

Prof. Wejdan S. Abu Elhaija

DSc., PhD, BSc. SMIEEE, FHEA, CE/JEA

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Wejdan is a Professor of Electrical Engineering/ Electrical Machines at Princess Sumaya University for Technology (PSUT), Amman-Jordan. Currently, she is an Advisor to HRH, Princess Sumaya bint El Hassan, President of the Royal Scientific Society (RSS) for Academic Affairs and Vice President for Academic Affairs, Princess Sumaya University for Technology, Jordan.

EDUCATION

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| 2012 | D.Sc. Doctor of Science (Engineering) - Higher Doctorate [honoris causa], Queen's University of Belfast, Northern Ireland, UK. |
| 1996-1999 | Ph.D. Electrical Engineering /Electrical Machines, Queen's University of Belfast, Northern Ireland, UK. Dissertation title: "Transient Performance of Small Salient Pole Alternators". |
| 1993-1995 | M.Sc. Courses of the Electrical Engineering Master Program, Jordan University of Science and Technology, Irbid, Jordan. |
| 1988-1993 | B.Sc. Electrical Engineering, Jordan University of Science and Technology, Irbid, Jordan. |

ADMINISTRATIVE EXPERIENCE

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| 2020-Present | Vice President for Academic Affairs, PSUT, Amman-Jordan. |
| 2018-Present | Advisor to HRH Princess Sumaya bint El Hassan, President of Royal Scientific Society for Academic Affairs, Amman-Jordan. |
| 2016-2018 | Vice President at ZUJ, during my two years leave from King Abdullah II School of Engineering at PSUT. |
| 2011-2015 | Dean, King Abdullah II School of Engineering, PSUT, Jordan. |
| 2009-2011 | Department Chair, Electronics Engineering Department, King Abdullah II School of Engineering, PSUT, Jordan. |
| 2007-2010 | Assistant to the President for Quality Assurance, PSUT, Jordan. |

PROFESSIONAL CAREER

2013- Present	Professor, Electrical Engineering Department at Princess Sumaya University for Technology, Jordan.
2006- 2013	Associate Professor, Electrical Engineering Department, Princess Sumaya University for Technology, Jordan.
2000- 2006	Assistant Professor, Electrical Engineering Department, Princess Sumaya University for Technology, Jordan.
1999- 2000	Lecturer, Electrical Engineering Department, Princess Sumaya University for Technology, Jordan.
1996- 1999	Laboratory Demonstrator, Electrical Machines Laboratory, School of Electrical and Electronics Engineering, Queen's University Belfast, Northern Ireland, UK.
1993- 1995	Teaching Assistant, Electrical Engineering Department, Jordan University of Science and Technology, Jordan,

PROFESSIONAL FELLOWSHIPS, SCHOLARSHIPS AND MEMBERSHIPS

2022-Present	Member of the International Women's Forum – Jordan Chapter.
2021-Present	ABET Program Evaluator representing IEEE International Society.
2014-Present	British HEA Fellow, Teaching and Learning- Higher Education Academy, UK.
1997-1999	Full PhD scholarship granted by Queen's University of Belfast, UK.
1994-1995	Full MSc. scholarship granted by Jordan University of Science and Technology, Jordan.
2011-Present	Senior Member, Institute of Electrical and Electronics Engineers (IEEE).
2017-Present	Consultant Engineer (CE), Jordan Engineers Association.
1993-Present	Member, Jordanian Engineering Association.
2019-Present	Professional member, American Society for Engineering Education (ASEE).
1996	Full PhD Scholarship granted by Queen's University Belfast, Northern Ireland, UK.
1994	Full MSc. Scholarship granted by Jordan University of Science and Technology, Irbid, Jordan.

