

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

Personal Data

- Name: Almoataz Youssef Abdelaziz
- Date of Birth: September 14, 1963.
- Place of Birth: Cairo, Egypt.
- Nationality: Egyptian.
- Marital Status: Married.
- Military Service: Completed.



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- <http://www.scopus.com/authid/detail.url?authorId=7003870872>
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- <https://scholar.google.com.eg/citations?user=646RieYAAAAJ&hl=ar>
- <https://www.webofscience.com/wos/author/record/A-4793-2008>
- https://www.researchgate.net/profile/Almoataz_Abdelaziz

Education

- **Ph. D.** in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. **May 1996.** Research was carried out at Brunel University, England. Work was jointly supervised by professors of Ain Shams University, Egypt and Brunel University, England.

Thesis Title: “*Application of Artificial Neural Networks in the Analysis of Adaptive Protection for Out-of-Step Relaying*”.

- **M. Sc.** in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. **February 1990.**

Thesis Title: “*Pattern Recognition Technique for Out-of-Step Protection in Electrical power Systems*”.

- **B. Sc.** in Electrical Engineering (Electric Power & Machines Department), Faculty of Engineering, Ain Shams University, Cairo, Egypt. **June 1985.**

First place in a group of one Hundred and eighty students with a general grade of **Excellent.**

Prof. Almoataz Abdelaziz websites:

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<https://scholar.google.com.eg/citations?user=646RieYAAAAJ&hl=ar>

Research Area Interest

- Applications of Artificial Intelligence to Electrical Power Systems and Renewable Energy.
- Applications of Recent Optimization Techniques in Power Systems Operation, Planning and Control.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

Academic Experience

Position Held	Place	From - To
Head of Department	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt	1 August 2023
Vice Dean for Education and Students Affairs	Faculty of Engineering and Technology, Future University in Egypt, Cairo, Egypt	October 2018 – September 2019
Professor	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt	March 2007 - Date
Associate Professor	General Directorate for Projects & Maintenance, King Saud University, Riyadh, KSA	January 2006 – January 2007
Associate Professor	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt	December 2001 – January 2006
Assistant Professor	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Egypt	June 1996 - December 2001
Research Assistant	Department of Electrical Engineering and Electronics, Brunel University, London, England	January 1994 - January 1996
Assistant Lecturer	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt	March 1990 - January 1994
Demonstrator	Electric Power & Machines Department, Faculty of Engineering, Ain Shams University, Cairo, Egypt	January 1987 - March 1990
Demonstrator	Electrical Power Engineering Department, Military Technical College, Cairo, Egypt (Military Service)	September 1985 – January 1987
Professor (part time)	Electrical Engineering Department, Future University, Cairo, Egypt	September 2012 – Date
Professor (part time)	Electrical Engineering Department, Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt	September 2001 - Date
Professor (part time)	Electrical Power Engineering Department, Military Technical College, Cairo, Egypt	January 2002 – Date
Professor (part time)	Electrical Power Engineering Department, Higher Institute of Engineering, Al-Shorouk Academy, Egypt	September 2004 - Date
Associate Professor (part time)	Electrical Technology Department, Industrial Education College, Cairo, Egypt	January 2002 - January 2006
Associate Professor (part time)	Electrical Engineering Department, High Technical Institute, 10 th of Ramadan City, Egypt	January 2003 – June 2004
Assistant Professor (part time)	Electrical Engineering Department, High Institute of Productivity, Zagazig University, Egypt	February 1997 - July 2000
Assistant Professor (part time)	Mechatronics Department, High Institute of Engineering, Six of October City, Egypt	February 1997 - July 1998

Teaching Experience

* Lectures and Tutorials for Under Graduate Students:

