Lina Nawwash Abu-Ghunmi, Ph.D
Associate Researcher (Associate Professor) of Environmental Engineering
The University of Jordan, Amman, Jordan

Email: Linagh22@yahoo.co.uk
and Lina.abughunmi@ju.edu.jo.

Jordan University 11942, Amman, Jordan
Tel: mobile: + 962 79 5807692
Office: +962 6 5355000/ 23912
Home: +962 6 5338878
Gender: Female

EDUCATION:

PhD in Environmental Engineering, June -2009, Wageningen University/ the Netherlands; Dutch Government Scholarship "NUFFIC"/ the Netherlands

M.Sc. in Civil engineering/ Environment and water resources, February-2002, University of Jordan/ Jordan; Graduate Studies Scholarships / University of Jordan/Jordan

B.Sc.in Chemical Engineering, February-1999, University of Jordan/ Jordan; Ministry of Higher Education Scholarships

EMPLOYMENTS:

Associate Researcher (Associate Professor), water energy and environment center, The University of Jordan, Jordan, 2016 till present

Assistant Researcher, water energy and environment center, The University of Jordan, Jordan, 2009-2016

Part-time Lecturer, Faculty of engineering, The University of Jordan, Jordan, 2009 -2012

RESEARCH INTERESTS

Waste management, Circular Economy, Green Development and sustainability, with main focus on:

Wastewaters and circular economy

Grey water and Domestic wastewaters

Management
Characterization
Collection

Treatment for resource recovery
Reuse

Industrial wastewaters

Treatment, on the basis of recovery, of Olive Oil-Mill pollutants
Treatment, on the basis of recovery, of textile wastewaters pollutants
Treatment, on the basis of recovery, of cooling water

Management

Circular economy and sustainability concept considering
Social and economical aspects
Environmental and technological aspects

Drinking water and circular economy:

Physiochemical treatment and disinfection

Nanotechnology:

Applications in water/wastewater treatment

TEACHING EXPERIENCE:

Environmental Issues and Water Management Policies in the Middle East: B.Sc. course, joint program of The University of Jordan/ Middlebury college / USA [2012-2013] one semester

Water supply: B.Sc. course, Civil Engineering Department, Faculty of Engineering and Technology, University of Jordan [2012-2013] one semester

Water supply: M.Sc. course, Water Integrated Resources Management program, joint program of The University of Jordan/ Jordan and Collon University/ Germany [2009-2016] four semesters

Water treatment processes and technology: M.Sc. course Department of Land and Water Reseources Engineering, Royal Institute of Technology-KTH. Stockholm. [2012] One semester

Air pollution: M.Sc. course, Civil Engineering Department, Faculty of Engineering and Technology, University of Jordan [2009-2010] one semester

Numerical methods for Engineers: M.Sc. course, Civil Engineering Department, Faculty of Engineering and Technology, University of Jordan [2010-2011] one semester

Technical writing: B.Sc. course, Industrial Engineering Department, Faculty of Engineering and Technology, University of Jordan [2009-2011] for semesters

RESEARCH "PROJECTS":

Water Footprint Analysis as Tool for Better Water Management in Jordan, The University of Jordan/Jordan, 21,270 EU, 2020-2022 [Co-principal Investigator]

Natural Based Nano-Composite for treatment of surfactants polluted water, The University of Jordan/Jordan, 15,000 EU, 2016-2018 [Principal Investigator]

Minimizing Risk of Hazard By Using Nanotechnology For Water Disinfection". USAID, 2015-2016 [Principal Investiagtor]

Developing a bio-zeolite filter for treatment of surfactants in grey water. TWAS, 2015-2016 **[**Principal Investiagtor]

Expanding access to sanitation for unsewered communites in Middel East and North Africa Countires. USAID. 2013-2015 (Principal Investiagtor)

Treatment of grey water by zeolite, [Principal investigator] funded by Deanship of Academic Research, The University of Jordan/ Jordan; 2011-2013

Role of Fungi in treatment of water-polluted by surfactants, [Principal investigator] funded by Scientific research support fund/ Jordan; 2012-2013.