HONORS AND AWARDS

- 2014 Star Reviewer of nominated by the editorial board of the IEEE Transaction of Energy Conversion.
- 2012 D.Sc. (Higher Doctorate) - Doctor of Science in Engineering [honoris causa] from Queen's University Belfast, UK.
- 2012 IEEE- Clementine Saduwa Award granted in recognition of outstanding contribution in Engineering and IT by IEEE Region 8 Sections (Europe, Middle East and Africa), Berlin- Germany.
- 2012 Women in Science Hall of Fame Award; US embassy in Amman.
- 2008 Best Design Model for the project entitled "3D Object Modeling Using Laser Scanning" Award, King Abdullah II Design and Development Bureau (KADDB), Jordan.
- 2007 Academic Women Leaders in Jordanian Universities Award, University of Jordan Center for Women's Studies, Jordan.
- 2004 Hisham Adeeb Hijawi Applied Science Award in the Information Technology and Communication Segment for the research entitled, "Deriving the Signal-to-Noise Ratio Probability of Error and Performance Measure Matrices for Distribution Line Carrier Signals Propagation (Using Bus Impedance Approach)", Jordan.
- 1993 Distinguished Undergraduate Student Award at Jordan University of Science and Technology, Jordan.
- 2013 Earned honorable mention status in QS News, A quarterly newsletter for Universities by QS Asia, May-July 2013.
- 2017 Earned honorable mention status in QS News, A quarterly newsletter for Universities by QS Asia, Nov 2016-Jan 2017.

RESEARCH INTERESTS

Design, modeling, simulation and optimization of electrical machines, finite element and analytical methods of electromagnetic fields; fault diagnosis of electrical machines; electromagnetic field computation and fault analysis of power transformers.

TEACHING EXPERIENCE

Electrical Machines, Electric Machines Drives, Power Systems Analysis, Electrical Circuit Theory, Applied Electromagnetics, Measurements and Instrumentation Techniques.

PROFESSIONAL SERVICE

2022-Present	Editor in Chief of the Jordanian Journal of Computers and Information Technology.
2022- Present	Member of the International Women’s Forum – Jordan Chapter
2020-Present	Member of the InterAcademy Partnership (IAP) Science Executive Committee representing the Royal Scientific Society of Jordan.
2020- Present	Member of the Science Education Committee of the Association of Academies and Societies of Sciences in Asia (AASSA) chaired by the Korean Academy of Science and Technology (KAST).
2018-Present	Member of the Jordan National Committee for Education, Culture & Science.
2015- Present	Member of the Advisory Board, Jordanian Journal of Computers and Information Technology (JJCIT).
2020	Member of the International Advisory Committee of the international conference on Innovation and New Trends in Engineering, Technology and Science Education Conference 2021.
2019-2020	Member of Jordan National Committee for Research Priorities in Jordan, Ministry of Higher Education and Scientific Research.
2017-2018	Member of the Higher National Committee for Sustainable Development.
2017	Certificate of Training, “Quality Management System Foundation Course ISO 9001:2015.
2018-2019	Head of the proficiency exam for engineering disciplines committee, 2nd cycle April 2018, Higher Education Accreditation Commission, Jordan.
2016	Reviewer for “The Best Researcher Award” in the sector of “Engineering and Technology” of the scientific research fund at the ministry of higher education.
2016	Member of National Human Resources Development Strategy Subcommittee- Governance.
2015-2016	Member of the scientific research fund committee at the Ministry of Higher Education.
2015-2016	Head of Quality Assurance Criteria for Jordan Engineering Programs Committee, Higher Education Accreditation Commission, Amman-Jordan.
2015	Conducting and organizing a workshop for Higher Education Accreditation Commission in Jordan on “ABET Accreditation for Engineering Programs”.