- (1) Switchgear and Protection Engineering.
- (2) Transmission and Distribution of Electrical Power.
- (3) Power System Analysis.
- (4) Electrical Power Engineering.
- (5) Electrical Measuring Instruments.
- (6) Automatic Control & Linear Systems Dynamics.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- (7) Electrical Energy Utilization.
- (8) Electric Power Quality.
- (9) Theory of Electrical Machines.
- (10) Electrical Circuit Theory.
- (11) Electric Installations in Buildings.
- (12) Introduction to Computers & Programming (FORTRAN and QBASIC Languages).
- (13) Computer Applications in Electrical Engineering and Power Systems (MATLAB).
- (14) Electrical Laboratory Tests.
- (15) Technical Reports Writing.
- (16) Contracts and Legislation.
- (17) Engineering Law.
- (18) Engineering Profession, Practice and Responsibilities.
- (19) Engineering Economy.
- (20) Environmental Sciences.
- (21) Professional Ethics and Legislation

*** Lectures for Post Graduate Students:**

- (1) Stability, Control and Dynamics of Power Systems.
- (2) Power System Analysis (Load Flow and Short Circuit Calculations).
- (3) Computer Relaying of power Systems.
- (4) Protection of Electrical power Systems.
- (5) Computer Applications in Power Systems.

*** Supervision Research Work Leading to M. Sc. and Ph. D. Degrees in the Following Subjects:**

M. Sc. Theses (80 Awarded + 5 Running)

1. Adaptive Coordination of Overcurrent Relays in Power Distribution Networks. (July 1999)
2. Effect of Recent Equipment of Electrical Power Systems on Load Reliability. (May 2001)
3. Artificial Intelligence for Loss Reduction of Distribution Systems. (September 2002)
4. Voltage Stability Assessment in Electric Power Systems. (November 2002)
5. Adaptive Intelligent Distance Protection in Electrical Power Systems. (February 2003)
6. Dynamic Load Modeling in Electric Power System Stability Studies. (January 2004)
7. Fault Diagnosis of Power Transformers Using Artificial Neural Networks. (February 2004)
8. Power System Stability Enhancement Using Adaptive Fuzzy Techniques. (December 2005)
9. Load Modeling Effect on Voltage Stability of Large Scale Power Systems Using Energy Function Technique. (January 2006)
10. Optimal Unit Commitment for Thermal Generating Units using Intelligent Techniques. (September 2007)
11. Distribution Systems Planning with Reliability Modeling. (December 2007)
12. Voltage Control of Radial Distribution Systems using Fuzzy Logic Techniques. (February 2008)
13. Fault Detection and Classification of Double Circuit Transmission Lines using Artificial Neural Networks. (July 2008)
14. Intelligent Optimization Techniques for Distribution Networks Reconfiguration. (August 2008)
15. Design of Grid Grounding Network for Substations. (January 2009)
16. Allocation of FACTS Devices using New Optimization Techniques. (August 2010)
17. Power Factor Correction in Electrical Distribution Systems using Fuzzy Logic Technique. (December 2010)
18. Analysis of Power Quality Disturbances using New Intelligent Techniques. (January 2011)
19. Voltage Control of Radial Distribution Systems using Artificial Intelligence Techniques. (February 2011)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

