

Date: 9/10/2022

ABDULLAH IBRAHIM AL-
ODIENAT



PERSONAL INFORMATION

Title: Dean, Engineering Faculty

Academic Rank: Professor

Date & Place of Birth: 17th August 1962, Karak-Jordan

Nationality: Jordanian

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ACADEMIC QUALIFICATIONS

Degree	Major	Duration (From-To)	University	Country
BEE	Electrical Power	1981-1986	NWFP University on Engineering & Technology	Pakistan
PhD	Electrical Power	1993-1998	Tashkent State University	Uzbekstan

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Human Resources Department

TEACHING EXPERIENCE

Duration	Rank	Institution	Department/Faculty	Country
2022- Present	Professor	Amman Arab University	Dean of Engineering	Jordan
2021-2022	Professor	Mutah University	Dean of Scientific Research	Jordan
2020 – 2021	Professor	Al-Ahliyya Amman University	Head of Electrical Engineering Department	Jordan
2014 – 2020	Professor	Mutah University	Electrical Engineering Department/Engineering	Jordan
2012 – 2014	Associate Professor	Mutah University	Deputy Dean of Scientific Research	Jordan
2011 – 2012	Associate Professor	Taibah University	Head of Electrical Engineering Department	Kingdom of Saudi Arabia
2009-2010	Associate Visiting Professor	University of Sheffield	Electrical and Electronics Department	UK
2001 – 2008	Assistant Professor	Mutah University	Head of Electrical Engineering Department	Jordan

OTHER EXPERIENCE

Duration	Rank	Institution	Department/Faculty	Country
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PUBLICATIONS

JOURNALS

Abdullah Al-Odienat	The Automatic Load Shedding for Stability Security at Load Buses	<i>Journal of Applied Science</i>	2(9) 2002	2002
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Research Activities

Research activities are focused on electric power system stability and control. Smart Grids, power quality, power system protection.

Publications

1. Abdullah I. Al-Odienat, "Training in Engineering Colleges", 2nd Arabic conference of The Arabic Union for Generation and Distribution of Electrical Energy. 9-11 Nov. 1999, Khartoum, Sudan.
2. Abdullah I. Al-Odienat, "Mathematical Modeling of Synchronous Motor Dynamic Modes under Stochastic Processes", 14th European Simulation Multi-conference, May 23-26, 2000, Ghent, Belgium.
3. Abdullah I. Al-Odienat, "Simulation Diagrams and Transfer Functions of High Rating Synchronous Motors", 12th European Simulation Symposium, September 28-30, 2000, Hamburg, Germany.
4. Abdullah Al-Odienat. "The Automatic Load Shedding for Stability Security at Load Buses", *Journal of Applied Science*, 2(9), pp. 903-906, 2002.
5. Abdullah Al-Odienat, VN Avremenko, ", *Information Technology Journal*, Vol. 5, issue 6, 2003.
6. Abdullah Odienat, Ibrahim Rida, " Overview of wind energy potential for water desalination in Jordan", International Engineering Conference –Mutah 2004. 26-28 April 2004, Mutah University, Jordan.
7. Abdullah I. Al-Odienat. "The Identification of the Critical Oscillatory Modes in Multi-machine Power System", *Alexandria Engineering Journal*. Elsevier, Vol. 44, No. 5, Sep. 2005.
8. Abdullah I. Al-Odienat & Omar. Radaideh, "The Error Minimization of Digital Filter Used in Uniprocessor Protective Relaying for 6-33 KV Electrical Networks". *Journal of CIRCUITS, SYSTEMS, AND COMPUTERS*. World Scientific. Vol. 14 Number 5 October 2005, pp. 953-963.