- 2014 Participant, ABET Workshop-Institute for the Development of Excellence in Assessment Leadership (IDEAL) Baltimore, Maryland, USA.
- 2011-2015 Project Coordinator, Women in Science Program funded by the American embassy in Amman.
- 2010 Participant, University Ranking: QS World Class Universities, Singapore.
- 2009 Participant, "University Development and Critical Thinking-Education in the Arabian Peninsula for a Global Future" conference, the American University of Kuwait (AUK), Kuwait.
- 2009 Participant, G8 for Universities Sustainable Development, Torino, Italy.
- 2008 Participant "Quality Assurance Criteria for Higher Education Universities in Jordan" Course, UNESCO –United Nations University, Amman-Jordan.
- 2008 Participant, "Introduction to Innovation Management, "Parallel Activity - Quality Control Exchange and Discussion", One-day workshop, PSUT-Amman, Jordan.
- 2006 Participant, "Promoting Excellence in Higher Education Capacity Building in Quality Assurance", Al Hussein Fund for Excellence Workshop, Amman-Jordan.
- 2000 External Evaluator for Al Hussein fund for excellence- strategic planning for quality assurance capacity building in Jordanian universities- on site visit, Amman, Jordan.
- 2019 Participant in the IYPT2019 event, 29th of January 2019 at the UNESCO HQ in Paris, France.
- 201 Participant in a regional consultation meeting for the Arab Charter of Ethics of Science and Technology, held at the Royal Scientific Society's headquarters in Amman, Jordan.
- 2018 Participant in the World Science Day for Peace and Development 2018 under the theme "Science, a Human Right", 9 November 2018, Room IX, UNESCO Paris.

UNIVERSITY SERVICE

- 2020-Present Head of PSUT Study Plans Committee.
- 2020-Present Head of PSUT Scholarships for Gifted Students Committee.
- 2020-Present Head of PSUT Teaching Field Incentives Committee.
- 2020-Present Head of PSUT Postgraduate Scholarship Committee.

2020-Present	Head of PSUT New Programs Committee
2020-Present	Head of PSUT Extension School Committee
2020-Present	Head of PSUT Quality Assurance Board
2020-Present	Head of PSUT Online Learning Committee
2020-Present	Head of PSUT Strategic Planning Committee.
2020-Present	Member of PSUT Student Aid Fund Committee.
2020-Present	Member of PSUT University Council.
2020-Present	Head of the Rating Agency Technical Committee- Initiative proposed by Dr. Farouq Kharouf for the Banking System in Jordan.
2020-Present	Head of a committee for drafting PSUT Researchers Promotion Regulation.
2020-Present	Head of PSUT Ranking and Rating Committee.
2017- 2018	Head of a committee for drafting "Risk Management Strategic Plan" at ZUJ.
2016- 2020	Head of ABET Accreditation Preparation Committee- Faculty of Engineering and Technology at ZUJ. (As a result, the civil and infrastructure engineering program was granted ABET accreditation for 6 years).
2011-2015	Head of ABET Accreditation Preparation Committee- King Abdullah II Faculty of Engineering, PSUT. (As a result, all engineering programs were granted ABET accreditation).
2014	Head of the selection committee engineering students with the best projects for Crown Prince, Hussein bin Abdullah NASA's internship initiative. As a result, PSUT students Zaid Kawar, Zaid Dhabayan and Farah Salah have been selected to participate in applied research projects at the National Aeronautics and Space Administration (NASA) for their excellence and leadership, reflecting the University's excellent international reputation. 2013 Established a Cooperative Master Degree Program in Electrical Engineering between PSUT and Ulm University, Ulm, Germany.
2011-2015	Member of PSUT Employees Affairs Committee.
2006 and	Member of PSUT Academic Research Committee
2010-2015	
2003 and	Member of King Abdullah II School of Engineering Council.
2009- 2015	
2006, 2010 and	Member of the PSUT University Council.
2011-2015	