20. Transmission Lines Fault Detection and Classification using Support Vector Machines. (May 2011)
21. Coordination of Overcurrent Relays using New Optimization Techniques. (October 2011)
22. Investigation of the Effect of Current Transformer Saturation on Power Transformer Protection using Artificial Neural Networks. (December 2011)
23. Optimal Mix Selection of Hybrid Electric Power Systems (HPS). (February 2012)
24. Distribution Network Reconfiguration using Modern Heuristic Optimization Technique. (June 2012)
25. Adaptive Distance Protection of Double Circuit Transmission Lines. (July 2012)
26. Simulation of Load Shedding as a Corrective Action Against Voltage Collapse. (September 2012)
27. Protection of Multi-terminal Transmission Lines. (October 2012)
28. Protection of Transformers using Wavelets Approach. (November 2012)
29. Protection of Generators using Artificial Neural Networks and Wavelets Techniques. (December 2012)
30. Harmonics in Industrial Electrical Power Systems: Analysis and Mitigation. (January 2013)
31. Power System Small Signal Stability Enhancement Based on SVC Control Design. (May 2013)
32. Out-of-Step Detection Using Phasor Measurement Unit. (June 2013)
33. Optimal Phasor Measurement Unit (PMU) Placement for Full Power System Observability. (June 2013)
34. Application of Geographic Information System (GIS) for Appropriate Site Selection of Wind Farms. (September 2013)
35. Blackout Mitigation using Wide Area Protection (WAP). (October 2013)
36. Recognition of Power Quality Events using Artificial Neural Networks. (December 2013)
37. New Technique for Maximum Power Point Tracking on Photovoltaic Systems. (January 2014)
38. Applications of Wavelets in Power System Protection. (April 2014)
39. Power Quality Analysis of Grid Connected Photovoltaic Systems. (August 2014)
40. Protection Coordination for Distribution Systems Containing Distributed Generating Units. (September 2014)
41. Artificial Intelligence Techniques for Short Term Wind Power Forecasting. (December 2014)
42. Site and Size Allocation of Distributed Generation in Electrical Distribution Systems. (February 2014)
43. Demand Response Effect on Deregulated Power Market. (April 2015)
44. Integration of Large Wind Farms into the Egyptian Power System. (May 2015)
45. Design of Off-shore Wind Farm Power Transmission Lines. (August 2015)
46. Artificial Intelligence Technique for Protective Relays Coordination. (October 2015)
47. Analysis and Control of Wind Energy System. (November 2015)
48. Mitigation of Distributed Generation Impact on the Coordination of Protection Systems in Distribution Networks using Fault Current Limiters. (December 2015)
49. Optimization of Hybrid Renewable Energy Systems using New Techniques. (December 2015)
50. Advanced Intelligent Islanding Detection and Protection Technique. (January 2016)
51. Improved Hybrid Technique for Anti-Islanding Protection of Grid Connected Photovoltaic Systems. (March 2016)
52. Adaptive Network Protection for Micro Grids. (July 2016)
53. Application of New Optimization Techniques for Fault Section Estimation in Power Systems. (October 2016)
54. Economic Dispatch using New Optimization Methods. (November 2016)
55. Adaptive Coordination of Overcurrent Relays in Microgrids. (May 2017)
56. Application of Optimization Techniques on Economic Dispatch. (August 2017)
57. Energy Hub Optimization Using Modified Firefly Algorithm. (August 2017)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

58. Modern Approaches for Optimal Power Flow. (August 2017)
59. Optimal Design of Controller for AVR Performance Enhancement. (November 2017)
60. Fault Location Estimation in Smart Grids. (January 2018)
61. Optimal Allocation of Energy Storage Systems (ESS) for Load Management Applications. (April 2018)
62. An Effective Adaptive Overcurrent Protection Scheme for Microgrids. (April 2018)
63. Optimal Design and Management of Photovoltaic and Energy Storage Systems. (May 2018)
64. Electric Power System Distortions Mitigation Using Power Filter Compensator. (August 2018)
65. Optimal Placement of Phasor Measurement Units in Electrical Power Systems. (January 2019)
66. Time-varying Cost-effective Primary Distribution Network Reconfiguration. (February 2019)
67. Economic Valuation of HVDC Transmission Lines. (March 2019)
68. Demand Side Management with Renewable Energy Sources. (May 2019)
69. Impact of Wind Farm Disturbance on Power System Performance. (July 2019)
70. Photovoltaic Array Reconfiguration for Partial Shading Loss Reduction. (January 2020)
71. Optimal Reactive Power Control using Artificial Intelligence Methods. (April 2020)
72. Intelligent Control for Hybrid Microgrid. (July 2020)
73. Performance Enhancement of Variable Speed Wind Energy Conversion System. (September 2020)
74. Optimum Solutions to Power Quality Problems Caused by Renewable Energy Resources. (December 2020)
75. Distribution Systems Restoration using Optimization Techniques. (February 2021)
76. Advanced Control for Hybrid AC/DC Microgrid. (April 2021)
77. Optimal Reconfiguration of Radial Distribution Power System using a Heuristic Optimization Approach. (June 2021)
78. Enhancement of DC Microgrid Protection Schemes. (November 2021)
79. Optimal Sizing and Management of Isolated Hybrid Micro-Grids. (October 2022)
80. Planning of Hybrid AC/DC Microgrids. (April 2023)
81. Intelligent Based Protection Strategy of Grid Connected Distributed Generators.
82. Optimal Allocation of Electric Vehicle Sharing Charging Stations with Integration of Renewable Energy as a Primary Power Source.
83. Optimal Relay Coordination for High Voltage Substation Considering Practical Constraints.
84. Renewable Energy Integration on the Electrical Grid using Modern Optimization Techniques.
85. Distance Protection of Transmission Lines with FACTS Devices.

