

Qais H. Alsafasfeh

Jordan – Tafila
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Dr. Qais H. Alsafasfeh is Associate Professor of Electrical Engineering/Energy and control, and a certified energy manager. He completed his Ph.D. in 2010 at Western Michigan University, on MSc in Electrical Power Engineering from Jordan University of Science and Technology (2004) and a BA in Electrical Power Engineering from the Mutah University (2000).

His Ph.D. research was supported by Western Michigan University, and received a research fellowships and Awards from Australian Endeavour Award, European Commission, Fulbright and Islamic Developing Bank for his post-Doctoral research.

He has six years of academic teaching experience of electrical and renewable energy-related courses and published over 30 articles in first-class International energy journals and International energy conferences on different arbitration topics, including but not limited to: Power system analysis, Renewable energy, and solar System, wind energy, green building.

Dr. Alsafasfeh also has two years of academic management experience as Head of the Electrical Engineering Department, and four years as a Director of Clean Energy Research Center. In recognition of his commitment, he received a collection of national and international awards, fellowship and research grants.

Dr. Alsafasfeh has excellent working relations with local, regional, and international researchers, policy makers, and entrepreneurs. He is an authorized trainer by the Association of Energy Engineers (TUV) also he delivered more than 40 talks and training courses in more than 30 countries.

Dr. Alsafasfeh also has a strong industrial experience. He managed and supervised numerous energy and environmental audits and studies in Jordan and the region also he has excellent industrial experience in 132/33/11kV substation maintenance, commission and testing and also in switching operations of electricity network for 400kV, 132kV, 33kV, 11kV and 0.4kV. He is a member of IEEE, IASTED, IREO, and JRES. Currently Dr. Alsafasfeh was Associate Professor at Electrical Engineering Department / Princess Sumaya University for Technology, Jordan.

PERSONAL INFORMATION

Born October 11th, 1977 (Jordan)
Citizenship: Jordanian
Marital status: married, 3 kids

EDUCATION

- 12.2015 – 12.2016** **UNIVERSITY OF MICHIGAN / USA**
Post Doc at Electrical Engineering Department
- Research Title: Energy Management for High Renewable energy penetration
- 05.2013 – 09.2013** **TECHNICAL UNIVERSITY OF BERLIN / GERMANY**
05.2014 – 09.2014 **Post Doc at Electrical Engineering Department**
- Research Title: Fault Control and Identification for Wind Turbine Systems
- 05.2012 – 09.2012** **UNIVERSITY OF WOLLONGONG / AUSTRALIA**
Post Doc at Electrical Engineering Department
- Research Title: Online Fault Detection, Classification and Localization for Power Distribution system with High Penetration of Clean Energy]
- 08.2007 – 08.2010** **WESTERN MICHIGAN UNIVERSITY/ USA**
Ph.D. Electrical and Computer Engineering / Power and Control -
- Dissertation Title: Pattern Recognition for Fault Detection, Classification and Localization in Electric Power Systems
 - GPA: Excellent [4/4] - First Grade honour
- 09.2002 – 09.2004** **JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY/ JORDAN**
MSc. Electrical Engineering / Power and Control
- Dissertation Title: Stability of the Jordanian Electrical Network (Up Rating Al-Risha-Amman 132kv Transmission Line)
 - GPA: Very Good [80.4%] - Second Grade honour
- 09.1995 – 2.2000** **MUTAH UNIVERSITY / JORDAN**
BSc. Electrical Engineering/ Power and Control -
- Graduation Project: Computer Simulation and Speed Control of D.C or A.C motor
 - GPA: Very Good [76.21%] - Second Grade honour

WORK HISTORY

- 09. 2010 – PRESENT** **TAFILA TECHNICAL UNIVERSITY**
- **Associate Professor / Electrical Engineering Department / Tafila Technical University, Jordan, from 13/09/2015 until now.**

