

Hussam J. Khasawneh, Ph.D.

INFORMATION	Deputy Director Water, Energy and Environment Center The University of Jordan Amman, 11942 Jordan	<i>Tel:</i> +962-6-535-5000 (ext. 23900) <i>Cell:</i> +962-79-666-7265 <i>Email:</i> h.khasawneh@ju.edu.jo h.khasawneh@gmail.com ; h.khasawneh@ieee.org
RESEARCH INTERESTS	Automotive, energy storage, renewable energy, water-energy nexus, smartgrid, microgrid, distributed generation, vehicle-to-grid.	
EDUCATION	The Ohio State University , Columbus, Ohio USA Ph.D., Electrical and Computer Engineering, 2011-2015 <ul style="list-style-type: none">• Dissertation Title: "Sizing Methodology and Life Improvement of Energy Storage Systems in Microgrids" The Ohio State University , Columbus, Ohio USA M.S., Electrical and Computer Engineering, 2011-2014 The Ohio State University , Columbus, Ohio USA M.S., Mechanical Engineering, 2009-2011 <ul style="list-style-type: none">• Dissertation Title: "Analysis of Heat-Spreading Thermal Management Solutions for Lithium-Ion Batteries" The University of Jordan , Amman, Jordan B.S., Mechatronics Engineering, 2003-2008	
AWARDS	IEEE Industry Applications Magazine Prize Article Award-second place, USA, 2016. "Made in the Arab World" Graduation Project Award-first place, Egypt, 2009. "Made in Jordan" Graduation Project Award-second place, Jordan, 2009. The University of Jordan School of Engineering Dean's List, 2008.	
PROFESSIONAL EXPERIENCE	Water, Energy and Environment Center / The University of Jordan , Amman, Jordan <i>Deputy Director</i> Sep, 2016 - Present Centers for Natural Resources and Development (CNRD) Network <i>Coordinator</i> Nov, 2016 - Present The Centers for Natural Resources and Development (CNRD) connects universities worldwide by promoting academic exchange and cooperation in the field of natural resource management, particularly with regards to water, land, ecosystems and renewable energy. It fosters interdisciplinary approaches to natural resource management related to the post-2015 Development Agenda and the sustainable development goals (SDGs) envisioned therein. Water and Wastewater Utilities for Climate Mitigation (WaCCliM) Project <i>Team Member</i> Jan 2017 - May 2017 The WaCCliM project is a GIZ-funded project that aims at determining the baseline and study the options to improve the carbon footprint of Madaba Water and Wastewater Utility, Miyahuna-Madaba Company. To assess the GHG emissions, this project utilized the Energy performance	

and Carbon emissions Assessment and Monitoring (ECAM) tool which is developed by the International Water Association (IWA).

Dar Al-Handasah, Amman, Jordan

Consultant Engineer

April, 2008 - November, 2008

The University of Jordan, Amman, Jordan

Graduation Project

March, 2007 - January, 2008

Design of Automated Wireless Dual Solar-Diesel Thermal System for Residential Space and Water Heating.

Heinz Nixdorf Institute, University of Paderborn, Paderborn, Germany

IAESTE Intern

July, 2007 - September, 2007

ACADEMIC
EXPERIENCE

The University of Jordan, Amman, Jordan

Assistant Professor

May, 2015 - Present

Teaching autotronics, electronics, measurements, and transducers.

The Ohio State University, Columbus, Ohio USA

Graduate Teaching Associate (GTA)

August, 2013 - May, 2015

Teaching electric machines laboratory.

Graduate Research Associate (GRA)

August, 2012 - August, 2013

Ph.D. research at Center for High Performance Power Electronics (CHPPE).

Graduate Research Associate (GRA)

April, 2011 - June, 2012

M.S. research at Center for Automotive Research (CAR).

Graduate Teaching Associate (GTA)

October, 2010 - April, 2011

Teaching statics.

PUBLICATIONS:
JOURNALS

H. Khasawneh, M. Illindala, "Battery Cycle Life Balancing in a Microgrid through Flexible Distribution of Energy and Storage", *Journal of Power Sources*, vol. 261, no. 1, pp. 378-388, 2014.

H. Khasawneh, and M. Illindala, "Supercapacitor cycle life equalization in a microgrid through flexible distribution of energy and storage resources," *IEEE Transactions on Industry Applications*, vol. 51, no. 3, pp. 1962-1969, 2015.

M. Illindala, **H. Khasawneh**, and A. Renjit, "Flexible distribution of energy and storage resources," *IEEE Industry Applications Magazine*, vol. 21, no. 5, pp. 32-42, 2015.