Ph. D. Theses (32 Awarded + 16 Running)

1. Optimal Transmission Congestion using FACTS. (June 2009)
2. Subsynchronous Resonance Control and Protection. (September 2009)
3. Adaptive Protection Strategies for Distribution Systems with Distributed Generation. (September 2011).
4. Applications of Phasor Measurement Units (PMUs) in Power System Protection. (August 2012).
5. Electrical Power Systems Security Assessment and Enhancement (December 2012).
6. Configuration Management of Electric Distribution Networks with Distributed Generation (June 2013).
7. Electric Energy Management in Power Delivery Systems using Virtual Power Plant Concept (December 2014).
8. Application of FACTS to Enhance the Performance of Power System with Growing Wind Power Penetration. (April 2015)
9. Adaptive Automated Fault Identification for Enhancing Smart Network Operation. (November 2016)
10. Optimal Control of Micro Grids for Fault Tolerant Operation. (January 2017)
11. Optimal Multi-Criteria Design of Hybrid Power Generation Systems. (March 2017)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

12. Enhancement of Voltage Stability and Reactive Power Control using Modern Optimization Methods. (December 2017)
13. Coordination of the Synchronous Generator Protection with Generator Capability Charts. (July 2018)
14. Generation Expansion Planning of the Egyptian Power System Considering High Penetration of Renewable Energy Resources. (January 2018)
15. Security Constrained Optimal Power Flow by Modern Optimization Techniques (March 2019)
16. Improvement of Power System Operation Using Modern Optimization Techniques (April 2019)
17. Electrical Distribution Systems Hosting Capacity: Assessment and Enhancement. (June 2019)
18. Enhancement of Distribution Systems Performance using Microgrids. (February 2020)
19. Modern Application of Wind Energy in Electrical Power Generation (MTC) (April 2020)
20. Microgrid Performance for Flexible Power System Operation. (June 2020)
21. Operation and Control of Offshore Wind Farm Connected to High Voltage Direct Current Transmission Systems. (October 2020)
22. Optimal Allocation of Energy Storage Systems for Improving Performance of Microgrids. (October 2020)
23. Enhancement of the Electrical Distribution Systems Performance from a Holistic Perspective. (November 2020).
24. Power Network Reconfiguration Using Decision-making Optimization for Hosting Capacity Enhancement. (April 2021)
25. Impact Investigation of Photovoltaics and Wind Generations Penetration on the Performance of Power Systems. (September 2021)
26. Centralized and Decentralized Security Assessment in Smart Grids. (January 2022)
27. Optimal Control of Microgrid Operation under Different Conditions. (April 2022)
28. A Novel Technique for Rotor Side Converter Protection in Doubly Fed Induction Generators. (May 2022)
29. Load Frequency Control of Interconnected Power Systems Including Renewable Energy Sources. (June 2022)
30. Analysis and Modeling of Hybrid Wind-Photovoltaic Energy System based on Intelligent Control Techniques. (July 2022)
31. Stochastic Modeling of Renewable Energy. (October 2022)
32. Utilization of Energy Storage Systems in the Performance Enhancement of Microgrids. (June 2023)
33. Grid Connected PV Plants with Energy Storage Systems: Impact and Solutions.
34. Frequency Excursions in Emerging PV Low Inertia Electrical Network.
35. Optimal Coordination of DOCRs in Hybrid DG Systems Considering Transient States of Fault Current.
36. Identification and Reduction of Electric Power Quality Problems.
37. Hosting Capacity Enhancement in Modern Electrical Distribution Systems with Renewables and Energy Storage Systems.
38. Optimal Transmission Network Configuration for Electrical Power System Performance Enhancement.
39. Optimal Planning of Distributed Generation Location and Sizing in Sub-Transmission Network.
40. Optimal Power Management Framework by Simultaneous Decarbonization and Minimization of Generation Cost.
41. Deep Learning Microgrid Load Forecasting with Optimal Dynamic Tariff.
42. Smart and Adaptive Fault Identification Technique for Series Compensated Transmission Lines.
43. Optimal Power Flow Considering Uncertainty of Renewable Energy Resources and Time-Varying Load.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