- **Assistance Professor / Electrical Engineering Department / Tafila Technical University, Jordan, from 13/09/2010 until 12/09/2015.**
- **Job Description:** Teaching Electrical Engineering courses Energy Storage & Energy Generation & Conversion , power system analysis, power system protection, power system operation and control, fundamentals of circuits and Electronic, Electrical Machines, High voltage engineering, Transmission and distribution.
- **Director of Clean Energy Research Center / Tafila Technical University, Jordan, from 24/09/2012 until now.**
- **Job Description:** Managed and supervised several commercial-scale renewable energy projects in Jordan with cumulative capacity of over 1MW.
- **Officer of Technology Transfer office, Tafila Technical University, Jordan, from 24/11/2014 until now.**
- **Job Description:** this office create based on Towards a university Enterprise alliance in Jordan Project
- The creation Jordanian University-Enterprise Network as functional resource and networking platform fostering the exchange of knowledge information and opportunities between universities and enterprises in Jordan;
- The establishment of institutional structures in form of an interface , which is in charge of establishing and managing university-enterprises linkages and building lasting relationships with the business world;
- Development of skills, capacities and attitudes of Jordanian universities staff towards higher employability of Jordanian Graduates and Increased innovation and technology transfer;
- Reform and modernisation of the institutional strategies, managerial and organizational capacities of 9 Jordanian Universities, thus enhancing the competitiveness; financial autonomy and sustainability of universities.
- **Chair of Electrical Engineering Department / Tafila Technical University, 13/09/2010 to 13/09/2012.**
- **Responsibilities:** Leading the department council, Administering the curriculum development process, Administering course scheduling process, Formulation of the strategic plans of the department, Preparation of the annual report on the academic activities of the department , Communicating with local industries with regard to joint research projects , Supervising the practical training of engineering students

09.2015 – 06.2016

UNIVERSITY OF MICHIGAN / USA
Visiting Fellow at Electrical Engineering Department

05.2012 – 09.2012

UNIVERSITY OF WOLLONGONG / AUSTRALIA
Visiting Fellow at Electrical Engineering Department

05.2011 – 09.2011

TECHNICAL UNIVERSITY OF BERLIN / GERMANY

Visiting Fellow at Electrical Engineering Department

- 09.2007 – 08.2010 **WESTERN MICHIGAN UNIVERSITY / USA**
Part time Lecturer and Teaching Assistance at Department of Electrical and Computer Engineering
- 08.2005 – 04.2007 **TAFILA TECHNICAL UNIVERSITY/ JORDAN**
- **Lecturer at Department of Electrical Engineering**
 - **Chair of Engineering and Science Department in Technical Community College, Tafila Technical University, 01/04/2006 to 01/09/2007.**
- 08.2004 – 08.2005 **AL-BALQA' APPLIED UNIVERSITY / JORDAN**
Lecturer at Department of Electrical Engineering at Tafila Applied University College
- 01.2001 – 05.2004 **NATIONAL ELECTRICAL POWER COMPANY [NEPCO]**
Maintenance Engineer
- **Job Description:**
 - Annual maintenance for 132/33/11kv substations for:
 - Power Transformer (10, 16, 40 MVA) for (132/33&33/11) kv.
 - Oil & SF6 Switch Gear for 132, 33, 11 kv and GIS Switch Gear.
 - High Voltage Isolator.
 - Battery and DC Charger for (110&50) V.
 - Erection for 132&33 kv outdoor and indoor substation.
 - Authorized to make switching operations on high voltage network for (400, 132, 33, 11&0.4) kv.
- 06.1999 – 01.2001 **VOCATIONAL TRAINING CORPORATION / JORDAN**
Instructor of Electrical Power

PROFESSIONAL ACTIVITIES

- IREC2017 steering committee, the International Renewable Energy Congress (IREC) <http://www.irec-conference.com/committees.html>
- Associate Editor of Thermal Energy and Power Engineering, ISSN: 2326-0521
- Associate Editor of Continental Journal of Engineering Sciences, ISSN: 2141- 4068.
- Associate Editor of International Journal of Energy Science, ISSN: 2218-6026.
- Steering Committee of world Academic publishing, Queensway, Admiralty, Hong Kong
- Reviewer of IEEE transaction in Power system.
- Reviewer of the Energy and Power, ISSN: 2163-159X Reviewer to the International Journal of Power and Energy Systems
- Reviewer to the International Journal of Modeling and Simulation, Canada.
- Member at the Jordanian Engineers Association since 2000.
- Member of the Institute of Electrical and Electronic Engineering (IEEE) since 2000.
- Member of the International Association of Science and Technology for Development (IASTED).
- Member of Intergovernmental Renewable Energy Organization (IREO).
- Member of Jordan Renewable Energy Society (JRES).
- Founding member of Jordan Energy Engineers Association.
- Designed and conducted a comprehensive capacity building program in energy auditing and management for the benefit of 120 engineers from the Ministry of Electricity and Water – GCC, 2014.