- 2007-2012 Head of the steering committee for drafting the first strategic plan for PSUT.
- 2012 Head, "Development of a new curriculum for the Electrical Power and Energy Engineering program" committee at King Abdullah II Faculty of Engineering, PSUT.
- 2012 Head, "Development of five new electrical machines, power electronics, power systems and protection and renewable energy laboratories for the new electrical power and energy program "committee at King Abdullah II School of Engineering, PSUT.
- 2010-2015 Counsellor- IEEE Women in Engineering Club at PSUT.
- 2012 Panelist- The importance of Science & Innovation for development, "Global Thinkers Forum 2012: Women Leaders in MENA", Amman, Jordan.
- 2012 Member of the selection committee of Women in Science Hall of Fame Award offered by the American embassy in Amman.
- 2011 Member of Electrical Power and Energy Accreditation Program Committee Jordan Accreditation Commission, Amman.
- 2008 and 2011 Head of the selection committee of Queen Rania Al-Abdullah scholarships offered by the Athens information technology university (AIT) to Jordanian graduates, Amman, Jordan.
- 2011 Head, Publication, publicity and dissemination committee, IEEE global engineering education conference "Learning Environments and Ecosystems in Engineering Education" EDUCON 2011 PSUT.
- 2001 Head of ABET Accreditation Preparation Committee, King Abdullah II faculty of Engineering.

SERVICE OF CONFERENCE CHAIRS

Chair, the 8th International Conference on Engineering, Project, and Production Management (EPPM 2017), (19 -21) Sep. 2017, Amman-Jordan.

Chair Session, "Promotion of Arab Women in Science", special session at the World Science Forum 2017, 7-11 November 2017, Dead Sea, Jordan.

Chair, the "1st Women in Science Symposium", May 18 2015 at PSUT campus, Amman-Jordan.

SERVICE TO PROFESSION

Editor in Chief of the Jordanian Journal of Computers and Information Technology (2022-Present)

Reviewer to several highly indexed journals in Energy Conversion.

POSTGRADUATE THESIS SUPERVISION

- 2017-2019 Fares Faouri: Field Oriented Control of Three Phase Induction Machine Incorporating Flux Saturation Effects, PSUT.
- 2018-2020 Homam Bakri: Enhancement of PV Panels Performance Using Nanoparticles and Modern Cooling Techniques, PSUT.
- 2018-2021 Muna Zoubi: Differential Power Processing for Increased Energy Production of Photovoltaic Systems, PSUT.
- 2018-2020 Manar Quda: Performance Analysis of Different Series Compensation Schemes of SMIB Power System Incorporating PV Generation, PSUT.
- 2018-2020 Rona Qatameen: Prediction of Power Output of Wind Turbines by System Identification Techniques, PSUT.
- 2020-2022 Muath Qendel: Comparative study between wind turbine modeling techniques: physical modeling, subspace identification, and machine learning techniques, PSUT.
- 2020-Present Mena Arafat: Conceptual design of concentrating solar power plant for dispatchable power generation, PSUT.
- 2020-Present Ahmad Elmomani: Multiple Process Modeling of Supercritical Thermal Power Plant (From Startup to Shutdown Simulation Studies), PSUT.
- 2020-Present Omar Abu-Znad: Wide-Range Predictive Control Strategy for Supercritical Generation Unit via Classical Model Predictive Control, PSUT.
- 2021-Present Marwan Al Shami: Development of a Grey-Box Gas-Turbine Model and Control Strategy Using Whale Optimizer, PSUT.
- 2021-Present Maryana Haddadin: Time-Based Performance Prediction of Thermal Power Plants Using Deep-Learning Techniques, PSUT.
- 2021-Present Mohammad Qasem: Development of a Grey-Box Clean-Coal Power Station Model and Control Strategy Using Meta-Heuristic Optimization Techniques, PSUT.

PUBLICATIONS

1. Khasawneh M.A., Thaher N.H., Shibli R.A., **Abu Elhaija W.S.**, Alwahadni A.M. (2022) Bolstering Economic Growth in the Arab Region Through Commercialization of Research Outcomes. In: Badran A., Baydoun E., Hillman J.R. (eds) Higher Education in the Arab World: Research and Development. Springer, Cham. https://doi.org/10.1007/978-3-030-80122-9_8.
2. Abu Al-Haija, Q.; Krichen, M.; **Abu Elhaija, W.** Machine-Learning-Based Darknet Traffic Detection System for IoT Applications. *Electronics* 2022, 11, 556. <https://doi.org/10.3390/electronics11040556>.