44. Optimal EVs Charging Behavior Prediction and Scheduling Using a New Generation of AI
45. Performance Improvement of Islanded Microgrids
46. Optimal Scheduling of Electrical Generation Sources and Electrical Vehicles Parking Lots with Demand Response in Smart Grid.
47. Improving Smart Homes Energy Consumption Patterns Using Optimization Algorithms
48. Techno-Economic Performance Enhancement of Energy Hub Systems using Artificial Intelligence Techniques.

*** Internal and External Examiner of the Following Theses:**

Ph. D.

1. Enhancement of Power System Voltage Stability by using FACTS Devices. (Ain Shams University - Egypt - January 2008)
2. Artificial Intelligence Applications for Load Forecasting. (Ain Shams University - Egypt - July 2008)
3. Optimal Power System Operation and Planning using Different Heuristic Optimization Techniques. (BMS College of Engineering - India - February 2010).
4. An Economical Stochastic Study of Electrical Load Pattern for Energy Management. (Ain Shams University - Egypt - August 2010)
5. Modeling, Operation and Control of Fuel Cells used as Distributed Generation. (Ain Shams University - Egypt - September 2012)
6. Fault Prediction of Electric Power System Elements Using an Artificial Technique. (Tanta University - Egypt - November 2012)
7. Improving the Performance of the Egyptian Second Testing Nuclear Research Reactor by Using a Type 2 Fuzzy Logic Controller Tuned by a Novel Evolutionary Algorithm. (Cairo University - Egypt - July 2013)
8. Load Frequency Control of Linear and Non-linear Based Multi-Area Power Systems using Various Evolutionary Algorithms. (National Institute of Technology Durgapur - India - August 2013)
9. Optimization of Solar Energy Generation Based on Artificial Intelligence. (Zagazig University - Egypt - November 2013)
10. On-line Solution to Alleviate the Voltage Collapse in Electrical Power Systems (Benha University - Egypt - November 2013)
11. Reliability Analysis of Power System Network Incorporating Phasor Measurement Units (Birla Institute of Technology - India - April 2014)
12. Optimum Network Reconfiguration and DG Placement Based on Maximization of System Loadability using Modified Bee Colony Algorithm (University of Malaya - Malaysia - August 2014).
13. Control Strategies for Power Grid Interface of Large Scale Wind Farms (Ain Shams University - Egypt - March 2015)
14. Optimal Penetration of Distributed Generation without Modifying Protection Coordination in Distributed Networks (Tanta University - Egypt - November 2015)
15. Protective Devices Coordination and Fault Location in Smart Grid (Menofia University - Egypt - January 2016)
16. Optimal Generation Expansion Planning with FACTS Devices/HVDC Systems and Security Constraints (Andhra University - India - March 2016)
17. Optimal Operation of Electric Power Systems Considering Wind Power Uncertainty Incorporating Energy Storage System and Demand Side Management (Cairo University - Egypt - June 2016)
18. Proposed Schemes for Restoring Protective Relays Coordination in Networks Incorporating Distributed Generation (Cairo University - Egypt - May 2017).
19. Power Systems Stabilization Using Flexible AC Transmission Systems (FACTS) Controlled by Advanced Control Techniques (Aswan University - Egypt - July 2017)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