The economic environmental and social sustainability of wastewater treatment plants in Jordan. Funded by Deanship of Academic Research, the University of Jordan/ Jordan; 2013-2014

Characterization and treatment of grey water; options for (re)use, [Principal investigator] funded by the Dutch government "Nuffic". My Ph.D research project at Wageningen university/ the Netherlands; 2005-2009

Cost effective treatment technology for reuse of reclaimed domestic wastewater in Irrigation, funded by European Union; Joint project between The Netherlands, Ireland Jordan, and Egypt, 2002-2005

Investigating the potential of SBR technology in treatment of textile wastewater, Deanship of Academic Research, the University of Jordan/ Jordan; 2002-2002

INTERNATIONAL EXPERIENCE AND HONORS:

Visiting Resercher, Mexico Government scholarship for academic staff exchange, Department of Environmental Engineering, Autonomous University of San Luis Potosi, San Luis Potosi state, Mexico, 1st October, 2019 to 1st November, 2019.

Coordinator of CNRD project since 2018. CNRD is an international network of Centers for Water Resources and Development, in which The University of Jordan is a member in this international network. The project is funded by German Academic Exchange Service (DAAD).

Visiting Lecturer, Erasmus+ Project/ EU fund for academic staff exchange, Department of Chemical Engineering Departmemnt, Lund University, Lund, Sweden, 21st to 25th/ May/ 2018

Visiting Lecturer, Erasmus+ Project/ EU fund for academic staff exchange, Department of Environmental Engineering, Ataturk University, Erzurum, Turkey, 9th to 14th/ April/ 2017

Post-doctoratal research, Islamic Development Bank fund, School of Industrial Engineering and Management, Department of Production Engineering, Royal Institute of Technology-KTH. Stockholm, Sweden, 2015/ 2016

Visiting researcher, USAID fund, Department of Maerial and nano-physicis, Royal Institute of Technology-KTH. Stockholm, Sweden, Augest-Spetember- 2015

Visiting researcher and lecturer, Erasmums Mundus/ JOSYLEEN project/ Acedemic staff exchange, Department of Land and Water Reseources Engineering, Royal Institute of Technology-KTH. Stockholm, Sweden, 2-months2011

Module developer of on-line grey water managment module, UNESCO-IHE, Delft, as part of AskNest projct in the period 2009 to 2011.

FUND RAISING:

Water Footprint Analysis as Tool for Better Water Management in Jordan, *Grant of Deanship of Academic Research*, The University of Jordan/Jordan, 21,270 EU, 2020-2022 [Co-principal Investigator]

Natural Based Nano-Composite for treatment of surfactants polluted water, *Grant of Deanship of Academic Research*, The University of Jordan/Jordan, 15,000 EU, 2016-2019 (principal Investigator)

Minimizing Risk of Hazard By Using Nanotechnology For Water Disinfection". USAID. 18,842 $, 2015-2018 (Principal Investiagtor)

Developing a bio-zeolite filter for treatment of surfactants in grey water. TWAS, $ 10,000, 2015-2017 (Principal Investiagtor) and ***Grant of Deanship of Academic Research***, The University of Jordan/Jordan, 5,000 EU, 2015-2017 (principal Investigator)

Expanding access to sanitation for unsewered communites in Middel East and North Africa Countires. USAID. 35,400 $, 2013-2015 (Principal Investiagtor)

The economic environmental and social sustainability of wastewater treatmetn plants in Jordan. *Grant of Deanship of Academic Research*, The University of Jordan/Jorsan, 17,700 EU, 2013-2015(Co-principal Investiagtor)

The role of Fungi in Treatment of water polluted by surfactatns. ***Grant of Scientific Research Support Fund***/ Jordan, 16,400 EU 2012-2014 (Principal Investigator).

The potential of zeolite in treating grey water. ***Grant of Deanship of Academic Research***, The University of Jordan/Jorsan, 15,000 EU, 2011-2014 (Principal Investiagtor)

AWARDS AND FELLOWSHIPS

Mexico Government scholarship; A One-month International Academic Scholarships for Eacademic Staff Exchange, Funded by Government of Mexico through the Mexican Agency for International Development Cooperation(AMEXCID) and the Association of Arab Universities (AAU). Environmental Engineering Department, Autonomous University of San Luis Potosi, San Luis Potosi state, Mexico, 1st October, 2019 to 1st November, 2019.

