

# CURRICULUM VITAE

Amer Mahmoud EL-Hamouz  
B.Sc., M.Sc., Ph.D. Chemical Engineering  
Member of AIChE and AMIChemE

## Editor of

**Process Safety and Environmental Protection Journal (Feb 2002-Dec 2007)**

**Marital Status** Married  
**Nationality** British / Palestinian  
**Term Address** Chemical Engineering Department, An-Najah National University  
P.O.Box 7. Nablus Palestine. Tel 09 2349029, Mobile: +970 599557056  
E mail: elhamouz@yahoo.com

## EDUCATION

**1990-1992** *Ph.D. in Chemical Engineering, (Separation and Reaction Systems)*, University of Manchester Institute of Science and Technology (UMIST).

**1988-1990** *M. Sc. in Chemical Engineering. (Separation and Reaction Systems)*. UMIST

**1983-1988** *B. Sc. in Chemical Engineering (honor)*.  
Jordan University of Science and Technology (JUST).

## WORK EXPERIENCE

**August 2001- present:** Associate professor of Chemical Engineering. Referee technical papers for several Chemical Engineering journals such as "Chemical Engineering Research and Design, Process safety and environmental protection, Journal of Waste management, Journal of Chemical Data and others"

**August 2005- August 2006** Visiting Professor, School of Chemical Engineering and Analytical Science- The University of Manchester.

**November 2002-present, Associate Professor of Chemical Engineering**

**March 2000- November 2002: Chairman** Chemical Engineering Dept., **Associate Professor.**

**Main activities:** Managing all department activities; such as: Annual course plan, Annual budget plan, Annual Development plan, Evaluation of department- staff performance, Evaluation of new applicants, Team leader of different committees in the university. **Chairman of the Second Palestinian Engineering conference 2000.**

*Teaching duties:* Teaching courses in Reaction engineering, reactor design, equipment design, and Plant design. Supervising graduation and post-graduation students' projects related to chemical process and in areas of manufacturing new chemical products. **Supervising B.Sc final year students and M.Sc students in areas related to safety engineering, solid waste management and Environmental Engineering.**

**May 2000- now:** *Consultant to Target for Chemical Products, Nablus Palestine.*

**1997 – Feb 2000:** Assistant Professor, Chairman of Chemical Engineering Dept., An-Najah National University, Head of Chemical Engineering Department

**1992-Feb 1997** Hounary lecturer/ *Research Associate - Chemical Eng. Dept., UMIST:*

*Teaching undergraduate students and supervising post-graduate students in areas related to Dispersion of Fluid Mixtures in Shear Flow.*

**1989-1992** An hourly paid demonstrator in the Chemical Engineering Dept. at UMIST.

## CONSULTATION WORK

- 1- "**Rehabilitation of Ferun Dump site as a solid waste transfer station**", a consultation for HWE, Ramalla, Feb –March 2009
- 2- "Participatory District Strategic Development plan in Jenin", a project funded by UNDP and Irish Aid, January- Aug 2008. (**a member of solid waste consultation team**)
- 3- "Dispersion of Silicone oil under high shear devices: Effect of concentration and flow rate" confidential work for UNILEVER company, UK, June 2008- July 2008.
- 4- "Dispersion of Silicone Oil in batch reactors: Effect of oil viscosity and impeller type" confidential work for UNILEVER company, UK, Aug 2005- July 2006.
- 5- Industrial Plant Layout for AlBareeq Company, AlRamah Jenin –Palestine. **A. M EL-Hamouz**. June 2005
- 6- **Safety in the workplace and accident investigation**, a two days workshop presented to the safety department of JAWAL company, Ramalla June 2005.
- 7- "Environmental Impact Assessment for the Privatization of Solid Waste Collection in Tubas District" USAID funded project, **A.M.EL-Hamouz**, September 2004.
- 8- "**Process Safety and Accident Investigation**", a consultation prepared to the Safety Department at the Palestinian Telecommunication, Nablus Branch, **A.M.EL-Hamouz**, December 2003.
- 9- "Solid Waste Management Project: Training and Consultancy Programs for Tubas Joint Service Council (TJSC)", USAID funded project under the implementation of SCF Palestine, A. AL-Ramahi, **A.M.EL-Hamouz**, I.Khatib and S.Dafi, July 2002.
- 10- "Solid Waste Management Project: Training and Consultancy Programs for Wadi Sheir Joint Service Council", A. AL-Ramahi, **A.M.EL-Hamouz** and I.Khatib DFID funded project under the implementation of SCF Palestine, May 2002.
- 11- "Solid Waste Collection System in Tubas District", USAID funded project under the supervision of SCF Nablus branch, A. AL-Ramahi, **A.M.EL-Hamouz** and I.Khatib September 2001.
- 12- **A course on Safety in the workplace, presented to the Palestinian Labor Association**, Nablus, September 2000.
- 13- "**A course on Chemical Process Safety: Fundamentals and Applications**" prepared to the Engineering Association- Jerusalem Center, May 1999.
- 14- "Investigation of the Production of Activated Carbon from Olive Pibs Waste" **A. M. EL-Hamouz**, prepared to Kanan Company, Nablus Palestine, March 1999.
- 15- "Environmental Impact Assessment of the Palestinian Cement Factory" **A. M. EL-Hamouz**, Prepared to the Palestinian Cement Factory owners, Jaba'a -Jenine.
- 16- "Tanneries Waste water treatment" a consultancy prepared to Hijawi Engineering Office for the treatment of Salfet Tannery, May 1998.
- 17- "Feasibility Study of Developing A Characterization Rig for Oil Emulsions and Chemicals", **A. M. EL-Hamouz**, G.A. Davies and M. Rashad, Consultancy to Christian Michelson Research Center, Bergen Norway, 1996.
- 18- 'CFL Oil Cartridge Performance: Testing and Verification' **A.M. EL-Hamouz** and A.C.Stewart, *A Confidential Report for Charlson Filtration* 1994.
- 19- " Feasibility Study of Developing Cyclone Inlet Configuration for Offshore Oil-Gas Separators" **A. M. EL-Hamouz**, Consultancy work for Christian Michelson Research Center, Bergen Norway, 1994
- 20- "A Chemical Reaction Engineering Model for Bromine Extraction from Sea Water" R. Mann and **A.M. EL-Hamouz**, *A Confidential Report for OCTEL Company*, U.K, 1992.