9. Abdullah I. Al-Odienat. "Power System Blackouts: Analysis and Simulation of August 9, 2004 Blackout in Jordan Power System". Information Technology Journal, Vol. 5, 2006. pp. 1078-1082.
10. Omar. Radaideh & Abdullah I. Al-Odienat. "The Generalized Mathematical Model of Electrical Power System for the Optimal Power Flow". ABHATH AL-YARMOUK, Vol.15, No.2, 2006, pp. 365-376.
11. Abdullah I. Al-Odienat. "The mathematical Modeling and Simulation of Low Voltage Network for Harmonics Analysis". International Mediterranean Modeling Multi-conference 2006, Barcelona, Spain, Oct. 4th-6th 2006.
12. Abdullah I. Al-Odienat. "Neuro-controller for Synchronous Generator Excitation system". Mutah Journal for Research and Studies, Volume (22) Number (3), 2007.
13. Akram Fajr, Abdullah I. Al-Odienat, "Genetic Algorithm Based Tuned Neural Networks As applied to Power System Controllers ", Mutah Journal for Research and Studies Volume (22) Number (3), 2007.
14. Abdullah I. Al-Odienat, Akram Fajr. "Fuzzy logic neural network application in power system", 7th regional Conference Exhibition of CIGRE National Committees in Arab Countries. Cigre 2007, Amman, Jordan, 3-5 September 2007.
15. Abdullah I. Al-Odienat, Ayman A. Al-Lawama. "The Advantages of PID Fuzzy Controllers over the Conventional Types". Science Publications/ American Journal of Applied Sciences 5 (6): 653-658, 2008.
16. Abdullah I. Al-Odienat, "Wind Turbine Power Generation System: The implementation of an Adaptive Control System" The First International Engineering Sciences Conference of Aleppo University 2-4 November 2008.
17. Abdullah I. Al-Odienat, Tauseef Gulrez "Inverse covariance principal component analysis for power system stability studies" Turkish Journal of Electrical Engineering & Computer Sciences, Volume 22, Issue 1, pp. 57- 65, 2014.
18. Abdullah I. Al-Odienat "Heterogeneous Information Fusion for the Voltage Stability Assessment of Next Generation Power Systems" Mutah Journal for Research and Studies, Vol.28. No. 2, 2013.
19. Abdullah I. Al-Odienat, "Adaptive Stabilizer of Single Machine Power System with Lossy System". WSEAS Transactions on power systems, 2014.

20. A.A. Abouelsoud, Reda Abobeah, Abdullah Al-Odienat. "Adaptive output feedback control of chemical batch reactor". Journal of Control Engineering and Technology. American V-King Scientific Publish. JCET Vol. 4 Iss. 3, PP. 205-209, July 2014.
21. Abdullah Al-Odienat, Reda Abobeah. "State Estimation of Binary Distillation Column with Unknown Feed Composition". Mutah Journal for Research and Studies, 2014.
22. Abdullah Al-Odienat, Amneh A. Al-Mbaideen. "Optimal Length Determination of the Moving Average Filter Using Independent Component Analysis for Power System Applications". International Journal of Innovative Computing, Information and Control (ICIC), Tokai University, Japan, 2014.
23. Abdullah Al-Odienat, "The PID Controller Based on Genetic Algorithm for Voltage Stability of the Synchronous Machine". International Journal of Innovative Computing, Information and Control (ICIC), Tokai University, Japan, Vol. 10, No. 6, 2014.
24. Abdullah Al-odienat, Tauseef Gulrez. "A New Perspective on Principal Component Analysis using Inverse Covariance". The International Arab Journal of Information Technology, Sep. 2015.
25. Abdullah. I. Al-Odienat, Khaled M. Alawasa, "Harmonics assessment and analysis at low voltage networks — Case study: Mutah University campus (Engineering building)," 2017 10th Jordanian International Electrical and Electronics Engineering Conference (JIEEEEC), Amman, 2017.
26. Abdullah. I. Al-Odienat and Khaled M. Alawasa, "Power Quality Characteristics of Residential Grid-Connected Inverter of Photovoltaic Solar System", 6th International Conference on Renewable Energy Research and Applications, ICRERA-2017, ,5-8/11/2017 San Diego, CA, USA.
27. Abdullah. I. Al-Odienat and M. Momani. "Global-Binary Algorithm; New Optimal Phasor Measuring Units Placements Algorithm". Electric Power Components and Systems, Taylor & Francis, Elsevier, 2019.
28. Khaled M. Alawasa and Abdullah. I. Al-Odienat, " Power Quality Investigation of Single-Phase Grid-Connected Inverter of Photovoltaic System". Journal of Engineering and Technological Sciences, 2019.
29. Abdullah. I. Al-Odienat, Khaled Al-Awasa Mohammad Al-Momani. "Connectivity Matrix Algorithm; New Optimal Phasor Measuring Unites Placement Algorithm". 3rd International Conference on Power and Smart Grid (ICPSG 2020) proceeding, Kuala Lumpur, Malaysia, May 29-31, 2020.
30. Abdullah I. Al-Odienat, Banan Malahmeh, Awj R. Tarawneh, " The Optimal PMU Placement in the Power Systems for the Enhancement of State Estimation". 2nd International Conference

on Electrical, ICECCE 2020 Communication and Computer Engineering 14-15 June 2020 ISTANBUL, TURKEY.

