#### Amer Mahmoud EL-Hamouz

Professor of Chemical Engineering Member of AIChE and AMIChemE

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#### Member of the Editorial board of

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

Coordinator of the University Safety Committee (Jan 2008-Oct. 2013, Aug 2015- March 2016)

Marital Status Married

Citizenship Palestinian - British

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**Term Address** Chemical Engineering Department, An-Najah National University

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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).

#### PROFESSIONAL EXPERIENCE

- External Proposals Evaluator for Khalifa University- UAE, 2017-2019
- Member of the Board of the Faculty of Postgraduate Studies 2018-2019
- Member of the Judging committee of Abdul Hameed Shoman Award for Arab Researchers, 2016
- Member of Engineering Association Accreditation committee, 2015- 2019
- Member of Certificate Equivalency committer of Ministry of Higher Education, 2013-2014
- Dean of the Faculty of Engineering and Information Technology: Aug 2013- Aug 2014
- Director of University Practical Training Centre, Aug 2011- Sep 2019
- Professor of Chemical Engineering: October 2011-now.
- Associate Professor 2001-2011 ANU
- Member of the Editorial board of the Process Safety and Environmental Protection Journal, published by the Institute of Chemical Engineers, UK, 2002-2007
- Member of Faculty ABET accreditation committee, 2010-2014
- Chair of Faculty of Engineering and Information Technology Appointment and Recruitment committee, 2010- Now
- Member of the "Made In Palestine Prize" reviewing committee, 2010 until now
- Assistant Professor 1997-2001- ANU
- Visiting Professor, University of Manchester 2005-2006

- Visiting Professor, Unilever Company UK, July 2007, and 20<sup>th</sup> May to 20<sup>th</sup> July 2008.
- Faculty member (Honary Lecturer), Department of Chemical Engineering, UMIST. June 1992 February 1997
- Associate Member: Institute of Chemical Engineers (AMIChE), 1998-present
- Member: Association of Jordanian Engineers, Chemical Engineering Division.,1988- present
- Member: American Institute of Chemical Engineering (AIChE), 1992- present

### **Teaching areas**

- <u>Undergraduate courses</u>: Several courses from first year to graduation level, Examples: Introduction to chemical engineering, Chemical Engineering Principles, Fluid Mechanics, Reaction Engineering, Reactor Design, Chemical Plant Design, Chemical Equipment Design, Experimental Analysis and Design, Soap and Detergent Production, Chemical Process Safety. Fine chemical Production, Environmental Impact Assessment (EIA) and Final year projects.
- Graduate courses: PhD Course: Sustainable Waste Management
- <u>M.Sc Courses</u>: Environmental Impact Assessment, Energy and Environment, Scientific Research and its statistical Application, Solid Waste Management and Biomass and Bioenergy.
- Supervision undergraduate and postgraduate theses.
- Supervising more than 40 undergraduate final year projects and more than 15 postgraduate theses.

## Non Academic Working experience

- 15 years working experience in projects related to institutional aspects and capacity building of solid waste management, hazardous waste management and wastewater. (latest project "Technical Assistance (TA) to the Ministry of Local Administration of Jordan to support the implementation of the National Solid Waste Management Strategy".
- More than 12 years in carrying out Environmental Impact Assessment (EIA) related to: solid
  waste transfer stations projects and Electricity Power plant project, underground
  electricity transmission projects and solar energy projects. (see several projects in the list)
  Teaching EIA postgraduate course and supervising Master students in this field
- More than 10 years' experience with project implementation, monitoring and evaluation wastewater management and solid waste management projects.
- More than 12 years' experience in stakeholder involvement process.
- More than 14 years' experience in working as a key or a non-key expert in EU and other donor funded projects
- At least 15 years of professional experience in environmental management and/or in wastewater management.
- More than 15 years in projects related to solid waste management and utilization of solid waste.
  Part of these projects related to Plastic solid waste management, this was evident in several projects such as the "update of the Palestinian NAP" project and "Gap Analysis on beneficiary country needs with regard to the reduction of plastic pollution and other reporting activities" project.

