

Amer Mahmoud EL-Hamouz
Professor of Chemical Engineering
Member of AIChE and AMIChemE
**Member of the Editorial board of
Process Safety and Environmental Protection Journal (Feb 2002-Dec 2007)
Coordinator of the University Safety Committee (Jan 2008-October 2013)**

Marital Status Married
Citizenship **Palestinian/ British**
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EDUCATION

1990-1992 *Ph.D. in Chemical Engineering, (Separation and Reaction Systems)*, University of Manchester Institute of Science and Technology (UMIST). *Thesis entitled "Complex Reactions and Imperfect Mixing in Stirred Semi-Batch"*.

1988-1990 *M. Sc. in Chemical Engineering. (Separation and Reaction Systems)*. UMIST, *Thesis entitled "Effect of Macro mixing on a Competitive Consecutive Reaction in a Semi-Batch Stirred vessels "*.

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

Working experience

- 10 year working experience in projects related to institutional aspects and capacity building of water, wastewater and solid waste management
- More than 15 years in projects related to **solid waste management and utilization**
- More than 10 years in **Hazardous waste management**.
- More than 3 years in carrying out as a consultant to the Municipalities in evaluating tenders related to water and wastewater treatment projects.
- **National Hazardous Waste consultant** (see consultations)

Teaching areas

Undergraduate courses: Reaction Engineering, Reactor Design, Plant Design, Equipment Design, Experimental Analysis and Design, Detergent Production, Chemical Process Safety. Environmental Impact Assessment, **EIA**

Graduate courses: EIA, Energy and Environment

Research Areas

Wastewater treatment Process Solid Waste management, EIA, Hazardous waste Management, Reaction Engineering, Chemical Process Safety, Emulsification, Utilization of Waste materials in producing useful products.

Professional Experience

- Dean of the Faculty of Engineering and Information Technology: Aug 2013- Aug 2014
- Director of University Practical Training Centre, Aug 2011- now
- Professor of Chemical Engineering: October 2011-now.
- Assistant Professor 1997-2001
- Associate Professor 2001-2011
- Visiting Professor, University of Manchester 2005-2006
- Visiting Professor, Unilever Company UK, July 2007, and May 20July2008.

PROFESSIONAL MEMBERSHIPS

- Member of the Editorial board of the Process Safety and Environmental Protection Journal, published by the Institute of Chemical Engineers, UK, 2002- 2007
- Associate Member: Institute of Chemical Engineers, UK. (AMIChE), 1998-present
- Member: American Institute of Chemical Engineering (AIChE), 1992- present
- Member: Association of Jordanian Engineers, Chemical Engineering Division.,1988-present
- Member of the “Made In Palestine prize” reviewing committee, 2010 until now

Committees Membership

- Member of University Deans Board, 2013-2014
- Member of Energy and Environment Departmental Board 2011- now
- University General Safety Coordinator, Jan 2008- October 2013
- Member of the Board of Directors of the Arab Council for the Training Students of Arab Universities (ACTSAU), 2012-Now
- Director of Practical Training Center 2011-now
- Member of the steering committee of the An-Najah Business Innovation and Partnership Centre (NBIC) 2013-now
- Evaluation Committee Member of Al-Nayzak Association since 2010 -now
- Member of the ABET college committee 2011-2014
- Member of the Editorial Board of An-Najah University Journal for Research (A), published by the Deanship of Scientific Research, Journal for Research -A (Natural Science), 2004-2006
- Member of the Departmental Curriculum Committee (CC), 2004-now

- Member of the Departmental Lab committee for studying receiving lab offers, 2004-2011
- Chairman of the Organizing and technical committees of the Second Palestinian Engineering Conference, 2002
- Chairman of Faculty of Engineering Recruitment Committee, since 2005 until now.
- Head and Founder of Chemical Engineering Department 1997-2001.

CONSULTATION WORK/Funded Projects (Selected)