21- "Pipeline Slug Flow Mixing" R. Mann and **A. M. EL-Hamouz** *A Confidential Report for B.P. Exploration*, Aberdeen U.K. 1992.

## AWARDS

- 1- **PARC fellowship 2007-2008 for the project** titled" Improvements of the Recycled Plastic Properties by the use of Olive Solid Waste" Joint with Eng. Shadi Sawalha.
- 2- One year Sabbatical leave, An-Najah University, 2005-2006. Hosted by the University of Manchester, UK.
- 3- One year Sabbatical leave, An-Najah University, 2005-2006. Hosted by the University of Manchester, UK.
- 4- **PARC fellowship 2005-2006 for the project**" Usage of Stone Cutting Waste in Producing Chemical Construction Products". Joint with Dr R. AbdelKarem. Results out of the work are underway for publications.
- 5- **UMIST Chem. Eng. award**. A six weeks award to carry out a short feasibility study on "Zelolization of Active Carbons from olive-pip waste to produce high value products", July-August 2002.
- 6- **International Editor** of the Process Safety and Environmental Protection: Transaction of the Institution of Chemical Engineers, Feb. 2002 up to now.
- 7- **Winner of the St Andrews Prize 2000**, "Preparation, Enhancement, and Utilization of Activated Charcoal from Solid Olive Waste in Palestine". The proposal won the prize out of 150 proposals submitted to the competition. The prize is share with Prof. Hikmat Hilal.
- 8- Award to attend the **Post Graduate School on new materials** organized by the Italian National Research Institute. One week in October 1999.
- 9- **A British Council Grant- in -Aid** to visit UMIST as part of the British Council Higher Education Links Program (one month 1997 and one month in 1998).
- 10- **A scholarship from OCTEL** for the tuition fees and living expenses for two years., 1990-92

## RESEARCH INTERESTS

- Medical waste management: the environmental problems out of the ill management of the medical waste from the Palestinian medical centres gave a borne to this project. In the project, a reaction engineering model was developed where the concentration of the toxic and carcinogen materials out of the medical incinerator is e valuated. Results and recommendations where send to the Health authority for actions. Part of the recommendations was implemented by some of the medical centers in Nablus city. Project results were published in the Arabian Journal of Science and Engineering.
- Solid waste management: I was involved in many consultation in this field, currently, I am involved in the rehabilitation of Feroun dump site in Tulakrm.
- In the last four years, four funded projects were accomplished. All projects are related to environmental problems. **Titles of these projects are**
  - 1- Usage of Stone Cutting Waste in Producing Chemical Construction Products.
  - 2- Drinking water improvement in Nablus City, (2004-2005)
  - 3- Utilization of Stone cutting Waste (2005-2006)

#### **4- Improvements of the Recycled Plastic Properties by the use of Olive Solid Waste (funded project by PARC 2007-2008).**

In addition, I supervised three M.Sc project in areas related to **environment**. These are:

- 1- Management Strategies for Oil and Grease Residues in Jenin City.
- 2- Chromium Removal and Recovery from Tanneries Effluents and
- 3- Household Hazardous Waste: Analysis and comparison between Nablus and its surrounding refugee camps.