3. Hassan Sumaya bint El, Cordova Kyle E., Rabadi Ghaith, **Abu Elhaija Wejdan**, "The (Un)Sustainability of Higher Education Institutions in Jordan, *Frontiers in Sustainability*, Vol 2, 2021, DOI=10.3389/frsus.2021.653992.
4. Homam Al Bakri, **Wejdan Abu Elhaija**, Ali Al Zyoud, "Solar photovoltaic panels performance improvement using active self-cleaning nanotechnology of SurfaShield G", *Energy*, Volume 223, 2021, 119908, ISSN 0360-5442, <https://doi.org/10.1016/j.energy.2021.119908>.
5. Omar Mohamed, Zain Bitar, Alla Abu-Sultaneh, **Wejdan Abu Elhaija**, "A simplified Virtual Power System Lab for Distance Learning and ABET Accredited Education Systems", *The International Journal of Electrical Engineering & Education*, <https://doi.org/10.1177/0020720921997064>. First Published February 24, 2021.
6. **W. A. Elhaija**, A. A. Wahadni, Z. Hamici and M. A. Afifeh, "Current Status of Engineering Education in Jordan," 2021 6th International STEM Education Conference (iSTEM-Ed), 2021, pp. 1-4, doi: 10.1109/iSTEM-Ed52129.2021.9625132.
7. N. A. Tawalbeh, S. S. Al Mattar, **W. S. Abu Elhaija** and M. A. Khasawneh, "Impact of COVID-19 on Electric Energy Consumption," 2021 12th International Renewable Energy Congress (IREC), 2021, pp. 1-6, doi: 10.1109/IREC52758.2021.9624928.
8. Qandil M, Mohamed O, Abu Elhaija W. A comparative study of wind turbine-generator modeling techniques: Physical modeling, subspace identification, and dynamic neural networks. *Wind Engineering*. doi:10.1177/0309524X211066623
9. Rana A. M. Alhorani, **Wejdan Abu Elhaija**, Subhi M. Bazlamit & Hesham S. Ahmad, "ABET accreditation requirements and preparation: Lessons learned from a case study of Civil Engineering Program", *Cogent Engineering*, Volume 8, 2021 - Issue 1, Published Online: 23 Nov 2021.
10. Wejdan Abu Elhaija, "Scientific articles for sale in black market", *THE Jordan Times Newspaper*, Oct 18, 2021.
11. Qudah, Manar, **Abu-Elhaija, Wejdan**, Widyan, Mohammad, "Performance Analysis of Different Series Compensation Schemes of SMIB Power System Incorporating PV Generator", *International Transactions on Electrical Energy Systems*. Volume 31, Issue1, January 2021, e12699 2020, DOI: 10.1002/2050-7038.12699.
12. **Wejdan Abu Elhaija** and Zoubir Hamici, "Robust Unbalance Compensation of Induction Machines using Swarm Intelligence Control: Design and Analysis", *Electric Power Components and Systems*, Volume 48, 2020 - Issue 9-10, <https://doi.org/10.1080/15325008.2020.1821839>.
13. Hesham S Ahmad, **Wejdan Abu-Elhaija** and Yousef Qandoos, "New Strategy for Enhancing Engineering Practical Teaching through the Development of Infrastructure Learning Hub (ILH)", 9th International Conference on Engineering, Project, and Production Management (EPPM2018), *MATEC Web of Conferences* 312, 02001 (2020) <https://doi.org/10.1051/mateconf/202031202001>.
14. Rona Qatamin, Omar Mohamed and **Wejdan Abu Elhaija**, "Prediction of Power Output of Wind Turbines using System Identification Techniques" *International Review on Modelling and Simulations (I.RE.MO.S.)*, Vol. 13, N. 1, February (2020) <https://doi.org/10.15866/iremos.v13i1.17713>.

