	4.27	4.39
Q5. The instructor made effective use of class time.	4.83	0.41	4.71	4.54	4.40	4.51
Q6. The instructor's presentations were clear and understandable.	4.67	0.52	4.65	4.36	4.22	4.38
Q7. The course stimulated my interest in learning more about this topic.	4.67	0.52	4.59	4.32	4.11	4.26
Q8. The course was valuable in my education.	4.67	0.52	4.65	4.41	4.22	4.32
Q9. Overall, how would you <i>grade</i> your instructor for this course?	3.83	0.41	3.76	3.56	3.42	3.50
Q10. Overall, how would you <i>grade</i> this course?	3.67	0.52	3.59	3.43	3.31	3.37

Instructor Information:

Instructor:	Mohamed Selim	Instructor ID:	000001816
College:	Engineering	Department:	Mechanical Engineering

Course Information:

CRN:	14624	Section:	53
Course Title:	Engineering thermodynamics	Course Code:	GENG220
Enrollment:	25	Respondents:	25 students (100%)

Question*	Section	Section	Course	Department	College	University
	Average	St.Dv	Average	Average	Average	Average
Q1. The instructor made content easy to understand.	4.00	0.82	3.86	3.94	4.17	4.34
Q2. The text book and other materials were helpful in learning.	4.48	0.65	4.40	3.97	4.04	4.11
Q3. The instructor actively involved students in learning.	3.96	0.84	4.00	4.04	4.25	4.36
Q4. The instructor's methods of evaluating students were based on course objectives.	4.08	0.76	4.18	4.10	4.27	4.39
Q5. The instructor made effective use of class time.	4.52	0.71	4.52	4.37	4.40	4.51
Q6. The instructor's presentations were clear and understandable.	4.08	0.81	4.02	3.98	4.22	4.38
Q7. The course stimulated my interest in learning more about this topic.	4.00	1.15	3.81	3.89	4.11	4.26
Q8. The course was valuable in my education.	4.20	1.00	4.05	3.98	4.22	4.32
Q9. Overall, how would you <i>grade</i> your instructor for this course?	3.48	0.59	3.36	3.21	3.42	3.50
Q10. Overall, how would you <i>grade</i> this course?	3.40	0.96	3.14	3.06	3.31	3.37

Instructor Information:			
Instructor:	Mohamed Selim	Instructor ID:	000001816
College:	Engineering	Department:	Mechanical Engineering
Course Information:			
CRN:	22760	Section:	01
Course Title:	Air Conditioning Systems	Course Code:	MECH513
Enrollment:	14	Respondents:	10 students (71%)

Question*	Section	Section	Course	Department	College	University
	Average	St.Dv	Average	Average	Average	Average
Q1. The instructor made content easy to understand.	4.90	0.32	4.90	4.36	4.17	4.34
Q2. The text book and other materials were helpful in learning.	4.80	0.42	4.80	4.36	4.04	4.11
Q3. The instructor actively involved students in learning.	4.90	0.32	4.90	4.41	4.25	4.36
Q4. The instructor's methods of evaluating students were based on course objectives.	4.90	0.32	4.90	4.44	4.27	4.39
Q5. The instructor made effective use of class time.	4.90	0.32	4.90	4.54	4.40	4.51
Q6. The instructor's presentations were clear and understandable.	4.70	0.67	4.70	4.36	4.22	4.38
Q7. The course stimulated my interest in learning more about this topic.	4.80	0.42	4.80	4.32	4.11	4.26
Q8. The course was valuable in my education.	4.80	0.42	4.80	4.41	4.22	4.32
Q9. Overall, how would you <i>grade</i> your instructor for this course?	3.70	0.67	3.70	3.56	3.42	3.50
Q10. Overall, how would you <i>grade</i> this course?	3.80	0.42	3.80	3.43	3.31	3.37