Currently Dr El-Hamouz is

- 1- supervising undergraduate students in a project title "**Charcoal production and Pollution Mitigation: Yabad District as case study**"
- 2- I am carrying out a consultation on the EIA of the establishment of solid waste transfer station in Tulkarm.

#### **SKILLS**

- Wide interests in computing, with programming knowledge in FORTRAN and BASIC. Good knowledge of P.C's. and their associated packages. Good ability in using the Internet and the electronic e-mail. Other interests include reading, especially books, magazines and watching TV programs including comedy and documentary programs. Good communication in English.
- Aability to organise, lead and deals tactfully with people of different thinking ability, the ability to write for support from industry and public funding bodies. Also the ability to referee technical proposal and manage their programs.
- Ability to organise and deliver training and workshop programs in solid waste and medical waste management areas .

#### **PUBLICATIONS**

#### **REFEREED JOURNALS**

[J1] **A. M. EL-Hamouz** "Drop size distribution in an ESCO Twin-impeller mixer unit at high dispersed phase volume fraction", under publication, Journal of Chemical Engineering and Technology, March 2009.

[J2] **A. M. EL-Hamouz, M. Cooke, A. Kowalski and P. Sharratt**, "Dispersion of Silicone oil in Water Surfactant solution: Effect of Impeller Speed, Oil Viscosity and Addition Point on Drop Size Distribution", *Chemical Engineering and Processing: Process intensification* **48**, 633-642 (2008).

[J3] **A.M. El-Hamouz**, "Effect of Surfactant concentration and operating temperature on the drop size distribution of Silicon oil water dispersion" *Journal of Dispersion Science and Technology, Journal of Dispersion Science and Technology* **28(5)** 797-804, (2007).

[J4] **A.M.EL-Hamouz, H. Hilal, N. Nassar and Z. Mardawi**," Solid Olive Waste in Environmental Cleanup: Oil Recovery and Carbon Production for Water Purification", *Journal of Environmental Management*, **84**, 83-92 (2007)

- [J5] H. S. Hilal, L. Z. Majjad, N. Zaatar and **A.M.El-Hamouz** "Enhanced Tio<sub>2</sub> Surfaces For UV Degradation of Phenol and Benzoic Acid in Water: the Role of the Dye" *accepted for publication, Journal of Solid State* **9**, 9-15 (2007).
- [J6] **A.M. El-Hamouz** and R. Mann, "A Chemical Reaction Engineering Analysis of the Blow-Out Process for Bromine Manufacture from Seawater" *Journal of Industrial and Engineering Chemistry Research*, **46(10)** 3008-3015, (2007).
- [J7] **A.M.EL-Hamouz** "Tanning Industry: Diagnosis and Environmental Management Strategies: A Case Study from Hebron, Palestine. The Engineering Journal of the University of Qater, Volume 17, 2004.
- [J8] **A.M.EL-Hamouz**, "Medical Waste Incineration in Nablus City, West Bank: A Case Study" *The Arabian Journal for Science and Engineering*, vol 27 number 1B, 29-40, (2002).
- [J9] Mustafa H., Bekassy Molnar and **A.M.EL-Hamouz**. 'Hydrodynamics and Mass Transfer of Textile Vibrating-Valve Trays', *Trans IChemE*, vol. 77, part A, 627, (1999).
- [J10] **A.M.EL-Hamouz** "Tanneries in Hebron Town –West Bank: Environmental Problems and Management" *Journal of Scientific Research Foundation*, Firat University, Turkey, vol. 4(1-3), p 25-32, (1999).
- [J11] **A. M. EL-Hamouz**, 'Effect of Shear Produced By Pipe Fittings on The Drop Size Distribution In Turbulent Flow of Kerosene-Water Mixtures', *An-Najah University Journal of Research (Natural Sciences)*, vol. 13, 9-30, (1999).
- [J12] **A. M. EL-Hamouz** and R. Mann 'Effect of Micro-Mixing on the Yield of Intermediates in a Triplet Sequence of Consecutive - Reactions', *The Canadian Journal of Chemical Engineering*, vol. 76. 650, (1998).
- [J13] A. C. Stewart; **A. M. EL-Hamouz** and G. A. Davies, 'Effect Of Chemical Additives On The Stability of Kerosene-Water Dispersions' *Journal of Disp. Sci. Tech.* vol 17(6), 675, 1996.
- [J14] R. Mann; S. K. Pillai; **A.M. EL-Hamouz**; P. Ying; A. Togatorop and R. B. Edwards, "Computational Fluid Mixing (CFM) for Stirred Vessels: Progress From Seeing to Believing", *Chemical Engineering Journal*, 59, 39, 1995.
- [J15] R. Mann and **A. M. EL-Hamouz**, 'A Product Distribution Paradox on Scaling Up a Stirred Batch Reactor', *AIChE J.*, vol.41(4), 855, 1995.
- [J16] R. Mann and **A. M. EL-Hamouz**, 'Imperfect Mixing and Paradoxical Product Distribution for a Stirred Semi-Batch Reactors', *Process Mixing: Chemical and Biochemical Applications*, *AIChE Symp. Series* 286, 1, 1992.
- [J17] A.W. Nienow , S. Drain , A. P. Boyes , R. Mann , **A.M. EL-Hamouz** and K.J.Carpenter 'New Pair of Reactions to Characterise Imperfect Macro-Mixing and Partial Segregation in a Stirred Semi-Batch Reactor', *Chem. Eng. Science* vol. 47, (9-11), 2825, 1992.
- [J18] **A.M. EL-Hamouz**. 'Fluid Mixing Developments', An Article about Fluid Mixing Research in Britain, by Charles Butcher. *Chemical Engineer J.*, 508, 17, 1991.

