

Dr. Muhyaddin Jamal Hosin Rawa

Assistant Professor, Department of Electrical and Computer Engineering, King Abdulaziz University

Education

<i>Degree</i>	<i>Field</i>	<i>Institution</i>	<i>Year</i>
PhD	Electrical and Electronic Engineering	The University of Nottingham	2014
MSc	Electrical and Computer Engineering / Power and Machines	King Abdulaziz University	2008
BSc	Electrical and Computer Engineering	Umm AlQura University	2000

Academic Experience

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>
2015	2016	King Abdulaziz University	Assistant Professor
2010	2014	The University of Nottingham	Graduate Student/ Research Assistant
2012	2013	The University of Nottingham	MSc Project Assistant
2008	2009	King Abdulaziz University	Demonstrator

Non-Academic Experience

<i>From</i>	<i>To</i>	<i>Company</i>	<i>Rank</i>
2001	2008	Saudi Electricity Company (SEC), Distribution Engineering Department, Maintenance Systems Division, Jeddah	Electrical Engineer
2006		Routine tests for 33 MV Cables, Dubai Cable Company (Private) Limited Ducab, Dubai.	Inspector
2005		Routine tests for 13.8 MV cables, Dubai Cable Company (Private) Limited Ducab, Dubai.	Inspector
2002		Routine tests for PMT Cabinet, Dammam, KSA.	Inspector

Funded Research Projects and Patents From The Last Five Years

1. Developing a Low-Cost Automated Dual-Axes Sun Tracking System with Sand/Dust Detection and Removal Suitable for PV System in Saudi Arabia.
2. Bi-directional Resonant DC/DC Converter for Vehicle-to-Grid (V2G) and Grid-to-Vehicle Applications, General Program – KAU, 1439 AH.
3. Efficient Transformerless Inverter for Photovoltaic Generation System, General Program – KAU, 1439 AH.
4. Multilevel inverters with reduced number of components, Distinct research study (Principal Investigator) – KAU, 1438 AH.

Certification and Professional Registrations**Current Membership in Professional Societies and organizations**

Society/organization	Rank	Member Since
IEEE Membership	Member	2011

Honors and Awards

1. Best Paper (Co-author) Preye M. Ivry, **Muhyaddin J. Rawa** and D.W.P. Thomas, "Factors Affecting the Harmonics Generated by a Generic Voltage Source Converter within a Microgrid," The Saudi Arabia Smart Grid Conference and Exhibition, Jeddah, 8th -11th Dec, 2012.
2. Certificate of Merit occasion of the five years to join the company in recognition of the efforts throughout the service.
3. Certificate of outstanding employee in September 2007 - Saudi Electricity Company - Distribution Engineering Department.
4. Certificate of outstanding employee in 2005 - Saudi Electricity Company - Distribution Engineering Department - Maintenance Systems Division.
5. Thanks and appreciation from the Director of Makkah Electricity Department for effective participation in the voltage conversion project from 11 kV to 13.8 kV.

Professional Services

1. Member of the technical program committee of the following journals.
 - American Journal of Electrical Power and Energy Systems.
 - International Journal of Computing and Digital Systems.
2. Member of the technical program committee of many conferences.
3. Session chair in the following conferences.
 - UKSim 17th International Conference on Computer Modelling and Simulation, 2015.
 - UKSim 16th International Conference on Computer Modelling and Simulation, 2014.
 - UKSim 15th International Conference on Computer Modelling and Simulation, 2013.
 - IEEE 11th International Conference on Electrical Power Quality and Utilisation (EPQU), 2011.

Recent Publications Related to the Proposal

1. MD ALAM, SAAD MEKHILEF, HUSSAIN BASSI, **MUHYADDIN RAWA**. "Analysis of LC-LC2 Compensated Inductive Power Transfer for High Efficiency and Load Independent Voltage Gain", *Energies* 11(11): pp 2883, Published in October 2018. **(ISI Indexed IF=2.676)**.
2. UKASHATU ABUBAKAR, SADD MEKHILEF, HAZLIE MOKHLIS, MEHDI SEYEDMAHMOUDIAN, B. HORAN, ALEX STOJCEVSKI, HUSSAIN BASSI, **MUHYADDIN RAWA**. "Transient Faults in Wind Energy Conversion Systems: Analysis, Modelling Methodologies and Remedies", *Energies* 11(9): pp 2249 Published in August 2018 **(ISI Indexed IF=2.676)**.
3. **Muhyaddin J. H. Rawa**, "Characteristic and Surge Impedance Variation Impact on Transmission Line Performance", *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 8, no. 4, August 2018, pp. 2602~2607, ISSN: 2088-8708.
4. **Muhyaddin J. H. Rawa**, David W. P. Thomas, Mark Sumner, A Review on Recent Development of Photovoltaics and Wind Turbines, *International Journal of Energy and Power Engineering*. Vol. 5, No. 6, 2016, pp. 222-227. doi: 10.11648/j.ijepe.20160506.18.
5. Ivry, P.M.; **Rawa, M.J.**; Thomas, D.W.P.; Sumner, M., "Power quality of a voltage source converter in a smart grid," *PowerTech (POWERTECH)*, 2013 IEEE Grenoble , vol., no., pp.1,6, 16-20 June 2013.
6. **Rawa, M.J.H.**; Thomas, D.W.P.; Sumner, M., "Modelling and Simulation of a 3kW Residential Photovoltaic for Harmonics Analysis," *Computer Modelling and Simulation (UKSim)*, 2013 UKSim 15th International Conference on , vol., no., pp.563,568, 10-12 April 2013.

Recent Professional Development Activities

Development Diploma for University Instructor

2018