- More than 12 years in **Hazardous waste management** on his position as National Hazardous waste management consultant. The project was funded by UNEP and the beneficiary was EQA.
- More than 6 years' experience in solid waste and hazardous waste management policies and legislations in the Palestinian territories. This is evidence in the development of "a National Master Plan for Hazardous Waste Management (NMPHW and the Preparation of an Interim Action Plan for the Hazardous Waste and recently "Align Legislations with the International Environmental Agreements and Prepare New Environmental Legislation".
- More than 5 years' experience in being as an external M.Sc. thesis related to Hazardous waste.
- More than 5 years' experience in being as an external M.Sc. examiner in the wastewater design units thesis
- More than 10 years' experience in reviewing scientific papers in the hazardous waste management
- More than 5 years in developing a monitoring plan for medical waste management. Also examine several M.Sc. dissertations in this field.

#### **Committees Membership**

- Member of the Sustainable Energy Technology PhD Program, 2020- now
- Director of Practical Training Center 2011-2019
- 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), 2012-2015
- 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 -2008, 2012 until now.
- Head and Founder of Chemical Engineering Department 1997-2001.

# CONSULTATION WORK/Funded Projects (Selected)

Name of assignment	"Investigation and développement a compendium with successful approaches of an Extended Producer Responsibility (EPR) system for plastics in Lebanon and Palestine"
Year	20/12/2022-ongoing
Location	Palestine
Client	LDK consultants Europe SA (funded by the European Union)
Main project features	The objective of this activity is to develop a compendium detailing successful approaches in the wider Mediterranean and beyond with all generic recommendations for the needed steps to be communicated to Lebanon and Palestine with a view to encouraging more ambitious EPR schemes to bring about a more sustainable use of plastics.
Position	National NKE
Activities	<ul> <li>Assess the current situation in Lebanon and Palestine (with focus on plastic packaging) that may apply the EPR and define which type of EPR instruments and models can be implemented in Lebanon and Palestine</li> <li>Investigate what institutional framework exists and how it can be improved.</li> <li>Present a compendium with lessons learned of successes from the EU and the region and failures in the region for countries who apply the EPR</li> <li>Clarify the roles and responsibility of the main actors and stakeholder in the field (government role/waste management companies/producers / manufacturers/informal sector/consumers/citizens)</li> <li>Assess the environmental, technical, economic and social aspects (benefits, constrains and challenges) for applying the EPR and define the main steps for EPR implementation</li> </ul>

Name of assignment	Sub-project "Installation of 3 Medium Voltage Lines from Qusin-Sarra Junction to Qusin-Bet
	Iba Junction
Year	04-09/2021
Location	Palestine
Client	PENRA Funded by the World Bank
Main project features	The Preparation of Generic & Site-Specific Environmental and Social Instruments - The objectives are to ensure that all relevant environmental and social impacts of the project are identified and assessed, and to develop a management plan to avoid or mitigate the adverse impacts. The E&S instruments are aligned with the new Environmental & Social Framework ESF of the World Bank.
Position	Team Leader and Environment and social Expert
Activities	The scope of the consultancy covers the following environmental & social instruments: Prepare a Site Specific Environmental & Social Management Plan, (ESMP)  • Prepare a Site-Specific Stakeholder Engagement Plan (SEP), update of the Labor management procedure (LMP)  • Prepare a Generic Waste Management Plan Including the hazardous waste, Generic
	Occupational Health and Safety Plan, Generic Emergency Response Plan, Generic Chance of Find Procedure implement as part of contractual obligations.  • Preparation of Gender Base Violence (GBV) action plan

Name of assignment	Align Legislations with the International Environmental Agreements and Prepare New Environmental Legislation
Year	01-10/2021
Location	Palestine
Client	EQA Funded by the Swedish International Cooperation Development Agency (SIDA)
Main project features	Preparing a map for the necessary amendments to harmonize the national environmental legislation with the international environmental agreements in relations to hazardous materials and wastes and in relation to nature protection.
Position	National Environmental Key Expert

Activities	• Harmonization of the national environmental legislations with the international
	environmental agreements in relation to hazardous materials and waste.
	• Preparing a draft bylaw for the management of hazardous materials.
	• Reviewing and developing lists of hazardous materials and instructions in accordance with the provisions of the bylaw.
	• Preparing forms of permits, permissions, approvals and licenses related to managing hazardous materials according to the provisions of the bylaw and according to international or regional standards.
	• Holding training workshops on reporting requirements for international environmental agreements in coordination with the focal points of the agreements.