- 1- Safety and environmental expert for the consultation on: “Temporary Forensic Laboratory (TFSL) Environmental and Facilities Management Logic Model”, coordinated by UNODC/UNDP. Nov 2013-May 2014.
- 2- Design of a **wastewater treatment plant** of a medium size tannery- Nablus. May 2013- Jan 2014.
- 3- Environmental expert: part of the team on the ” **Assessment of the feasibility study of establishing Nablus handicraft Industrial Zone**: Design and development of Tender Package. ” Amar Group, Ramallah, May 2012- October 2012
- 4- Solid Waste Expert: Part of the team for the preparation of Strategic Physical Plan for Aja Anza, Meka and others. Funded by MDLF. May 2012-November 2012.
- 5- Preparation of SDIP for several municipalities (Nablus, Beta, Asera, Aqaba and Aqraba) , Funded by MDLF, March 2011- June 2011
- 6- **National Hazardous Waste Management consultant**” Preparation of an Interim Action Plan for the **Hazardous Waste** In the Palestinian Territory” consultation to EQA/GIZ Palestine, June- December 2011.
- 7- Solid Waste Expert: Part of the team for the preparation of the SDIP for several municipalities (Nablus, Beta, Asera, Aqaba and Aqraba) , Funded by MDLF, March 2011- June 2011
- 8- Solid Waste Expert: part of the team for the preparation of Physical and Strategic Plans for Alkafriyat Municipality and Alitihad Municipality, *Jan-May 2011, Funded by MDLF*
- 9- **National Hazardous Waste consultant** “Development of a National Master Plan for **Hazardous Waste** Management for the Palestinian National Authority (PNA)” consultation to UNEP/EQA **Jan - Sep 2010.**
- 10-Solid Waste consultant for “Strategic Development plan For Nablus District”, January- Aug 2008. (**a member of solid waste consultation team**)
- 11- **A consultant for “Monitoring Plan for the Medical Waste Management** of Ramallah District: A project funded by UNDP Ramallah 2009”, a **consultation** prepared for **UNDP/ EQA**, Ramallah July 2009.
- 12-**A consultant**: Recipe Formulation, Lab and Commercial Production of Specialized Olive oil Based Soap, private consultation to Anabtawi group- Nablus West Bank, Aug 2009.
- 13-**Environmental Impact Assessment** of Feroun Transfer Station-Tulkarm”, prepared to HWE, Ramallah, May 2009.

- 14-**A member of solid waste consultation team** for “Participatory District Strategic Development plan in Jenin”, a project funded by UNDP and Irish Aid, January- Aug 2008. ()
- 15-“Dispersion of Silicone oil under high shear devices: Effect of concentration and flow rate” **confidential work** for UNILEVER company, UK, May 2008- July 2008.
- 16-“Dispersion of Silicone Oil in batch reactors: Effect of oil viscosity and impeller type” confidential work for UNILEVER company, UK, Aug 2005- July 2006.
- 17-Industrial Plant Layout for AlBareeq Company, AlRamah Jenin –Palestine. **A. M EL-Hamouz**. June 2005
- 18-**Safety in the workplace and accident investigation**, a two days workshop presented to the safety department of JAWAL company, Ramalla June 2005.
- 19-“Environmental Impact Assessment for the Privatization of Solid Waste Collection in Tubas District” USAID funded project, **A.M.EL-Hamouz**, September 2004.
- 20-“ **Process Safety and Accident Investigation**”, a consultation prepared to the Safety Department at the Palestinian Telecommunication, Nablus Branch, **A.M.EL-Hamouz**, December 2003.
- 21-“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.
- 22-“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.
- 23-“ 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.
- 24-**A course on Safety in the workplace, presented to the Palestinian Labor Association**, Nablus, September 2000.
- 25-“**A course on Chemical Process Safety: Fundamentals and Applications**” prepared to the Engineering Association- Jerusalem Center, May 1999.
- 26-“**Investigation of the Production of Activated Carbon from Olive Pibs Waste**” **A. M. EL-Hamouz**, prepared to Kanan Company, Nablus Palestine, March 1999.
- 27- “Environmental Impact Assessment of the Palestinian Cement Factory” **A. M. EL-Hamouz**, Prepared to the Palestinian Cement Factory owners, Jaba’a -Jenine.
- 28-“**Tanneries Waste water treatment**” a consultancy prepared to Hijawi Engineering Office for the treatment of Salfeet Tannery, May 1998.
- 29-“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.
- 30-‘CFL Oil Cartridge Performance: Testing and Verification’ **A.M. EL-Hamouz** and A.C.Stewart, *A Confidential consultancy Report for Charlson Filtration* 1994.
- 31-“ 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
- 32-“A Chemical Reaction Engineering Model for Bromine Extraction from Sea Water” R. Mann and **A.M. EL-Hamouz**, *A Confidential consultancy Report for OCTEL Company*, U.K, 1992.
- 33-“Pipeline Slug Flow Mixing” R. Mann and **A. M. EL-Hamouz** *A Confidential consultancy Report for B.P. Exploration*, Aberdeen U.K. 1992.

Referee Activities

During my enrolment in the editorial board of Process Safety and Environmental protection Journal, I do read papers submitted to the Journal in my area of specialty before choosing referees for the paper.