- Managed and supervised over 20 energy and environmental audits for industrial facilities, hotels, and commercial buildings in Jordan and the region.

AWARDS, FELLOWSHIPS:

- ❖ **Islamic Development Bank fellowship**, IDB Merit Scholarship Programme, 2016, USA
- ❖ **Fulbright fellowship**, research grants at University of Michigan, 2015, USA
- ❖ **High Majesty Rania fellowship**, The Art and Science of Negotiation, Greece, 2013
- ❖ **Erasmus Mundus fellowship** External Cooperation Window (**PEACE II**) research grants at Staffordshire University, 2016, UK.
- ❖ Mobility Grant from **The Higher Council for Science and Technology (HCST)**, Jordan, Research grants at The Centre for Research & Technology, Hellas, Thessaloniki, Greece, 2013.
- ❖ **Erasmus Mundus fellowship** External Cooperation Window (**AVEMPACE II**) research grants at Technical University of Berlin, 2013, Berlin, Germany.
- ❖ **Erasmus Mundus fellowship** External Cooperation Window (**JOSYLEEM**) research grants at University of Bologna, 2013, Italy.
- ❖ **Erasmus Mundus fellowship** External Cooperation Window (**AVEMPACE**) research grants at Technical University of Berlin, 2013, Berlin, Germany.
- ❖ **Australian Endeavour Award**, Research grants at University of Wollongong, Dept. of Electrical Power Engineering, 2012, Wollongong, Australia.
- ❖ **Hungarian fellowship**, Research grants at Budapest Technical University Dept. of Electrical Power Engineering, 2012, Budapest, Hungary.
- ❖ **German Research Foundation fellowship** (Deutsche Forschungsgemeinschaft), Research grants at Technical University of Berlin, Jun.-Sept. 2011, Berlin, Germany.
- ❖ Scholarship from **Western Michigan University** to complete the Ph.D. degree in electrical and computer engineering in USA.
- ❖ Scholarship from **Tafila Technical University** to complete the Ph.D. degree in Electrical Engineering in Western Michigan University/ USA.
- ❖ Scholarship from **Al-Balqa Applied University** to complete the MSc. degree in Electrical Power Engineering from Jordan University of science and Tech.

SPECIALIZED WORKSHOPS, TRAINING COURSES AND TALKS

Conducted numerous local and regional training courses, workshops and talks on energy efficiency technologies, energy management, and renewable energy applications also in many areas such as:

1. Electrical Losses Management, Kuwait Petroleum Company, Dubai, 2015.
2. Electrical Preventive Maintenance and Best Practice, Qatar Petroleum, Qatar, 2015
3. Instrumentation, Measurement, Process Control, PLCs, SCADA, UPS, & DCS for Oil Industries, Kuwait Petroleum Company, Dubai, 2015.
4. Certification Course for Isolation and Cancellation of Electrical Equipment (HV MV LV), Al Dur Generation Company, Bahrain, 2015
5. Certification Course for Isolation and Cancellation of Electrical Equipment (HV MV LV), Wadi Aljizii Generation Company, Oman, 2014.
6. Certification Course for Isolation and Cancellation of Electrical Equipment (HV MV LV), QAPCO, Qatar, 2013
7. Generation Power Plant, Wadi Aljizii Generation Company, Sohar, Oman, 2013
8. Engineering project management, Planning & Scheduling, KNPC, Munich, Germany, 2013
9. Transformer, Operation, Maintenance and Troubleshooting, KPC, Barcelona, Spain, 2013.
10. Electrical Power Management, Thessaloniki, Greece, 2013.