31. Abdullah I. Al-Odienat Lana Tarawneh, Afnan Kasasbeh, "The Accuracy Evaluation of State Estimation in Smart Power Grids". 2nd International Conference on Electrical, ICECCE 2020 Communication and Computer Engineering 14-15 June 2020 ISTANBUL, TURKEY.

32. Abdullah Al-Odienat, Khaled al-maitah, Batool al-khriesat, "The Improvement of Weighted Least Square State Estimation Accuracy Using Optimal PMU Placement", WSEAS TRANSACTIONS on POWER SYSTEMS, Volume 15, 2020.pp. 1-7.

33. Abdullah I. Al-Odienat, Awj R. Tarawneh, Banan Malahmeh, "Improved LEACH Protocol for Increasing Network Lifetime Based on Circular Patches Clustering". Universal Journal of Applied Science Vol. 7(1), pp. 8 – 17, 2020.

34. Abdullah Al-Odienat, Khaled Al-Maitah, Batool Al-Khriesat, "Monitoring High Voltage Power Lines Using Efficient WSN", Journal of Advances in Energy and Power 7(1): 10-19, 2020.

35. Abdullah Al-Odienat and Khaled Al-Maitah, "Wide Area Protection Scheme for Active Distribution Network Aided μ PMU", 7th Annual IEEE PES/IAS PowerAfrica Conference (PAC 2020). August 25 to August 28, 2020.

36. Abdullah Al-Odienat, Khaled Maitah "Local Decision Module for a More Reliable Wide Area Protection Scheme", International Journal of Innovative Computing, Information and Control, Vol. 17, No. 2, 2021, Tokai University, Japan, 2021

37. Khaled Al-Maitah, Abdullah Al-Odienat, "A New Wide Area Protection Scheme Based on Phase Angles of Sequence Components", Journal Electric Power Components and Systems, Taylor & Francis, 2021.

38. Abdullah Al-Odienat, Khaled Al-Maitah, Batool Al-Khraisat, "The enhancement of Frequency Stability of Low Inertia Interconnected Power System". 2021 IEEE PES/IAS PowerAfrica, August 23-28, 2021.

39. Mohammad M. Almomani, Abdullah Al-Odienat, "The Impact of Wind Generation on Low Frequency Oscillation in Power Systems". 2021 IEEE PES/IAS PowerAfrica, August 23-28, 2021.

40. Abdullah Al-Odienat, Khaled Al-Awasa, Khaled Walidi, Moahammad Dawood, Backer Abu Jaradeh "Implementation of Wide-Area Monitoring System (WAMSs) in Jordanian National Grid". JEEIT 2021, IEEE Jordan International Joint conference on Electrical Engineering and Information Technology, 16-18 November 2021, Amman, Jordan.