Name of assignment	Gap Analysis on beneficiary country needs with regard to the reduction of plastic pollution
	and other reporting activities
Year	01-05/2021
Location	Palestine
Client	LDK consultants Europe SA (funded by the European Union)
Main project features	The objectives of the assignment are to:
, ,	(1) Identify the needs and gaps on plastics pollution prevention and reduction, either at institutional level or at practical, operational and/or implementation level in the Partner Countries.
	(2) Bring out areas where awareness on plastic pollution is needed, including on the negative
	impacts on health and the urgency to reduce pollution from Single Use Plastics
Position	National NKE
Activities	<ul> <li>Collecting and generating the needed information for the Gap Analysis. This includes:</li> <li>a desk study/review of the literature, search of the "profiles" and other information material of EU funded and other programmes and projects, as well as on research.</li> <li>circulation of questionnaires and face-to-face or on-line one-to-one interviews with target groups</li> </ul>
	and resource persons
	<ul> <li>compiling and treating the needed and available information to identify the character and type of Gaps.</li> </ul>
	<ul> <li>Clustering of Gaps to respond to typologies of plastic pollution reduction activities</li> </ul>
	Preparing concept notes and the inception report

Name of assignment	EIA for The Establishment of a Post-Harvest Hub (PHH) (Packaging and marketing) for fresh
	agricultural Products in Hableh Village – Qalqilia
Year	01-04/2021
Location	Palestine, Nablus
Client	FAO – Palestine
Main project features	This is part of the project "Support Economic Growth through Optimized Agricultural Value Chains in the West Bank OSRO/GAZ/406/CAN" funded by Global Affairs Canada Nations. It is implemented by (FAO) Coordination Office for the West Bank and Gaza Strip. This project seeks to support the objective of agribusiness sustainably contributing to economic growth and the welfare of the Palestinian people. In particular, the project will contribute to sustainably improving income and labour productivity in agribusiness. The Intended EIA was conducted based on FAO's EIA guidelines and procedures and in line with the related national policies and regulations.
Position	EIA Expert
Activities	Conduct the EIA scoping study and deliver the following results: an overview of the project, the applicable legislative and institutional framework; a description of the key stakeholders and their concerns and engagement plans; a description of the geographical area to be considered in the environmental baseline in the identification of impacts; recommendations on specific impact identification and evaluation methodology to be used in the EIA  Conduct EIA study which address the following: identification and assessment of the potential significant environmental impacts of the project in its different alternatives; physical and social impacts of the project on local area; mitigation and monitoring strategies, environmental and management plan; institutional arrangement for the implementation of the plans; responsibilities, role of the environmental authorities, role and participation of stakeholders; preparation of a monitoring and supervision plan including appropriate indicators, frequency of monitoring and schedule monitoring and mitigation measures.

Name of assignment	External monitoring and provision of support to the WES Demonstration projects
Year	12/2020-04/2023
Location	Palestine
Client	LDK consultants Engineers and planners SA (funded by the European countries)
Main project features	(1) perform regular "soft" external monitoring for each one of the two Demo project; (2) provide <i>ad hoc</i> assistance to the Demo projects to assist them achieve their objectives and meet their respective planning.  Expected results of this assignment would be the production of a Monitoring Report for each Demo project (aiming to be once annually) which will consist of findings and recommendations for the DEMO project's implementation, a summary of the <i>ad hoc</i> support provided to the projects, a reflection of capacity building in communication and the information disseminated, collaboration occasions and the work that was provided for the promotion of their visibility.  Assessment will be carried out according to the usual five DAC criteria. Face-to-face, skype and onsite visit to all Demo projects were carried out.
Position	Local Monitoring senior NKE- Palestine
Activities	Meetings with farmers from both genders Annual collection, review & analysis of Demo projects' documentation Development of monitoring & assessment framework Meetings and discussions with implementing partners and key stakeholders. This includes Video/tele-conferences/interviews and / or telephone calls and/ or e-mail exchange with implementing partners an face to face discussions. Preparation of monitoring report with follow-up recommendations Identification of opportunities for interaction and experience sharing with the WES project Communication and Visibility.

