

Curriculum Vitae

Personal data:

First Name Issa
Surname Etier
Date of birth 18.05.64
Place of birth Ramtha – Jordan



Address:

Hashemite University
P.O. Box 150459,
Zarqa 13115, Jordan.
00962 5 390 3333 Ext. 4648
00962799050723
E-Mail: etier@hu.edu.jo

Education

- Ph.D.:** 2005 Technical University Berlin
Faculty of Electrical Engineering and Computer Science
Institute of Energy and Automation Technology, Germany
Thesis Title: **Photovoltaic Power Supply Model for Semi-Arid Regions Suggested for Use in Three Areas in Jordan.**
- M.Sc.:** 1996 Technical University Berlin
Faculty of Electrical Engineering and Computer Science
Institute of Energy and Automation Technology, Germany
- 1994 Thesis of the First Diploma Project: **Optimization of a Micro Controller for Regulating and Controlling a 2-D Tracking Photovoltaic Systems.**
- 1995 Thesis of the Second Diploma Project: **Design and Construction of a Power Supply Board for Isolated Electrical Photovoltaic Systems.**
- B.Sc.:** 1988 Technical University Berlin
Faculty of Electrical Engineering and Computer Science
Institute of Energy and Automation Technology, Germany
- School:** 1984 – 1985 German language and Preparatory course at TU Aachen
24.07.1983 high school Certificate in Ramtha/Jordan

Working Experience

9/2015 – present	Associate Professor at The Hashemite University Zarqa/Jordan, Chair of the Department of Electrical Engineering
9/2014 – 9/2015	Associate Professor at The Zarqa University Zarqa/Jordan, Chair and establishment of the Department of Energy Engineering
5/2013 – 9/2014	Associate Professor at The Hashemite University Zarqa/Jordan
08/2005 – 7/2013	Assistant Professor at The Hashemite University Zarqa/Jordan
09/2007 – 09/2009	Assistant Dean for Students Affairs and training in the Faculty of Engineering at The Hashemite University
09/2011 – 9/2013	Department Chair of Electrical Engineering
1 st semester 2009/2010	Part-Time lecturer at the German Jordanian University, Amman
Feb. 1992 – Oct. 1996	Hardware/Software Developer and System Administrator at the I. Link Communication Systems Company.
Oct. 1996 – July 2003	Network and System Administrator, Data Base Developer, Helpdesk and Customer Service at PC-WISP Company.
1996 – 2004	Research Assistant at Institute of Energy and Automation Technology/Technical University Berlin: 1. Micro-Controller Tracking Photovoltaic System Researcher and Supervisor. 2. First and Second Diploma Thesis Students Supervisor

Research Interests:

- Electronic and Microelectronic
- Power Systems
- Micro-Controller Tracking Photovoltaic Systems
- Design and construction of Analog and Digital electric circuit
- Design and simulation of PV- solar Energy systems
- Renewable Energy
- Energy conversion

Courses Taught

- Photovoltaic Systems
- Renewable Energy
- Energy conversion
- Electronics
- Design and simulation of PV- solar Energy systems
- Renewable power generation
- Power Systems
- Electronics Lab

- Electrical Circuits
- Electrical Circuits lab
- Electrical and Electronic circuits
- Electrical and Electronic circuits lab

CONFERENCES

- 2016 1- A. Al Tarabsheh , I. Etier , M. Akmal , A. Sweleh , M. Ghaza I" **Modeling of Series-Connected Photovoltaic Cells**" 143rd IEEE Photovoltaic Specialists Conference, June 5 - 10, 2016, PORTLAND, OR , ccepted for an oral presentation
- 2015 2- I. Etier, Anas Al Tarabsheh , R. Alqaisi " **Optimization and Simulation of IGBT Inverter Using PWM Technique**". The International Conference on Energy, Water & Environment (ICEWE 2015)" Sharjah, United Arab Emirates, , accepted for an oral presentation
- 2011 3- **I. Etier**, A. Al Tarabsheh, A. Atyat, B. Abu Al-Haw, M. Al-Shatte,M. Abd Al-Qader, O. Al-Rousan, T. Al-Maharmeh, Y. Al-Saidi."**RESEDINTAIL CONSTRUCTION POWERED BY PV GRID-CONNECTED SYSTEM**" Global conference on renewables and energy efficiency for desert regions (GCREEDER2011) Amman, Jordan 2011
- 4- Issa Etier**, M. Abderrazzaq." **The impact of Wind Farms on the Stability of Electric Networks** "International Conference on water, energy and environment 2011 (ICWEE 2011) Sharjah, United Arab Emirates
- 2010 5- Anas Al Tarabsheh, **Issa Etier**, "**Potential of One-Axis and Two-Axis Tracking Photovoltaic Systems**" International Conference on Energy, Water & Environment (ICEWE 2010) December 12-15, 2010Amman, Jordan,
- 2009 6- **Issa Etier** , Anas Al Tarabsheh. Mohammad Ababneh "**Investigation of Solar Energy in the Hashemite University**" International Conference and Exhibition on Green Energy & Sustainability for Arid Region & Mediterranean Countries, Amman, Jordan 2009
- 7- Anas Al Tarabsheh, Mohammad S. Widyan, **Issa Y. Etier**. "**Shunt Resistance of series-connected a-si :solar cells**". International Conference and Exhibition on Green Energy & Sustainability for Arid Region & Mediterranean Countries, Amman, Jordan 2009
- 8- Mohammad S. Widyan, Anas Al Tarabsheh, **Issa Y. Etier** and Rolf E. Hanitsch , "**Transient analysis and output characteristics of dc motors fed by photovoltaic systems**". International Conference and Exhibition on Green Energy & Sustainability for Arid Region & Mediterranean Countries, Amman, Jordan 2009
- 9- A.I.Al Tarabsheh, M.B.Schubert, M.S.Widyan. **I.Y.Etier** & J.H.Werner, "**A Qualitative Study of The Shunt Resistance of Parallel-Connected Amorphous Silicon Solar Cells**", International Conference and Exhibition on Green Energy & Sustainability For Arid Regions & Mediterranean Countries 2009, (ICEGES 2009), November 10-12 2009, Amman Jordan.
- 10- Mohammad Ababneh, **Issa Etier**, "**Investigation of wind energy in Jordan**", International Conference and Exhibition on Green Energy & Sustainability For Arid Regions & Mediterranean Countries 2009, (ICEGES 2009), November 10-12 2009, Amman Jordan.
- 11- Ali M.Jawarneh, **Issa etier**, Salem Nijmeh, "**Availability of solar energy in Hashemite University**", International Conference and Exhibition on Green Energy & Sustainability For Arid Regions & Mediterranean Countries 2009, (ICEGES 2009), November 10-12 2009, Amman Jordan.