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41. M. M. Al-Momani, A. Odienat, S. F. Algharaibeh, K. Awasa and O. Radaideh, "Modified Connectivity Matrix Algorithm," 2022 Advances in Science and Engineering Technology International Conferences (ASET), IEEE Proceeding, pp. 1-6, 2022.
42. M. M. Al-Momani, A. Odienat, S. F. Algharaibeh, K. Awasa and I. Reda, "Ringdown analysis for Low-Frequency Oscillation Identification," 2022 Advances in Science and Engineering Technology International Conferences (ASET), IEEE Proceeding, pp. 1-6, 2022.
43. Fraihat H, Almbaideen A, Al-Odienat A, Al-Naami B, De Fazio R, Visconti P. "Solar Radiation Forecasting by Pearson Correlation Using LSTM Neural Network and ANFIS Method: Application in the West-Central Jordan." Future Internet.; 14 (3):79, 2022.
44. Abdullah. I. Al-Odienat, Khaled Al-Awasa Mohammad Al-Momani, "Global-Binary Algorithm; New Optimal Phasor Measurement Unit Placement algorithm". Accepted for publication in Journal of Engineering, Technology & Applied Science Research, ISI (Clarivate) indexed, 2022.
45. Khaled A. Mahafzah, Hana'a A. Rababah, Abdullah Al-Odienat, Mohammad Al-Momani, Khaled Al-Maitah, Amneh Al-Mbaideen, "The Dynamic Response of SPWM vs. SVPWM Synchronverter," WSEAS Transactions on Power Systems, vol. 17, pp. 93-102, 2022.
46. Abdullah. I. Al-Odienat and Tamer Mushal Al-Jaafreh, "The Application of Deep Learning Techniques for Solar Power Forecasting", Accepted for publication in IEEE proceeding: The 13th International Conference on Information and Communication Systems (Technically Co-Sponsored by IEEE-Jordan Section) Irbid, Jordan, June 21-23, 2022.
47. Abdullah. I. Al-Odienat and Tamer Mushal Al-Jaafreh, "The Solar Energy Forecasting by Pearson Correlation using Deep Learning Techniques", Accepted for publication in IEEE proceeding: 26th International Conference on Circuits, Systems, Communications and Computers, IEEE proceeding, Chania, Crete Island, Greece, July 19-22, 2022.
48. Abdullah Al-Odienat, Khaled Al-Maitah, "Wide Area Protection", accepted for publication as a book chapter, Springer, 2022.
49. Khaled Al-Maitah, Abdullah Al-Odienat, "Frequency Regulation for Low Inertia Power System with High Penetration of Photovoltaic System", ID-1056, C4/ Power System Technical Performance PS 3 / Challenges and advances in power system dynamics, Cigre Paris, France, 28th August – 2nd September 2022.

**CONFERENCE
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Author/s (In Order)	Title	Conference	Country	Date
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BOOKS

Author/s (In Order)	Title	Publisher	Edition	Date
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MEMBERSHIPS OF SCIENTIFIC AND PROFESSIONAL SOCIETIES

- Member of IEEE
- Member of SCS “The Society for International Computer Simulation”.
- Member of Jordanian Engineers Association.

UNIVERSITY COMMITTEES

- Head of ABET Committee for the accreditation of the department programs.
- Member in the committees in the Jordanian Accreditation and Quality Assurance Commission for Higher Education Institutions
- Head of the postgraduate studies committee in the department.
- Head of Scientific Research Committee
- Head of the Faculty Investigation Committee/Student Conduct Committee.
- Head of Power and Control Group in the department.
- Head of the Higher Technical Committee, CIGRE National Committee, Jordan
- Member in Scientific Research and Innovation Support Fund/Ministry of Higher Education and Scientific Research-Energy Sector
- Several International Conferences-Organizing and Scientific committees and sessions chair.

WORKSHOPS ATTENDED

دائرة الموارد البشرية
Human Resources Department

- ICDL Certificate.
- Intel Course Requirements.
- Quality Assurance and Accreditation in Higher Education.

WORKSHOPS OFFERED

RESEARCH INTERESTS

Research activities are focused on electric power system stability and control. Smart Grids, power quality, power system protection.

LANGUAGES

- Arabic
- English
- Russian

OTHER COMMUNITY ACTIVITIES

AWARDS RECEIVED

- BEE scholarship, awarded by the Ministry of Education/Jordan
- PhD scholarship, awarded by Al-Balqa University/Jordan
- University Research Fellowship, awarded by Tashkent State University.
- Visiting Research staff, awarded by University of Sheffield, UK.

GRADUATE STUDENTS' SUPERVISION

Khaled Al- Maitah	The Application of Wide Area Protection System to The Distribution Networks Integrated with Distributed Generations
Mohammad Munketh Al-Momani	Wide-Area Damping Control of Low-Frequency Oscillations in Smart Grids
Atallah Ahmad Al Qaralleh	Optimal Sequence Placement of Phasor Measurement Units for State Estimation in Jordanian National Grid
Lana Mostafa Al-Tarawneh	Power Quality Investigations in Smart Distribution Networks

REFERENCES

- Professor Arafat Awajan , President of Mutah University
- Professor Marwan Mousa, Vice President of Mutah University
- Professor Thafer Y. Assaraira, President of Higher Education Accreditation and Quality Assurance Commission