11. Smart grid Technology with High Penetration of Renewable Energy Resources, New Jersey, USA, 2013 .
12. Gas Turbine Power Plant, Control, and Troubleshooting Analysis, Dubai, 2013.
13. Safe Operation and Maintenance of Circuit Breakers and Switchgear, Tafila Technical University, Jordan, 2012
14. Business Ethics, INJAZ, Jordan, 2012
15. Time Management, INJAZ, Jordan, 2012
16. Engineering Contract Administration, Public Authority for Industry of Kuwait, London – UK, 2011
17. High Voltage Overhead Best Practice training course, Jo Wafra Training center, Kuwait, 2011.
18. Financial Analysis, Modeling, and Forecasting for Engineers, Kuwait Petroleum Corporation, Amsterdam, 2011.
19. Transmission Line Operation & Maintenance Techniques, Tafila Technical University, Jordan, 2011.
20. Process Measurement & Control Technology, Tafila Technical University, Jordan, 2011.
21. Quality Engineering Management, Technical University of Berlin, Germany, 2011.
22. Leadership and Effective Team Building Skills for engineer, Technical University of Berlin, Germany, 2011.
23. Creative Thinking, Problem Solving and Decision Making, Berlin, Germany, 2011.
24. Process Measurement & Control Technology, Berlin, Germany, 2011.
25. Control Components: Sensors and Transducers, Operation and Maintenance, Tafila Technical University, Jordan, 2010.
26. Engineering project management, Planning & Scheduling, Western Michigan University, USA, 2009.

CONFERENCES, WORKSHOPS AND PRESENTATION:

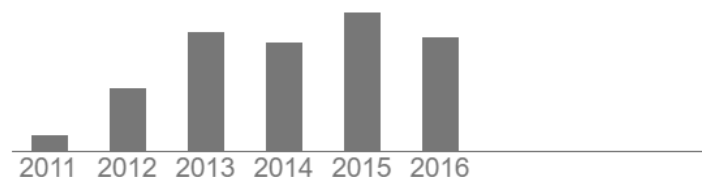
1. IEEE Electro/ Information Technology Conference, Normal, IL, USA, May, 2010.
2. Organizing Committee of the 3rd International Conference on Emerging Ubiquitous Systems and Pervasive Networks, www.iasks.org/conferences/EUSPN2011, Jordan.
3. Organizing Committee of International Conference on Frontiers and Beyond in Information Technology <http://www.iasks.org/conferences/FBIT201>, Jordan.
4. 2nd World Conference on Information Technology, WCIT-2011, November 23-26, Antalya- Turkey.
5. 3rd World Conference on Information Technology (WCIT-2012), Barchalona, Spain
6. ICEAA-IEEE APWC-EMS 2013, Torino, September 9-13, 2013, Italy.
7. LET'S 2014 conference, September 29th – October 1st 2014, Bologna Italy
8. The 6th International Renewable Energy Congress (IREC), Tunnies, 2015
9. Arab-Euro thematic Conference on Higher Education (AECHE) , TU Berlin Campus El Gouna, Egypt.
10. The 7th International Renewable Energy Congress (IREC), Tunnies, 2016.

RESEARCH INTERESTS:

- Nonlinear and chaotic System
- Control Theory
- Smart Grid.
- Renewable Energy Systems
- Power System Analysis and Control,
- Clean Technology
- Linear System and Electric Machines,

PUBLICATION

Citation indices	All	Since 2012
Citations	98	98
h-index	5	5
i10-index	3	3



2017

1. Adetokunbo Ajao, Jingwei Luo, Zheming Liang, **Qais Alsafasfeh**, Wencong Su, "Intelligent Home Energy Management System for Distributed Renewable Generators, Dispatchable Residential Loads and Distributed Energy Storage Devices, 8th IEEE International Renewable Energy Congress (IREC), 2017.(Accepted for publication).
2. Saleh Al-Joufout, **Qais Alsafasfeh**, Effect of Dust on the 1-MW Photovoltaic Power Plant at Tafila Technical University, 8th IEEE International Renewable Energy Congress (IREC), 2017.(Accepted for publication)