Name of assignment	Advancing Sustainability in Performance, Infrastructure, and Reliability of the Energy (ASPIRE) Sector in the West Bank and Gaza
Year	09/2019-01/2020
Location	Palestine, Ramallah
Client	Palestinian Energy and Natural Resources (funded by the World Bank)
Main project features	ESIA, ESMF and SEMP carried out according to World Bank Environmental and Social Framework
Position	Environment and Social Impact Assessment Expert
Activities	• ESMF, ESIA, SEMP

Name of assignment	TA for addressing industrial pollution and supporting environmental inspection and inventory
	for the Olive Oil and the Tanning industries
Year	10/2018-02/2019
Location	Palestine, Ramallah
Client	MIO-ECSDE / EQA- Palestine (funded by the European countries))
Main project features	1- Develop environmental pollution management plans/inventory/guidelines for the Olive Oil and
	Tanning industries.
	2. Develop inspection manuals.
	3. Reinforced and developed capacities of inspectors
Position	Industrial pollution local expert
Activities	<ul> <li>Review and assess the existing situation (includes location, number) in terms of environmental pollution, environmental inspection and permitting in the Olive Oil and Tanning industries.</li> </ul>
	<ul> <li>Develop environmental inspection and management plans/guidelines for the Olive Oil and</li> </ul>
	Tanning industries
	Two trainings to introduce and discuss the environmental management plans/guidelines and inspection manuals

Name of assignment	External monitoring and ad hoc technical assistance to the SWIM Demonstration projects
	Phase II)
Year	09/2018-02/2019
Location	Palestine
Client	LDK consultants Engineers and planners SA (funded by the European countries)
Main project features	1) Perform external monitoring (mid-term assessment) for each one of the 3 SWIM Demo projects;
	2) Recommendations and measures to the demo projects to enhance positive effects, to
	eliminate/mitigate/compensate undesired effects.
Position	Local Monitoring senior NKE- Palestine

Activities	Face-to-face, skype and on-site visit to all Demo projects.
	Activities involved meeting with farmers from both genders.

Name of assignment	Preparation of EIA
Year	05-11/2018
Location	Palestine, Nablus
Client	Private company Jaffa new solar power limited (According to MIGA standards)
Position	EIA expert
Activities	ESIA Report: Construction of a 5MW Solar Power Plant - Shams Tubas submitted to EQA and approved by EQA for business start

Name of assignment	Environmental monitoring inspection for 8 small projects funded by Municipal Development
	and lending Fund program for area C
Year	12/2017-03/2018
Location	Palestine, Ramallah
Client	Arabtech Jardana Company
Main project features	Projects include: Sewage and water projects, rehabilitation of buildings, and rehabilitation of roads.
Position	Environmental Expert
Activities	Meetings with stakeholders
	Obtain information about their concern and needs from the proposed projects
	• Checking the suitability of the design project from the environmental point of view according to WB methodology,
	• Preparation and submit Environmental and Social notes for each project, and environmental and social monitoring and complains mechanism.

Name of assignment	The Update of Palestinian National Action Plan for the Protection of the Mediterranean Sea from Land Based Sources
Year	02/2015-02/2016
Location	Palestine, Ramallah
Client	LDK consultants/EQA- Palestine(funded by the European countries)
Main project features	In all the NAP activities, close attention was paid to identification and utilisation of complementarities/synergies with other relevant national regional and international policy frameworks including, H2020 initiative, Stockholm convention, Basel convention and EU MSFD.
Position	National Expert/Team leader of NAP update process
Activities	<ul> <li>Identification and prioritization of national programme of measures to achieve Good Environmental Status (GES),</li> <li>Identification of capacity building needs and development of a plan to address these needs, as well as to develop NAP follow-up and reporting plan.</li> </ul>