Reviewed many technical papers related to the fields of mixing in static mixers, dispersion of liquid mixtures, solid waste and hazardous waste management and removal of heavy metals by adsorption for:

- Journal of Industrial Engineering and Chemistry Research 2013
- Journal of the Taiwan Institute of Chemical Engineers, 2012
- Journal of Solid waste management, 2006, 2008,2010, 2012, 2014
- An-Najah Scientific Research Journal, Part A, 2012
- International Journal of multiphase flow, 2009
- Journal of Environmental Engineering and Science, Nov 2005.
- Water: Values and Rights/International Conference May 2-4, 2005, Palestine
- Journal of Chemical and Engineering Data, 2005
- Transaction of the Institute of Chemical Engineers, Part A: Chemical Engineering Research and Design, 2002, 2003 and 2004
- Journal of Chemical Engineering Data, 2004
- Second Engineering Palestinian Conference, 2001.

AWARDS

- 1- DGIS-UNESCO – IHE, Programatic cooperation,” **Step Chlorination for Improving Drinking Water Disinfection System in Ghana and Palestine**” November 2011.
- 2- Quality Research Excellence Award for the years 2010 and 2012, Deanship of Scientific Research, An-Najah National University.
- 3- Participating in the Professional Faculty Development Conference organized by Center for Learning and Teaching held at the American University in Cairo from March 11 to March 17th, 2012.
- 4- MTCP, **Science and Technology Course for Researchers in OIC countries**, 4-16 July 2010, Kuala Lumpur, Malaysia
- 5- **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.
- 6- One year **Sabbatical leave** from An-Najah University, 2005-2006. Hosted by the University of Manchester, UK.
- 7- **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.

- 8- **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.
- 9- **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.
- 10- Award to attend the **Post Graduate School on new materials** organized by the Italian National Research Institute. One week in October 1999.
- 11- **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).
- 12- **A scholarship from OCTEL** for the tuition fees and living expenses for two years., 1990-92

PUBLICATIONS

Patent.

Zakariya Al-Hamouz, **Amer EL-Hamouz** and Nabil Abu Zaid “System and method for estimating corona power loss in a dust – loaded Electrostatic precipitator”. Patent number: US 8 521455 B2, 27th August 2013.

REFEREED JOURNALS

- [J1] Ahed Zyoud, Hiba N.I. Nassar , **Amer El-Hamouz**, Hikmat S. Hilal, “Solid olive waste in environmental cleanup: Enhanced nitrite ion removal by ZnCl₂-activated carbon Journal of Environmental Management 152 (2015) 27-35
- [J2] Steven Hall, Michael Cooker, **Amer EL-Hamouz** and Adam J. Kowalski ”Droplet Break-Up by in-line Silverson Mixer”, Chemical Engineering Science 66 (2011) 2068–2079
- [J3] Z. Al- Hamouz and **A. EL-Hamouz**, “ Analysis of a Wire-Duct Electrostatic Precipitator Under Dust Loading Conditions”, *J Energy Conversion and Management*, 52 (2011), 1235-1243.
- [J4] Z. Al-Hamouz, **A. M. EL-Hamouz** and N. Abu Zaid ”Simulation and Experimental Studies of Corona Power Loss in Dust Loaded Wire-Duct Electrostatic Precipitator” *J Advanced Powder Technology*, **22(6)**, 706-714 (2011).
- [J5] S.Sawalha and **A.M. EL-Hamouz**,” Improvements of the Tensile Properties of Recycled High Density Polyethylene (HDPE) by the Use of Carbonized Olive Solid Waste." *Polymer Plastic Technology and Engineering*, **49(4)**, 387-393 (2010).
- [J6] **EL-Hamouz**,” Drop size distribution in a Standard Twin –Impeller Batch Mixer at High Dispersed Phase Volume Fraction " *Journal of Chemical Engineering and Technology*, **32 (8)** 1203-1210, (2009)
- [J7] Hikmat S. Hilal, Rania M.A.Ismail, **Amer EL-Hamouz**, Ahed Zyoud and Iyad Saadin,” Effect of cooling rate of pre-annealed CdS thin film electrodes prepared by chemical path desposition: Enhancement of photo electrochemical characteristics. *Electrochimica Acta* 54, 3433-3440 (2009).

- [J8] **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 (2009).
- [J9] **AM.EL-Hamouz** "Logistical management and private sector involvement in reducing the cost of municipal **solid waste collection service** in the Tubas area of the West Bank" *Waste Management* **28(2)**, 260-271 (2008).
- [J10] **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).
- [J11] **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)
- [J12] H. S. Hilal, L. Z. Majjad, N. Zaatar and A.M.El-Hamouz "Dye Effect in TiO₂ catalyzed contaminants photo-degradation: sensitization vs. charge-transfer formalism " *solid state sciences* **9**, 9-15 (2007).
- [J13] **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).
- [J14] **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.
- [J15] **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).
- [J16] 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).
- [J17] **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).
- [J18] **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).
- [J19] **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).
- [J20] 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.
- [J21] 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.
- [J22] 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.
- [J23] 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.