2016

3. Mohammed S. Al Soud, Mohammed A. Al-Dabbas, **Qais H. Alsafasfeh**, The Performance of the Hybrid Solar-Electrical Home Refrigerator, International Journal of Renewable Energy Development (IJRED), 2016.(accepted).
4. Omar A. Saraereh; **Qais H. Alsafasfeh**; Caisheng Wang, "Spatial Load Forecast and estimation of the peak electricity demand location for Tafila region, 2016, 7th International Renewable Energy Congress (IREC), pp 1 – 4.
5. **Qais Alsafasfeh**, Mohammed S. Al Soud," Polarization Ellipse Technique Based Fault Classification and Localization in Distribution Systems with High Renewable Generation Penetration", Jordan Journal of Electrical Engineering , vol. 2, no. 1, pp. 29-52, 2016.

2015

6. Aouda Arfoa, **Qais Alsafasfeh**, Omar Alsaraereh, Jaber Alrawahi, Operational Skill and TNA (Training Needs Analysis) for Generation Power Plant, Journal of Energy and Power Engineering ,2015 Volume 10, David Publishing, USA
7. **Qais Alsafasfeh**, Performance and Feasibility Analysis of a Grid Interactive Large Scale Wind/PV Hybrid System based on Smart Grid Methodology Case Study South

Part – Jordan, International Journal of Renewable Energy Development (IJRED), vol 4 issue 1, February 2015.

8. Mohammed S. Al Soud, **Qais H. Alsafasfeh**, Financial and Economic Analysis of 75 MW Photovoltaic Project for Jordan, Journal of Energy and Power Engineering ,2015 Volume 9, David Publishing, USA
9. Aouda A. Arfoa, **Qais Alsafasfeh**, Mohammed S. Al Soud, Evaluation of Electric Energy Losses in Southern Governorates of Jordan Distribution Electric System, International Journal of Energy Engineering, 2015, Vol. 5, No. 2, Scientific & Academic Publishing, USA.
10. Mohammed S Al-Soud, **Qais H Alsafasfeh**, Economical evaluation for various renewable energy products in Jordan, 6th International Renewable Energy Congress (IREC), 1-4, 2015.

2014

11. Mohammad Mahasneh, **Qais Alsafasfeh**,” Smart Grid Law and Regulation—Case Study of Tafila Smart Grid”, Beijing Law Review, 2014, 5, 102-106.

2013

12. Omar A. Saraereh, **Qais Alsafasfeh**, Anas Al Tarabsheh, Aouda Arfoa, and Issa Etier,” Least Squares Fitting Based Fault Classification in Distribution Systems, Journal of Energy and Power Engineering, 8 (2014) 560-567.
13. O. A Saraereh, C. J Panagamuwa, J. C Vardaxoglu and **Q. H Alsafasfeh**, “Study on the Appropriate Dimensions and Positions of Slots and Notches in the Ground plane of Planar Monopole Handset Antenna for Bandwidth Enhancement”, ICEAA-IEEE APWC-EMS 2013, Torino, September 9-13, 2013, Italy.
14. Omar A. Saraereh, **Qais H Alsafasfeh**, Aodeh Arfoa, ”Improving a New Logistic Map as a New Chaotic Algorithm for Image Encryption”, Modern Applied Science Journal, Vol. 7, No. 12, November 2013.
15. Omar A. Saraereh, M. A. Smadi, A. K. S. Al-Bayati, Jasim A. Ghaeb, **Qais H. Alsafasfeh**, ”A Novel Low-Profile Coupled-Fed Printed Twelve-Band Mobile Phone Antenna with Slotted Ground Plane for LTE/GSM/UMTS/WIMAX/WLAN Operations”, International Journal of Electronics Science and Engineering/ World Academy of Science, Engineering and Technology (WASET) Proceedings, Vol.7 No. 8, November 2013.