20. Reactive Power Control for Voltage fluctuations Mitigation and Power Loss Reduction under High Photovoltaic Penetration in the Egyptian Distribution Networks (Ain Shams University - Egypt - January 2018)
21. Control of Three Phase Doubly Fed Induction Generator Driven by Wind Turbine (Assuit University - Egypt - May 2018)
22. Effects of Increasing Wind and Solar Energy on the Egyptian Power System (Al-Azhar University - Egypt - May 2018)
23. Performance Analysis of Combined Wind Farm Based on SCIG and DFIG with FACTS Devices during Abnormal Conditions (Aswan University - Egypt - July 2018)
24. Nonlinear and Sampled Data Control with Application to Power Systems (Sapienza Università di Roma - Italy – August 2018)
25. Phasor Measurement Unit based Wide Area Backup Protection Scheme for Transmission Lines (Cairo University - Egypt - November 2018)
26. Advanced Control of Permanent Magnet Synchronous Motor for Hybrid Electric Vehicles (Ain Shams University – Egypt - December 2018)
27. Advanced Protection Technique for Wind Farm Collector Feeder Divided to Multi Zones (Helwan University – Egypt - June 2019)
28. Optimized Distributed FACTS Schemes for Efficient Operation of Distribution Networks using Recent Optimization Techniques (Cairo University – Egypt - July 2019)
29. Battery Management Optimization and Lifecycle Impact Analysis for Microgrid Operation with V2G Implementation (University of Malaya - Malaysia - September 2019)
30. Optimization of Operating Parameters for a Hybrid Renewable Energy Systems (Minia University – Egypt - October 2019)
31. Improvement of Electric Voltage Quality using Electronic On-Load Tap-Changer of Distribution Transformers with Application on NDEDC (Mansoura University – Egypt - November 2019)
32. Real-time Power Management of Renewable Microgrid based on IEC 61850 Communication Protocol Using Adaptive Intelligent Petri Net (Curtin University – Australia – December 2019)
33. Optimum DG Allocation Considering Protection Coordination and Network Performance Evaluation (Cairo University – Egypt - January 2020).
34. Assessment of Power Systems Reliability for Nuclear Power Plants Safety (Al-Azhar University – January 2020)
35. Optimal Allocation of Renewable Energy Sources Connected to Electrical Power Systems (Aswan University – Egypt - February 2020)
36. Automatic Generation Control of Multi-Area Multi-Source Power System using Moth-Flame Optimization Algorithm (Veer Surendra Sai University of Technology - India – May 2020)
37. Analysis, Design of Electric Vehicle Powertrain and Control System (Sohag University – Egypt - June 2020)
38. Wide Area Situational Awareness Assessment using Phasor Measurement Units (Centurion University of Technology & Management: Odisha, India, June 2020)
39. Optimum Planning and Operation Assessment of a Microgrid (Minia University – Egypt - August 2020)
40. Advanced Control of the Egyptian Unified Electrical Grid with the Impact of the Nuclear Power Generation in Dabaa (Cairo University – Egypt - January 2021)
41. Deregulated LFC of Multi Area Power System with Renewable Energy using Recent Control Methods (Sohag University – Egypt – March 2021)
42. Protection of Multi-terminal High Voltage Direct Current Power Transmission Systems (Menoufia University – Egypt - May 2021)
43. Power Quality Improvement in the Distribution Network using Optimization of the Hybrid Distributed Generation System (Victoria University – Australia – May 2021.
44. Investigation of Electrical performance for Non-Ceramic Insulators using Optimization Techniques (Ain Shams University – Egypt - June 2021)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