- [J24] 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.
- [J25] **A.M. EL-Hamouz**. 'Fluid Mixing Developments', An Article about Fluid Mixing Research in Britain, by Charles Butcher. *Chemical Engineer J.*, 508, 17, 1991.

CONFERENCE PAPERS

- [C1] Step Chlorination Need for Improving Drinking Water Disinfection Systems: Comparison between Experimental Results and EPANET Simulation. **A.M. EL-Hamouz, A. R. Hasan, A.Imreesh1, A. Abusafal and M. Haddad**. Paper accepted for The Third International Conference on Water, Energy and Environment (ICWEE) - AUS | March 24–26, 2015
- [C2] The Impact of Effective Staff Involvement on the Successful Realization of ABET Requirements, A. M EL-Hamouz, A Ja'roon, M Hmouda, B shaheen and **presented at the 14 AIChE 2014 annual meeting November 16-21 2014, Atlanta GA Paper No 357871**
- [C3] A. Al-Khaldi, W. Abbadi, A. R. Hassan and A.EL-Hamouz” Self-cleaning Advanced-treatment Filter for Effluents (SAFE): Innovative development, design and application for efficient treatment of secondary effluents of wastewater treatment plants” Second Arab Innovation Network Annual Conference – AINAC 2013 Dead Sea – Jordan, December 2013
- [C4] Z. AL-Hamouz and **A.M.EL-Hamouz**, Electrohydrodynamic (EHD) Flow in Wire –Duct Electrostatic Precipitators: Numerical and Experimental Findings" Paper Number D5, International Symposium on Electrohydanamics, University of Malaysia Sarawak (UNIMAS) Malaysia 25-28th March 2009.
- [C5] 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 1-3 2006.
- [C6] 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*.
- [C7] **A.M. EL-Hamouz** and H.Hillal, “Utilization of Palestinian Olive Solid Waste in Creating Green Environment ”, abstract accepted for oral presentation in the 7th World Congress of Chemical Engineering to be held on 12th July 2005, UK.
- [C8] **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.
- [C9] **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.

- [C10] **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..*
- [C11] **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.*
- [C12] 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.*
- [C13] **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.*
- [C14] 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.*
- [C15] 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.*

Graduate Supervision Activities.

Selected Ms. Supervision, Internal and external examiner related to reaction Engineering and Environmental disciplines.

- 1- Mays Shadeed., "Solar Drying and Utilization of Sludge Produced at Wastewater Treatment Plants" *Jordan University of Science and Technology, Jun 2014 (external examiner).*
- 2- Hiba Nassar" *Removal of Nitrate and Nitrite ions by Activated carbon" An-Najah National University, May 2012.*
- 3- Rami Bani Shamas "Assessment of solid medical waste management in laboratories and the occupational safety of the workers in Medical laboratories in Nablus and Ramallah and AlBirah Districts., *Bir Zeit University. Examined on June 2012. (external examiner).*
- 4- Majed I AL-Sari" *Behavioral and attitude factors and workers safety in construction waste management in the Southern West Bank of Palestine" Examined in October 2010 (external examiner –Bir Zeit University.*
- 5- Rania M.A.Ismail, " Effect of cooling rate of pre-annealed CdS thin film electrodes prepared by chemical path desposition: Enhancement of photo electrochemical characterization. (2009)
- 6- Mohammad AlSadi " Reuse-Recycling Options for Municipal Solid Waste in Zahrat Al-Finjan Landfill", July 2009 *(internal examiner).*
- 7- Abdul-salam Khalaf," *Assessment of Medical Waste Management in Jenin District Hospitals" (2009)(internal examiner).*
- 8- AbdelSalam Khalid," *Medical Waste Management and its Associated Factors in Jenin Hospitals", November 2009 (Internal Examiner).*

- 9- Manal F. Shkoukani" Development of Environmental Management System Using Cleaner Production in Palestinian Dairy Industries, (*external examiner*), October 2008, BirZeit University.
- 10- Ehab Mayyaleh "Assessment of Household Hazardous Waste Management: A comparison Study between Nablus City and its Refugee Camps". Successfully defended in April 2007.
- 11- Jomana Ateya Management Strategies for Oil and Grease Residues in Jenin City October 2002.