Developing Spatial Development Framework Plan, Traffic and Transportation Plan for Ramallah, Al-Bireh, and Beituniya Municipal Area, and Aerial Photography for Beituniya
10/2015-03/2016
Palestine, Ramallah
National Center for Sustainable Development (funded by Municipal Development and lending Fund)
Environmental Expert
<ul> <li>Management of the environmental team of the project to conduct site visits,</li> <li>Organisation of meetings with municipal staff and involved institutions</li> <li>Assistance in preparing requested documents, collect and analyse data needed and report on the findings</li> <li>Responsible for the Definition of the Planning Framework, Sectoral Assessment and Develop Potentials and Challenges.</li> </ul>

Name of assignment	Study on Public Private Partnership in Solid Waste Management in West Bank, Palestine
Year	09-12/2015
Location	Palestine, Ramallah
Client	House of Environment
Main project features	Survey on PPP in SWM
Position	Environmental Expert/Solid waste management

Activities	Survey on PPP in SWM sector, current situation, success stories and challenges facing PPP and
	hence include recommendations for the feasible options for PPP in SWM.

Name of assignment	Forensic Human Resource and Governance Development Assistance for the Palestinian Authority
Year	11/2013- 11/2014
Location	Palestine, Ramallah
Client	Palestinien Civil Police/UNODC/UNDP
Position	Safety and Environmental management Expert/ Co project team leader
Activities	Facility Management Plan, Emergency Action Plan, Health and Safety plan and Environmental
	management plan (EMP). Safety and EMP workshops were delivered.

#### **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 Clean Production, 2019
- Journal of Sustainability, 2017
- Journal of Environmental Monitoring and Assessment 2016
- Journal of Cleaner Production 2016-2017
- Journal of Solid waste management, 2006, 2008, 2010, 2012, 2014, 2017, 2018
- Journal of Industrial Engineering and Chemistry Research 2013
- Journal of the Taiwan Institute of Chemical Engineers, 2012
- 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.

# **Research Grants and Support**

- 1- Research team leader for "Managing heavy metals contaminated industrial wastewater from inorganic chemical industries: Implementing cleaner production for sustainability" project funded by PADUCO (Palestinian Dutch Academic Corporation on Water", 2017-2020, (192437 Euro).
- 2- Appointed as a director for the project titled "Improvement of Students Skills towards Employment Enhancement between An-Najah Training center,

- **Najah Innovation Center and PFIU**". A three years funded project by the World Bank through Ministry of Higher Education. (255,725 Dollars)
- 3- DGIS-UNESCO IHE, Programmatic cooperation," **Step Chlorination for Improving Drinking Water Disinfection** System in Ghana and Palestine" November 2011 (15,000 Euro)
- 4- 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 (7500 Dollars)
- 5- 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 (7500 Dollars)
- 6- **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). (6000 Dollar)
- 7- **UMIST Chem. Eng. award**. A six weeks Research grant to carry out a feasibility study on "Zelolization of Active Carbons from <u>olive-pip waste to produce</u> high value products", July-August 2002. (8000 dollars)

#### **Training Activities**

- 1-EPA ORD Emergency Response Webinar: Facilitating Coordinated Response from Field to Lab: ESAM Program, online Webinar, 14<sup>th</sup> Sept 2022.
- 2-Delivering three days training course titled "Improving the Capacity of Stakeholders in the Management of Hazardous Chemicals and Wastes", repeated 12 times in 12 Palestinian governorate. (2021-2022).
- 3-Best Practice Advice on Safety Data Sheet Authoring, online webinar 6th July 2022. Three days Training Workshop "Supporting the State of Palestine for the initial national information collection on the listed POPs and on the legal frameworks for POPs under the Stockholm Convention" organized by SCRC-Kuwait on 29-30 November and 1st of December 2021
- 4-Four days training workshop on "Resource Efficiency in Industry- UNIDO TEST Methodology" to introduce Resource Efficient and Cleaner Production (RECP) and the Transfer of Environmentally Sound Technologies (TEST) in the industry. December 2021. Ramallah -Palestine
- 5-IHE, Delf training week on "Managing heavy metals contaminated industrial wastewater from inorganic chemical industries: Implementing cleaner production for sustainability" funded by PADUCO (Palestinian Dutch Academic Corporation on Water", 10-17 Sept 2018.
- 6-Professional Faculty Development Conference organized by Center for Learning and Teaching held at the American University in Cairo form March 11 to March 17th, 2012. MTCP, **Science and Technology Course for Researchers in OIC countries**, 4-16 July 2010, Kuala Lumpur, Malysia