15. **Wejdan Abu Elhaija** and Ahed Al-Wahadni, "Online Education: A Tool that Comes with New Rules" Islamic World Academy of Sciences Newsletter, Sep-Dec 2020, Vol. 28, No. 43, pp.5-7.
16. Zoubir Hamici and **Wejdan Abu Elhaija**, "Power Conditioning with Intelligent Control using a Novel Recursive Stochastic Optimization", **IEEE Transactions on Industrial Electronics**, vol. 66, Issue 5, May 2019. DOI: 10.1109/TIE.2018.2856195.
17. Z. Hamici and **Wejdan Abu Elhaija**, "Novel Current Unbalance Estimation and Diagnosis Algorithms for Condition Monitoring with Wireless Sensor Network and Internet of Things Gateway", **IEEE Transactions on Industrial Informatics**, vol. 15, Issue 11, 19 November 2019, DOI: 10.1109/TII.2019.2935743. Special Section on Identification and Observation Informatics for Energy Conversion, and Applications.
18. Ali Al-Zyoud, **Wejdan Abu Elhaija**, "Solar Power Lead Battery Storage Solution Using Cycle Recovery Charging Method", **Journal of Energy Storage**, 25 (2019) 100843.
19. Fares S. El-Faouri, Omar Mohamed, and **Wejdan Abu Elhaija**, "Model-Based Field-Oriented Control of a Three-Phase Induction Motor with Consideration of Rotor Resistance Variation", *International Review of Electrical Engineering* 14(3):173, **June 2019**.
20. **W.S. Abu-Elhaija** and A. Muetze, "A Voltage Unbalance Factor Coding Technique for Three-Phase Induction Motors", *International Transactions on Electrical Energy Systems* 28(4): e2554, DOI: 10.1002/etep.2554, January 2018.
21. Fares S. El-Faouri, Omar Mohamed, and **Wejdan Abu Elhaija**, "Comparison of Three Phase Induction Motor Control Models Incorporating Mutual Flux Saturation Effect", *International Journal on Energy Conversion (IRECON)*, vol.5, no.5, **2017**.
22. **W. Abu-Elhaija**, Vahid Ghorbanian, J. Faiz and H. Nejadi Koti, "Significance of Rotor Slots Number on Induction Motor Operation under Broken Bars", *IEMDC* May, Miami, Florida, **2017**.
23. Fares S. El-Faouri, Omar Mohamed, and **Wejdan Abu Elhaija**, "D-Q model and control of a three - phase induction motor considering mutual flux saturation effect", *JIEEC* **2017**, Amman, Jordan.
24. Mohammad Masoud, **Wejdan Abu-Elhaija**, Yousef Jaradat, Ismael Jannoud, and Loai Dabbour, "Software Project Management: Resources Prediction and Estimation Utilizing Unsupervised Machine Learning Algorithm", *The 8th International Conference on Engineering, Project, and Production Management EPPM2017*, Sep **2017**, Amman, Jordan.
25. Yousef Jaradat, Ismael Jannoud, Mohammad Zakaria Masoud, **Wejdan Abu-Elhaija**, "A Roadmap for SDN-based Network Management: Al-Zaytoonah University of Jordan Case, 18th International conference on Sciences and Techniques of Automatic control & computer engineering, At Tunis-Monastir, Dec **2017**.
26. Ayman Faza, Majd Batarseh, and **Wejdan Abu-Elhaija**, "Upgrading power and energy engineering curricula in Jordanian universities: A case study at PSUT", **International Journal of Electrical Engineering Education**, (IJEEE), vol. 54, 1: pp. 57-81, Oct. **2016**.
27. **Wejdan S. Abu Elhaija**, Jamal Y. Thalji, "Self-Excited Reluctance Generator: State of the Art and Future Trends", **International Journal on Energy Conversion (IRECON)**, Vol. 1, July **2014**.