## REFEREEDCONFERENCE PAPERS

- [C1] Hikmat S. Hilal, Lamees Z. Majjad, **A. El-Hamouz** and Nidal Zaater; Graphite-Supported Nano- Crystalline Semiconductors as Catalysts for Photo-Degradation of water Contaminants, International Congress in Materials Science and Engineering 2006, Algeria May<sup>1-3</sup> 2006.
- [C2] H. A. Arafat, **A. M. El-Hamouz**, A. Abu-Safa and M. Almasri "Methodology for Disinfectant Dose Evaluation, Modeling, and Optimization in Drinking Water in Small

Middle Eastern Cities - Nablus City (Palestine) as a Case Study". *Third International Conference on Water Resources in Mediterranean Basin , Tripoli- Lebanon 1-3 November 2006.*

- [C3] **A. M. EL-Hamouz** "Development of Fine Chemicals Production Course at An-Najah National University: A Case Study of an Academic-Industrial Collaboration in Developing the Palestinian Fine Chemical Industry", *Paper number ED23*. Third Forum on Engineering Education: Building Partnership with Government, Industry and Society, Sharja University, Sharja, 14-15 October 2003.
- [C4] **A.M.EL-Hamouz** and M. AL-Jabari "Imperfect Mixing in The Palestinian Fine Chemical Stirred Semi-Batch Reactors: Research Needs" Presented in the Palestinian Engineering Conference 2001, August 2001. An-Najah National University, Nablus, Palestine.
- [C5] **A. M. EL-Hamouz** and A.C. Stewart. 'On-Line Drop Size Distribution Measurement of Oil-Water Dispersion Using A Par-Tec M300 Laser Backscatter Instrument' *Paper presented at the 'Society of Petroleum Engineers Annual Technical Conference and Exhibition, SPE 36672, vol 685, 6-9 October 1996, Denver , Colorado, U.S.A..*
- [C6] **A. M. EL-Hamouz**; A. C. Stewart and G. A. Davies.' A Study of Kerosene-Water Dispersions In Shear Flow Through Pipes and Fittings' *International Symposium on Two-Phase Flow Modeling and Experimentation, Rome, Italy, 9-11 October, vol. 2, 987, 1995.*
- [C7] A. C. Stewart; G. A. Davies; **A. M. EL-Hamouz** and Q. Zhang, 'Latest Research and Design Guidelines for Primary Separation Systems' *A BICS International Conference on "Produced Water Discharges- Current and Future Developments in Legislation and Reduction Technologies", 24th Nov, 1994.*
- [C8] **A. M. EL-Hamouz**; A. C. Stewart and G. A. Davies, 'Kerosene-Water Dispersions Produced By A Lightnin "In-Line" Static Mixer', *ICHEME Symposium Series 136, 457, 1994.*
- [C9] O. M. Ilyas, R. A. Williams, R. Mann, P. Ying, **A. M. EL-Hamouz et al.** 'Advances in and Prospects for the Use of Electrical Impedance Tomography for Modeling and Scale-Up of Liquid and Solid-Liquid Processes', *AIChE Annual Meeting, Miami Beach 1992.*
- [C10] R. Mann and **A. M. EL-Hamouz**, "Effect of Macro-Mixing on a Competitive-Consecutive Reactions in a Semi-Batch Stirred Reactor: Paul's Iodination Experiments Interpreted by Network-of-Zones", *7th European Conference on Mixing, Paper no 1, 1991, Bruges Belgium.*

***Ms. Supervision:***

*1- Assessment of Household Hazardous Waste Management: A comparison Study between Nablus City and its Refugee Camps.*

***By Ehab Mayyaleh: Successfully defended in April 2007.***

*2- Management Strategies for Oil and Grease Residues in Jenin City successfully defended in October 2002) by Jomana Ateya*

**External and Internal M.Sc. Examiner:** BirZeit University and An-Najah University.