- 2007 12- **Issa Etier**, Mohammad Ababneh "**Photovoltaic system as an alternative source of electricity generation: A case study in Hashemite University / Jordan**" The Third International Conference on Thermal Engineering: Theory and Applications May 21-23, 2007, Amman, Jordan
- 1998 13. Hanitsch, R., **Etier, I.**, Ertürk, N., Heumann, K. und Munschauer, M, " **Simulation And Comparison Of A Tracked Pv System With A Model Based On The Measurement Of The Sky Irradiance Distribution**", EuroSun98, 2nd ISES-Europe Congress14-17. September 1998, Congress Centre Bernardin Portoroz, Slovenia.

Publications

PUBLISHED BOOK:

2005 Issa Etier. PV-Energieversorgungsmodell für semiaride Regionen, dargestellt für drei Gebiete in Jordanien. (Mensch & Buch Verlag) ISBN: 3-89820-828-1.

ARTICLES:

- 1- **I. Etier**, M. H. Abderrazzaq , Anas Al Tarabsheh, O.A. Saraereh, M. AlBdour "**The impact of large scale photovoltaic systems on the harmonic increase in distribution networks**". Jordan Journal of Mechanical and Industrial Engineering *volume 10 Number 4, ISSN 1995-6665, Page 239-244, December.2016*
- 2- Anas Al Tarabsheh, **Issa Etier**, Hassan Fath, Abdullah Ghazal, Yousef Morci, Mohamed Asad, Amgad El Haj "**Performance of photovoltaic cells in photovoltaic thermal (PVT) modules**" IET Renewable Power Generation, March 2016 doi: 10.1049/iet-rpg.2016.0001
- 3- **Issa Etier**, Mohammad Ababneh, and Anas Al Tarabsheh "**Design and Simulation of a PV-Grid Connected System**" International Journal of Computational Science and Engineering - January 2015 DOI: 10.1504/IJCSE.2015.070991
- 4- **Issa Etier** , Anas Al Tarabsheh , Mohammad Ababneh. " **ANALYSIS OF SOLAR RADIATION IN JORDAN**", the Jordan Journal of Mechanical and Industrial Engineering (JJMIE) Vol.4, No. 6, pp. 190-197, 2010.
- 5- **Issa Etier**, Mohammad Ababneh, and Anas Al Tarabsheh "**Simulation of a 10 kW Photovoltaic System in Areas with High Solar Irradiation**" American Journal of Applied Sciences Vol. 8 (No2): p. 177-181, 2011
- 6- A. Al Tarabsheh, **I. Etier**, A. Nimrat "**Energy Yield of Tracking PV Systems in Jordan**," International Journal of Photoenergy, Published online DOI:10.1155/2012/890183, Volume 2012, 5 pages,
- 7- Anas Al Tarabsheh, **Issa Etier**, Mohammad Widyan, **Investigating the Shunting Effects of Parallel-Connected A-Si:H Solar Cells**, International Journal of Sustainable Energy, Published online DOI:10.1080/14786451.2011.592587, ISSN 1478-6451 print/ISSN 1478-646X online, pp. 1- 7, 2011
- 8- Anas Al Tarabsheh, **Issa Etier**, "**Potential of One-Axis and Two-Axis Tracking Photovoltaic Systems**" the International Journal of Thermal and Environmental Engineering (IJTEE) Vol.3, No. 2, pp. 81-85, 2011
- 9- A.I.Al Tarabisheh, **I.Y.Etier**, "**ANALYSIS OF THE IDEALITY FACTOR OF A-SI:H SOLAR CELLS**". Journal of Solar Energy Engineering Vol 133, No.1, pp 011012-1-011012-, 2011.
- 10- Mohammad Ababneh, **Issa Etier**, Mahmoud Smadi, Jasim Ghaeb "**Synchronization of Chaos Systems Using Fuzzy Logic**" Journal of Computer Science Vol 7 (No.2): pp 197-205, 2011