28. **W. S. Abu-Elhaija** and Jawad Faiz, "Review of Series Connected Wound Rotor Three Phase Induction Motors", 22nd International Symposium on, Power electronics, electrical drives, automation and motion, Naples, Italy, 18-20 June **2014**.
29. **W. S. Abu-Elhaija**, and A. Muetze, "Self-Excitation and Stability at Speed Transients of Self-Excited Single-Phase Reluctance Generators", **IEEE Transactions on Sustainable Energy**, vol. 4, issue 1, Jan **2013**, pp.136-144.
30. Jawad Faiz, Hossein Ehya and **W.S. Abu-Elhaija**, "New Optimal Configurations for Two-phase Switched Reluctance Motors", 8th Jordanian International Electrical and Electronics Engineering Conference "JIEEEEC" , Amman-Jordan, 16-18 April **2013**.
31. Ehya, Jawad Faiz and **W. S. Abu-Elhaija**, "Detailed Performance Analysis of Salient Pole Synchronous Generator under Dynamic Eccentricity Fault", the 8th Jordanian International Electrical and Electronics Engineering Conference JIEEEEC, Amman-Jordan, 16-18 April **2013**.
32. Jawad Faiz, Mahmud Bijan, Bashir Ebrahimi, **W.S. Abu-Elhaija**, "Three-Dimensional Magnetic Equivalent Circuit Modeling of Induction Motor", the 8th Jordanian International Electrical and Electronics Engineering Conference JIEEEEC, Amman-Jordan, 16-18 April **2013**.
33. **W.S. Abu-Elhaija**, Bashir Mahdi Ebrahimi, Jawad Faiz, "Influence of Simulation Precision on Broken Rotor Bars Fault Diagnosis Accuracy in Induction Motors", **International Review of Electrical Engineering (I.R.E.E.)**, Vol. 7, No. 2, March-April, **2012**, pp.3935-3940.
34. **W. S. Abu-Elhaija**, Vahid Ghorbanian, Jawad Faiz and Bashir Mahdi Ebrahimi" Impact of closed-loop on behavior of Inverter-fed Induction Motors with Rotor Broken Bars Fault", IEEE International Conference on Power Electronics, Drives and Energy Systems (IEEE PEDES 2012), 16-19 December **2012**, Bengaluru, India.
35. **W. S. Abu-Elhaija**, A. M. Takbash, Jawad Faiz and Bashir Mahdi Ebrahimi" Eccentricity Fault Diagnosis in Induction Motors using Global Processors- A Review", IEEE International Conference on Power Electronics, Drives and Energy Systems (IEEE PEDES 2012), 16-19 December **2012**, Bengaluru, India.
36. J. Faiz, B. M. Ebrahimi and **W. S. Abu-Elhaija**," Computation of Static and Dynamic Axial and Radial Forces on Power Transformer Windings due to Inrush and Short Circuit Currents", 2011 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (IEEE AEECT), 6-8 December **2011**, The University of Jordan, Amman, Jordan.
37. F. K. Amoura, **W.S. Abu-Elhaija**, "Time Varying Magnetic Fields under Power Transmission Lines ", IEEE EPQU - Electrical Power Quality and Utilization Conference Lisbon, Portugal, 17-19 October **2011**.
38. **W.S. Abu-Elhaija** and A. Muetze, "Effect of the variation of the rotor impedance with slip on the performance of single-phase excited three-phase induction motors, "**IEEE Transaction on Energy Conversion**", Vol. 25, No. 4, Dec **2010**, pp.1010-1020.
39. **Abu-Elhaija, W. S.**, Faiz, Jawad and Ebrahimi, Bashir Mahdi, "Analytical Prediction of Instantaneous Torque and Speed for Induction Motors with Mixed-Eccentricity Fault Using Magnetic-Field Equations", **Electromagnetics**, 30: 6, 525 - 540, **2010**, pp.525-540.
40. J. Faiz, B. Ebrahimi, H. A. Toliyat, **W. S. Abu-Elhaija**, "Mixed-fault diagnosis in induction motors considering varying load and broken bars location", **Energy Conversion and Management**, Volume 51, Issue 7, July **2010**, pp.1432-1441.