2012

16. Itewi, M., **Alsafasfeh, Q.**” Green Home with Energy saving Design - Eco Homes in Jordan”, European Scientific Journal, vol.8, No.19, 2012.
17. Alshabat, A., **Alsafasfeh, Q.**” Design and Implementation of a Real-time SMS Based Wireless Control System for Automating Home Appliances and Security”, 3rd World Conference on Information Technology (WCIT-2012), Vol 03, 257-262, 2013.
18. **Alsafasfeh, Q.**, Abdel-Qader, I., Harb, A, “Fault Classification and Localization in Power Systems Using Fault Signatures and Principal Components Analysis, “Energy and Power Engineering, USA , 4, 506-522, 2012.

2011

19. Alshabatat, A., **Alsafasfeh, Q.**” Cooperative Decision Making Using a Collection of Autonomous Quadrotor Unmanned Aerial Vehicle Interconnected by a Wireless Communication Network” 2nd World Conference on Information Technology (WCIT-2011), Vol 01, 212-218, 2012
20. **Alsafasfeh, Q.**, Alarni, M.,” A New Chaotic Behavior from Lorenz and Rossler Systems and Its Electronic Circuit Implementation”, Circuits and Systems, Vol.2, No.2, PP.101-10, 2011.
21. **Alsafasfeh, Q.**, Alshabatat A.,” Image Encryption Based on Synchronized Communication Chaotic Circuit,” Journal of Applied Sciences Research, Vol.7, No.4, PP 392-399, 2011.
22. **Alsafasfeh, Q.**, Arfoa, A.” Image Encryption Based on the General Approach for Multiple Chaotic System, “Journal of Signal and Information Processing, Vol.2, No.3, PP 238-244, 2011.
23. Alshabatat A., **Alsafasfeh, Q.**” Security Estimation Model for Military Aircrafts Using Directional Antennas.” Journal of Applied Sciences Research, Vol.7, No.4, PP 428-436, 2011.
24. Arfoa, A., **Alsafasfeh, Q.**” Limitation of Capacitive Power and Effect of Capacitor on Over Current Relay of Induction Motor Power Circuit”, Advances in Natural and Applied Sciences, Vol.5, No.2, PP 64-68, 2011.

2010

25. **Alsafasfeh, Q.**, Abdel-Qader, I., and Harb, A., ”Symmetrical Pattern and PCA Based Framework for Fault Detection and Classification in Power Sys- tem,” Proceedings of IEEE Electro/Information Technology Conference, Nor- mal, IL, May, 2010.

LANGUAGES

- Arabic (native),
- English (proficient).

COMPUTER SKILLS

- Advanced programming in C, C++, MATLAB
- Good command of computer simulation programs (MATLAB Simulink, PSCAD, ETAP, Orcad)
- Good command of Microsoft Office™ tools (Word™, Excel™ and PowerPoint™) and Windows™.

ONGOING RESEARCH AND FUNDED PROJECT

- Principle Investigator and Coordinator, International credit mobility Erasmus +, project with Staffordshire University 70000 Euro.
- Partner with towards a university Enterprise alliance in Jordan (TEJ), Tempus Project, and 1000000 Euro.
- Principle Investigator, the research funded by the Department of Education, Employment and Workplace Relations (DEEWR), Australia and University of Wollongong is mainly in Intelligent Operation and Emergency Control of a Smart Grid with High Penetration of Renewable Energy Resources.30.000 \$.

COURSES TAUGHT:

- High Voltage Engineering
- Power System Protection
- Power System Analysis I
- Power System Analysis II
- Power Transmission and distribution
- Power System Operation and Control
- Quality Engineering.
- Electrical Machines
- Control System
- Power Plants Engineering
- Energy Conversion
- Electrical Wiring-Residential
- Gas and Steam Turbine Technology
- Electrical Wiring-Industrial
- Financial Analysis for Engineer
- Engineering Economy

ACADEMIC SERVICE

- Member of the Engineering Faculty Council, Tafila Technical University, 2010-2012 Responsibilities:
- Legislation of the academic and administrative bylaws of the college
- Study the promotion applications of the faculty members
- preparing the strategic plans of the college
- Approval of the academic strategic plans of the college departments
- Approval of the appointment of new faculty members
- Approval of the faculty members leave applications
- Approval of the student transfer applications