- 11-M.S.Widyan, A.I.Al Tarabsheh, **I.Y.Etier** & R.E.Hanitsch, "**Dynamical Analysis of DC Machines Fed By Photovoltaic Systems**" International Journal of Modelling and Simulations, Vol. 30, No. 3, pp. 353-360, 2010.
- 12- M.S.Widyan, A.I.Al Tarabisheh, **I.Y.Etier** & R.E.Hanitsch, "**Transient Analysis and Output Characteristics of DC Motors Fed by Photovoltaic Systems**", Jordan Journal of Mechanical and Industrial Engineering, Vol. 4, No. 1, Jan, 2010. pp.193-204
- 13- Al Tarabsheh A., Voutetakis S., Papadopoulos A.I, Seferlis P., **Etier I.**, and Saraereh O., "**Investigation of Temperature Effects in Efficiency Improvement of Non-Uniformly Cooled Photovoltaic Cells**" Chemical Engineering Transactions Vol.35, No. 2, 2013
- 14- Saraereh O., Alsafasfeh Q., Al Tarabsheh A., and **Etier I.**, "**least squares fitting based Fault Classification in Distribution Systems**" Journal of Energy and Power Engineering, **Vol. 8, 2014, page560-567 Received: October 26, 2013 / Accepted: December 23, 2013 / Published: March 31, 2014.**

AWARDS

- Prize of the Best team in the national technology parade 2008 for the project: Traffic Violation Automation
- Second prize in the national technology parade 2010 for the project :High Performance Hybrid Vertical Wind-Solar System
- Prize of the best female team in the national technology parade 2010 for the project: A DC Helical Wind generator for water Pump Application
- Second Prize in the JESCO award for applied Scientific Resarch 2016 for the project: **Solar & smart green house**

PROFESSIONAL DEVELOPMENT ACTIVITIES

- Attended the Academic Quality Assurance and Create new faculty members Workshop, The Zarqa University, September 2014.
- Attended the Academic Quality Assurance Workshop, The Hashemite University, November 2005.
- Attended the Blackboard Learning System Essentials Course. The Hashemite University, august 2006
- Reviewer at "Jordan Journal of Mechanical and Industrial Engineering
- Member in the Jordan Engineers Association-Jordan.
- Member of the organizing committee of the 3rd ICTEA conference, Amman, Jordan, 2007
- Member in the Scientific Committee of the "International Conference and Exhibition on Green Energy & Sustainability for Arid Regions & Mediterranean Countries" ICEGES 2009.
- Chairman of the Scientific Committee and Member of the organizing committee of the "The second Zarqa Science and Engineering Conference" 2010

- Member in the Scientific Committee and Member of the organizing committee of the " The International Conference on Energy, Water & Environment (ICEWE 2013)" the Hashemite University, Zarqa, Jordan, during 21-24 April 2013.
- Electrical Engineering Department Representative at the Faculty Council Meeting for the academic year 2008/2009 and year 2010/2011 at The Hashemite University
- Head and member at several administrative committees at the Department and Faculty.
- Master THESIS COMMITTEE MEMBER in many universities.
- Co. Supervisor master thesis "Experimental Evaluation of the Performance of a Photovoltaic Panel under Bypass Diodes Configurations" HU, Zarqa, Jordan, 2017.

REFERENCES

- Prof. Dr.-Ing. habil. Rolf Hanitsch, Ph.D. supervisor. Institute of Energy and Automation Technology, Berlin University of Technology, Germany
- Prof. Mosa Mohsen, Department of Department of Mechanical Engineering, Faculty of Engineering, The Hashemite University, Jordan.
- Prof. Ahmed Malabeh, Department of Earth Sciences and Environment, Faculty of Natural Resources and Environment, The Hashemite University, Jordan.
- Prof.. Mohammad Abderrazzaq, Department of Electrical Power Engineering, Hijjawi Faculty for Eng. Technology. Yarmouk University, Irbid, Jordan

Courses and Extra Activities

April 1986 – July 1986	Programming Technology and Methods for Engineers Course
Oct. 1986 – Feb. 1986	Unix Basics Course
Sep.2004 – Dec. 2004	Linux System Administration Training Course (LPI1 and LPI2)

Computer Skills

Programming languages:	Pascal, Turbo Pascal, Modula2, Basic, Delphi, HTML and Assembler
Operating systems:	Windows NT server, Workstation, Win9x, Win2000, Win Me, Win XP, Linux, Unix, MS Office (Access, Word, Excel, PowerPoint)
Practical Knowledge:	Networking, Structure and Repair.
Software Packages:	PV SOL, Meteonorm.

Languages

Arabic, English and German.

Dr. Issa Etier