7- Four days intensive course on "Advanced course on Reverse Osmosis Technology" 26-29<sup>th</sup> March 2007, organized by Middle East Desalination Research Centre.

#### **AWARDS**

- 1- Quality Research Excellence Award for the years 2010 and 2012, 2016, 2017, 2018, 2019, 2020, 2022 Deanship of Scientific Research, An-Najah National University.
- 2- Participating in the Professional Faculty Development Conference organized by Center for Learning and Teaching held at the American University in Cairo form March 11 to March 17th, 2012.
- 3- MTCP, Science and Technology Course for Researchers in OIC countries, 4-16 July 2010, Kuala Lumpur, Malysia
- 4- One year **Sabbatical leave** from An-Najah University, 2005-2006. Hosted by the University of Manchester, UK.
- 5- Award to attend the 4-days intensive course on "Advanced course on Reverse Osmosis Technology" 26-29<sup>th</sup> March 2007, organized by Middle East Desalination Research Centre.
- 6- 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 25,000 \$ prize in share with Prof. Hikmat Hilal.
- 7- Award to attend the **Post Graduate School on new materials** organized by the Italian National Research Institute. One week in October 1999.
- 8- **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 8,521,455 B2, 27the August 2013.

#### **CHAPTER IN A BOOK**

Hassan Sawalha, Maher Al-Jabari, **Amer El-hamouz**, Abdelrahim Abusafa and Eldon R. Tannery wastewater treatment and resource recovery options, Chapter 25 in Waste Bioenergy: Integrating Biorefineries for Waste Valorisation edited by Thallada Bhaskar, Ashok, Eldon R. Rene and Daniel C.W., ISBN: 978-0-12-818228-4, Elsevier Publication 2020

#### REFEREED JOURNALS

[J1] Maryam Hmoudah, Amjad El-Qanni, Nedal N. Mareic, Saqr Abuhataba, Amer El-Hamouz, Belal J. Abu Tarboush, Ihab H. Alsurakji, , Hanaa M Baniowda

- Vincenzo Russo, and Martino Di Serio, Competitive Adsorption of Alizarin Red S Bromocresol Green from Aqueous **Solutions** using **Brookite** and TiO2 Nanoparticles: Experimental and Molecular Dynamics Simulation accepted for **Publication** Environmental Science and Pollution Research, https://doi.org/10.1007/s11356-022-21378-7 June 2022
- [J2] Ihab H Al-Surakji, Amjad EL-Qani, Amer EL-Hamouz, Ismail Warad and Yazan Odeh, "Thermogravimetric Kinetics Study of Scrap Tires Pyrolysis Using Silica Embedded With NiO and/or MgO Nanocatalysts." *Journal of Energy Resources and Technology*. Vol 143 (9) 2021.
- [J3] Mohammed Hawash, Mohammad Qneibi, Nidal Jaradat, Murad Abualhasan, Johnny Amer, EL-Hamouz Amer, Tasneem Ibraheem, Siham Hindieh, Sama Tarazi & Shorooq Sobuh, "The impact of filtered water-pipe smoke on healthy versus cancer cells and their neurodegenerative role on AMPA receptor" *Drug and Chemical Toxicology volume* 44(x), 2021.
- [J4] Hanan S. Tuhul, Amer El-Hamouz, A. Rasem Hasan and Hanan A. Jafar "Development of a Conceptual Framework for Occupational Safety and Health in Palestinian Manufacturing Industries" *Int. J. Environ. Res. Public Health* 18(3), 1338. **2021.**
- [J5] Mays Shadeed, Reem Ashqar, Lama, Amer EL-Hamouz, Hanan Alkoni, "Design and performance investigation of Continuous Solar Desalination Unit (CSDU)", Energy Sources, Part A: Recovery, Utilization, and Environmental Effect, Vol 43 (22) pages 2996-3010, 2021
- [J6] Heba Nassar, Ahed Zyoud, Amer El-Hamouz, Rafeeq Tanbour, Nour Halayqa and Hikmat S. Hilal "Aqueous nitrate ion adsorption/desorption by olive solid waste-based carbon activated using ZnCl<sub>2</sub>" Sustainable Chemistry and Pharmacy 18 (2020) 100335
- [J7] Saqr Abuhatab, Amjad El-Qanni, Nedal N. Marei, Maryam Hmoudah, and Amer El-Hamouz, "Sustainable Competitive Adsorption of Methylene Blue and Acid Red 88 from Wastewater using NiO and/or MgO Silicate Based Nanosorbcats" RSC advances 9(61), (2019), 35483-35498
- [J8] 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
- [J9] 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
- [J10] 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.
- [J11] 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).
- [J12] 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 (201**0**).