Erasmus+, EU fund for academic staff exchange, Chemical Engineering Department, Lund University, Lund, Sweden, 21st to 25th/ May/ 2018

Erasmus+, EU fund for academic staff exchange, Environemtal Engineering Department, Ataturk University, Erzurum, Turkey, 9th to 14th/ April/ 2017

Isalmic Development Bank; Post-doctorate research scholarship: Industrial and Manufacturing Engineering Deparment, Royal Institute of Technolgoy, Stockholm, Sweden, Decmber, 2015- Novermber, 2016.

Erasum Mendus, JOSYLEEN;, EU fund for academic staff exchange, October-November/ 2011

Dutch Goventmnt Award; Nuffic, for PhD study: 2004-2009

Univeristy of Jordan; Graduate studies scholarship for M.Sc. study: 1999-2002

Minsitry of Higher Eduction scholarship for B.Ss. study: 1994-1999

TRAINING COURSES: Trainer of the following courses

Course Title	Location	Hours
Primary and secondary treatment of wastewater	Yemen	20
Sludge treatment and disposal	Jordan	20
Sludge management and control	Yemen	20

PUBLICATIONS

Abu-Ghunmi*, *L., Alkhawaldeh, M. and Alkhateeb, F. (2020). Determinants of linear alkylbenzene sulfonate destiny in the environment: a study of linear alkylbenzene sulfonate interactions with Aspergillus niger. *Desalination and water treatment*. 207(December): 197–204 Impact factor (1.32) : *doi: 10.5004/dwt.2020.26410*

Kayal, B., Abu-Ghunmi, D., ***Abu-Ghunmi, L.***, Archenti, A., Larkin, C., and Corbet, S. (2019) An economic index for measuring firm's circularity: The case of water industry. *Journal of Behavioral and Experimental Finance* 21(March): 123-129 Impact factor (0.662): *https://doi.org/10.1016/j.jbef.2018.11.007*.

Abu-Ghunmi, D., ***Abu-Ghunmi, L***., Kayal, B., and Bino, A. (2016) Circular economy and the opportunity cost of not 'closing the loop' of water industry: the case of Jordan. *Journal of Cleaner Production* 131 (10) 228-236. Impact factor (4.167)

Jemmali, H., and ***Abu-Ghunmi, L.*** (2016) Multidimensional analysis of the water-poverty nexus using a modified Water Poverty Index: a case study from Jordan. *Water Policy* 18 (4), 826-843. Impact factor (0.83)

Abu-Ghunmi*, *L., Alkhatib, L. and Alkhawaldeh, M. (2016). Aspergillus niger-mediated bioremediation of Triton X-100-contaminated resources. *Desalination and water treatment*. 57(32): 15200-15207. Impact factor (1.173)

Kayal, B., ***Abu-Ghunmi, L***., Abu-Ghunmi, D., Rashid, A., Nicolescu,M., and Al Khatib, I. (2016). Pulp Industry Performance and Circular Economy. *Наукові праці Кіровоградського національного технічного університету. Економічні науки*.29: 170-177.

Abu-Ghunmi*, *L., Eslamian, S. (2016). Greywater. Chapter 34; Urban water reuse Handbook. Taylor & Francis Group, LLC, (Chapter four) 405-418. ISBN 9781482229141 - CAT# K22608

Abu Ghunmi*, *L., Badawi, M., and Fayyad, M. (2014). Fate of Triton X-100 Applications on Water and Soil Environment: A Review. *Journal of surfactants and detergents*. 17 (5): 833-838. Impact factor (1.69)

Abu Ghunmi*, *L., Al-Refaie, A., Kassab, G., Abu Ghunmi, D., and Bata, N. (2014). Minimizing Discrepancies in Oxygen-Demand-based-Biodegradability (ODB) Results Using Taguchi Method. *Desalination and water treatment*. 52 (25-27), 4664-4672. Impact factor (1.173)

Kassab, G., Halalsheh, M., ***Abu Ghunmi, L.*** and Shatanawi, K. (2013).Characterization and anaerobic biodegradation of single house wastewater. *Jordan journal of civil engineering*. 7 (2): 202-2010.