41. **W.S. Abu-Elhaija**, "Effect of variable slip rotor impedance on the performance of singly excited three phase induction motor", International Conference on Electric Machines and Drives IEMDC '09, Miami, Florida., **2009**.
42. Dahab, **W. S. Abu-Elhaija**, F. K. Amoura "A Comparative Study of Electric Field Beneath Compact and Non Compact Transmission Lines", **International Journal of Electrical Engineering Education**, (IJEEE), UK, Volume 44, No.1, Jan **2007**, pp.76-83.
43. Al-Zaben, **W. S. Abu-Elhaija**, M. Alomoush "Identification of Three Phase Transformer Abnormal Conditions Using Wavelet Entropy," IEEE International Electric Machines and Drives Conference (IEEE IEMDC 2007), Antalya, Turkey, 3-5 May **2007**.
44. **W.S. Abu-Elhaija**, A. Al-Zaben, M. Alomoush "Quantifying Severity of unbalanced conditions of induction motor using wavelet entropy", **Electric Power Components and Systems**, Volume 34, No.9, Sept. **2006**, pp. 1001-1013.
45. **Abu-Elhaija, Wejdan**, "Capacitance Requirement of Single-Phase Self Excited Reluctance Generator using Eigenvalues Criterion", IEEE PES Transmission and Distribution Conference and Exposition, Dallas, Texas, 21-25, May **2006**.
46. Ahed Al-Wahadni and **Wejdan Abu Elhaija**," Jordan constitution and Human Rights Acts", DNNL: **2006/2/285**, International Library, Jordan.
47. Dahab, F. K. Amoura and **W. S. Abu-Elhaija** "Comparison of Magnetic Field Distribution of Non-Compact and Compact Parallel Transmission Line Configurations", **IEEE Transaction on Power Delivery**, Volume 20, No.3, July **2005**, pp.2114-2118.
48. **W. S. Abu-Elhaija**, F. K. Amoura "Fault Analysis of Six Phase Power System Using Six Phase Symmetrical Components", **Electric Power Components and Systems**, Volume 33, No. 6, June **2005**, pp. 657-671.
49. F. K. Amoura, **W. S. Abu-Elhaija**. "Deriving the Signal-to-Noise Ratio Probability of Error and Performance Measure Matrices for Distribution Line Carrier Signals Propagation Using Bus Impedance Approach", **IEEE Transaction on Power Delivery**, Volume 19, No.1, Jan **2004**, pp. 96-104.
50. **W. Abu-Elhaija**, C.E. Tindall, J.P. Martin. "Finite Element Time-Stepping Method for the Prediction of Small Alternator Transient Response", **Electric Power Components and Systems**, Volume 31, April **2003**, pp-379-388.
51. **Abu-Elhaija, W.**, Tindall, C.E., Martin, J.P., " Prediction of Three Phase Sudden Short Circuit Response using Finite Elements "; Proceeding 33rd Univ. Power Engineering. Conference, Edinburgh, UK, **1998**.
52. Ahmad Al-Momani; Omar Mohamed, **Wejdan Abu Elhaija**," Multiple Processes Modeling and Identification for a Cleaner Supercritical Power Plant via Grey Wolf Optimizer", submitted to Energy Journal.
53. Omar Abu Znad, Omar Mohamed, **Wejdan Abu Elhaija**, "Speeding up Startup Process of a Cleaner Coal Power Generation Stations via Classical Model Predictive Control", submitted to Clean Energy Journal.