- [J13] **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)
- [J14] 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).
- [J15] 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).
- [J16] **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).
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# **Graduate Supervision Activities.**

# PhD Supervision

**1-** Ahmad Ameen Jaber, "Laser Assisted Activated Carbon Derived from Biomass: Preparation and Applications. Co-supervisor Dr Iyad Saadeddin Main supervisor, 2022- ongoing

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

- 1- Bayan Bsharat, "Investigating the Possibility of Trivalent Chromium Oxidation to Hexavalent Chromium of Tanning Wastewater", Supervisor, Feb 2022
- 2- Munya Mas'oud," Technical Feasibility of Applying Cleaner Production Practices in Palestinian Leather Tanning Industries" Supervisor, Dec 2021.
- 3- Sabreen Fraij," Municipal Solid Waste to Energy Alternatives in the Northern West Bank: a Comparative Study", Internal Examiner, 2021
- 4- Osama Bani Namera," Grid and Environmental Impact Assessment of 0.5 MWp Photovoltaic Power System Connected to Salfit Governorate Electricity Distribution Network, Co-Supervisor", 2021
- 5- Ashraf Imraish "Experimental and Simulation of Biomass Conversion by Gasification and Biodigestion: Potential of Bioenergy in Palestine" (Internal Examiner), Feb 2017.
- 6- Hanan Tuhul, "Development Of A Conceptual Framework For Occupational Safety And Health In Palestinian Manufacturing Industries", (Supervisor), expected to accomplish in Dec 2018.
- 7- Mays Shadeed., "Solar Drying and Utilization of Sludge Produced at Wastewater Treatment Plants" Jordan University of Science and Technology, Jun 2014 (external examiner).
- 8- Hiba Nassar" Removal of Nitrate and Nitrite ions by Activated carbon" An-Najah National University, May 2012. (supervisor)
- 9- 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).
- 10- 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.
- 11- 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) (supervisor)
- 12- Mohammad AlSadi " Reuse-Recycling Options for Municipal Solid Waste in Zahrat Al-Finjan Landfill", July 2009 (*internal examiner*).
- 13- Abdul-salam Khalaf," Asessment of Medical Waste Management in Jenin District Hospitals" (2009)(internal examiner).
- 14- AbdelSalam Khalid," Medical Waste Management and its Associated Factors in Jenin Hospitals", November 2009 (*Internal Examiner*).
- 15- Manal F. Shkoukani" Development of Environmental Management System Using Cleaner Production in Palestinian Diary Industries, (*external examiner*), October 2008, BirZeit University.
- 16- Ehab Mayyaleh "Assessment of Household Hazardous Waste Management: A comparison Study between Nablus City and its Refugee Camps". Successfully defended in April 2007.(supervisor)
- 17- Jomana Ateya Management Strategies for Oil and Grease Residues in Jenin City October 2002. (supervisor)