Hamaideh A., ***Abu Ghunmi, L***. and Hamdi M. (2012). Water options in the middle east: current trends and innovations. *Journal of soil and water conservation*. 67 (3): 77A-79A. Impact factor (1.60)

Abu Ghunmi, L., Zeeman, G., Fayyad, M. and van Lier, J. B (2011). Grey water treatment systems:

A review. *Critical Reviews in Environmental Science and Technology*. 41 (7) 657-698. Impact factor (3.468)

Abu Ghunmi, L., Zeeman, G., Fayyad, M. and van Lier, J. B. (2010). Grey water biodegradability. *Biodegradation*. 22 (1) 163–174. Impact factor (2.336)

Abu Ghunmi, L., Zeeman, G., Fayyad, M. and van Lier, J. B. (2010). Grey water treatment in a series anaerobic –aerobic system for irrigation. *Bioresource Technology*. 101 (1) 41-50. Impact factor (5.33)

Abu Ghunmi, L., Zeeman, G., van Lier, J. and Fayyad, M. (2008). Quantitative and qualitative characteristics of grey water for reuse requirements and treatment alternatives: the case of Jordan. *Water Sci*. *Technol*. 58 (7), 1385-1396. Impact factor (1.106)

Halalsheh, M., ***Abu Ghunmi, L.,*** Al-Alami, N. and Fayyad, M. (2008). Fate of Pathogens in tomato plants and soil irrigated with secondary treated wastewater. In Al Baz et al. (eds.), *Efficient Management of Wastewater*. Springer-Verlag Berlin Heidelberg. 81-89.

Zeeman, G., Kujawa, K., Mes de, T., Hernandez, L., Graff de, M., ***Abu Ghunmi, L.,*** Mels, A., Meulman, B., Temmink, H., Buisman, C., Lier van, J. and Lettinga, G. (2008). Anaerobic treatment as a core technology for energy, nutrients and water recovery from source-separated domestic waste(water). *Water Sci*. *Technol*. 57 (8), 1207-1212. Impact factor (1.106)

Abu-Ghunmi, L. and Jamrah, A. (2006). Biological treatment of textile wastewater using sequencing batch reactor technology. *Environmental Modeling and Assessment*. 11 (4). 333-343. Impact factor (0.98)

Jamrah, A. and ***Abu-Ghunmi, L.*** (2005). One independent variable rate equation describing utilization of biodegradable organic matter in activated sludge processes. *Environmental Modeling and Assessment*. 10 (1), 21-31. Impact factor (0.98)

CONFERENCES:

Abu Ghunmi, D. and ***Abu Ghunmi, L.*** (2018). Investing in Climate Resilient Projects**.** Conference of Water Security and Climate Change. Nairobi, Kenya 03-05 December, 2018.

Abu Ghunmi, L. Arwa Hamaideh, Laila Alkhatib, and Nadia Atoom (2016). Fungi potential in treatment of industrial wastewaters. Conference of Water security and climate change: challenges and oppournities in Asia. Bangkon, Tailand 28/11-1/12/ 2016.

Halalsheh, M., Kassab, G., ***Abu Ghunmi, L.,*** Hamaideh, A. (2014). Temperature shift as a tool for better understanding of solids digestion under anaerobic conditions. Proceedings IWA specialized conference- Global challenges: Sustainable wastewater treatment and resource recovery. Kathmandu, Nepal. October 26-30, 2014.

Abu Ghunmi, L. (2013). Grey water concept towared mitigating water shortage. 1st Annual International Conference The Politics of Freshwater: Access and Identity in a Changing Environment, Middlebury, USA, March 14-16, 2013

Abu Ghunmi, L. (2012). Grey water characteristics, use requirements and regulations. The 3ed Regional Conference on Water Resources Assessment in the Arab Region, Amman_Jordan, April 16, 17 and18, 2012.

Abu Ghunmi, L., Zeeman, G., Fayyad, M. and van Lier, J. B. (2010). Role of Anaerobic Digestion in DeSaR concept Applications in Rural areas of Jordan with Cesspol sanitations. 12th World congress on anaerobic digestion, Guadalajora_Mexico, Poster-presentation. October 31st to November 4th 2010.

LANGUAGES

Arabic, mothertang
English