M. Kilani, **H. Khasawneh**, A. Badran, and A. Awidi, "Further development on a gentle electromagnetic pump for fluids with stress-sensitive microparticles," *Sensors and Actuators A: Physical*, vol. 247, no. 1, pp. 440-447, 2016.

M. Saidan, **H. Khasawneh**, M. Tayyem, M. Hawari, "Getting Energy from Poultry Waste in Jordan: Cleaner Production Approach," *Journal of Chemical Technology and Metallurgy*, vol.

52, no. 3, pp. 595-601, 2017.

PUBLICATIONS:
CONFERENCES

O. Aljanaideh, M. Rakotondrabe, **H. Khasawneh**, M. Al Janaideh, "Rate-dependent Prandtl-Ishlinskii hysteresis compensation using inverse-multiplicative feedforward control in magnetostrictive Terfenol-D based actuators," 2016 American Control Conference (ACC), Boston, MA, 2016, pp. 649-654.

H. Khasawneh, M. Illindala, "Quantitative and Qualitative Evaluation of Flexible Distribution of Energy and Storage Resources," in Proc. of IEEE ECCE, pp. 43-50, 15-19 Sept. 2013.

H. Khasawneh, M. Illindala, "Equalization of Battery Life through Flexible Distribution of Energy and Storage Resources," in Proc. of IEEE ICPS , pp. 1-9, 20-23 May 2014.

H. Khasawneh, M. Illindala, "State-of-Health based Load Sharing Strategy in Vehicle-To-Grid Systems," in Proc. of IEEE ITEC, pp. 1-6, 15-18 Jun 2014.

H. Khasawneh, M. Illindala, "Supercapacitor Cycle Life Equalization in a Microgrid through Flexible Distribution of Energy and Storage Resources," in Proc. of IEEE IAS Annual Meet., pp.1-9, 5-9 Oct 2014.

H. Khasawneh, M. Smalc, and J. Norley, Analysis of Heat-Spreading Thermal Management Solutions for Lithium-Ion Batteries, in Proc. of ASME Mechanical Engineering Congress and Exposition IMECE, 2011.

M. Haj-ahmed, **H. Khasawneh**, M. Illindala, "Autonomous Cooperative Agent Based Flexible Distribution of Energy and Storage Resources," in Proc. of IEEE PEDES, pp. 1-6, 16-19 Dec 2014.

H. Khasawneh, A. Mondal, M. Illindala, B. Schenkman, D. Borneo, "Evaluation and Sizing of Energy Storage Systems for Microgrids," in Proc. of ICPS, pp. 1-8, 5-8 May 2015.

D. Mao, **H. Khasawneh**, M. Illindala, B. Schenkman, D. Borneo, "Economic Evaluation of Energy Storage Options in a Microgrid with Flexible Distribution of Energy and Storage Resources," in Proc. of IEEE ICPS, pp. 1-7, 5-8 May 2015.

M. Kilani, **H. Khasawneh**, A. Abbadi, "Design and testing of a gentle pump with rotating magnetic field for fluids with stress-sensitive microparticles," in Proc. of IEEE ISMA, pp. 1-4, 8-10 Dec 2015.

PROFESSIONAL
MEMBERSHIPS

The Institute of Electrical and Electronics Engineers (IEEE)- Power and Energy Society (PES)
The Institute of Electrical and Electronics Engineers (IEEE)- Industry Applications Society (IAS)

The Institute of Electrical and Electronics Engineers (IEEE)- Control Systems Society (CSS)
The Institute of Electrical and Electronics Engineers (IEEE)- Young Professionals
Jordan Engineers Association

VOLUNTEER
WORK

Reviewer, IEEE Transactions on Transportation Electrification, 2015-2017.

Reviewer, IEEE Transactions on Power Electronics, 2016-2017.

Reviewer, Journal of Natural Resources and Development, 2017.

Reviewer, IEEE Transactions on Industry Applications, 2014.

Reviewer, IEEE IAS Annual Meeting 2015.

Reviewer, International Journal of Electrical Power and Energy Systems, 2014-2015.

Reviewer, IEEE Transportation Electrification Conference and Expo (ITEC), 2014-2015.

Reviewer, IEEE Applied Power Electronics Conference and Exposition (APEC), 2014.

Reviewer, IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), 2015.

Judge, The 11th National Robotics Competition in Jordan, 2016.

Proctor, IEEEExtreme Programming Competition 9.0 in Jordan, 2016.