45. Analysis of Photovoltaic Panels Performance and Power Output Forecasting based on Optimized Deep Learning Technique (University of Malaya – Malaysia – June 2021)
46. A Proposed Protection of Microgrids connected to Distribution Systems (Mansoura University – Egypt - July 2021)
47. Enhancing the Performance of Distance Protection During Power Swing (Cairo University – Egypt - July 2021)
48. Artificial Neural Networks for Agricultural Robots (Alexandria University – Egypt - November 2021)
49. Loss Allocation Techniques in Active Distribution Networks (IIIT Bhubaneswar, Bhubaneswar, India – January 2022)
50. Performance Enhancement of Grid- Connected PV Systems with FACTS using Artificial Intelligence Tools (Sohag University – Egypt - January 2022)
51. Machine Learning Based Analysis and Design of Pediatric Epileptic Seizure Detection Using Electroencephalogram Signals (KIIT Deemed to be University, Bhubaneswar, Odisha, India – February 2022)
52. Proposed Adaptive Distance Relaying Schemes for Interconnected Transmission Lines Compensated with Thyristor Controlled Series Capacitor (Cairo University – Egypt – March 2022)
53. Performance Enhancement and Control strategy of Hybrid Grid-Connected Photovoltaic-Wind Power Generation System (South Valley University – Egypt – March 2022)
54. Power Quality and Stability Analysis of Distribution System Integrated with Distributed Generators (Visvesvaraya Technological University, Belagavi – India – June 2022)
55. Multi-objective Optimal Performance of an Electric Distribution System Supported by WTGs and SMESs (Assuit University – Egypt – June 2022)
56. A Novel Design of Fourth-Order Harmonic Passive Filters for Electric Power Distribution Systems Operating under Non-Sinusoidal Conditions (Cairo University – Egypt – July 2022)
57. Evaluation Dielectric Strength of High Voltage Rubber Blends for Insulators (Al-Azhar University – Egypt – September 2022)
58. Improvement of Distribution Networks Performance Using Renewable Energy Sources Based Hybrid Optimization Techniques (Aswan University – Egypt – November 2022)
59. Restoration of Protective Devices Coordination in Distribution Networks under High Penetration of Inverter-based Distributed Generation Units (E-Just University – Egypt – December 2022)
60. Adaptive Controller based FACTS Devices to Enhance Power Quality of Distribution System (Visvesvaraya Technological University, Belagavi – India – December 2022)
61. Operation and Control of Distributed Energy Resources in Electrical Distribution System (Visvesvaraya Technological University, Belagavi – India – January 2023)
62. Optimal Planning and Operation of Wind and Solar Distributed Generations and Active Network Management Tools in Distribution Networks (Cairo University – Egypt - March 2023)
63. Nano and Micro Filler Effects on Rubber Blends as High Voltage Insulators (Ain Shams University – Egypt – May 2023)
64. Fault Diagnosis of Three Phase Induction Motor using Convolutional Neural Network (Alexandria University – Egypt – October 2023)
65. Innovative Approaches for Effective Harmonic Mitigation and Resonance Damping in Electric Power Systems: A Study of Novel Methods and Techniques (Cairo University – Egypt – November 2023)
66. Plug in Electric Vehicle Based Power Quality Improvement in Weak Grids (Mansoura University – Egypt – December 2023)

M. Sc.

1. Adaptive Control of Power System using FACTS Devices. (Cairo University – Egypt - April 2008)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

2. Impact of Distributed Generation Technology on Distribution Systems Reliability. (Ain Shams University – Egypt - May 2008)
3. Investigation, Estimation and Methods of Loss Reduction in Electrical Distribution Systems. (Ain Shams University – Egypt - October 2009)
4. Coordination of Overcurrent Voltage Controlled Protection using Particle Swarm Optimization Technique. (Arab Academy for Science & Technology - Egypt - March 2010)
5. Reliability Analysis of Different Configuration of Transmission Substation using Analytical Techniques. (Ain Shams University – Egypt - July 2010)
6. Distance Relaying under Arcing Fault Conditions. (Ain Shams University – Egypt - September 2010)
7. Prototype Model for Power Transformer Protection System. (Ain Shams University – Egypt - October 2010)
8. Switching Overvoltages Analysis in High Voltage Substations (Cairo University – Egypt - April 2012)
9. Generation Expansion Planning for the Egyptian Power System Considering the Role of the Nuclear Energy (Ain Shams University – Egypt - May 2012)
10. Power Transformer Protection Technique Based on Transient Components (Helwan University – Egypt - June 2012)
11. Thermal Protection for Successively Starting Three Phase Induction Motors using Particle Swarm Optimization Technique (Arab Academy for Science & Technology - Egypt - September 2012)
12. Optimal Planning of Electrical Distribution Networks Integrating DG using Mathematical Optimization Methods (Cairo University – Egypt - January 2013)
13. Over and Under Reach Correction of Distance Protection (Helwan University – Egypt - May 2013)
14. Optimal Transmission Lines Switching in Smart Grid Environment (Tanta University – Egypt - June 2013)
15. Application of Optimal Hybrid PMUs and Conventional Meters for Fault Location Observability in Transmission Networks (Alexandria University – Egypt - July 2013)
16. Voltage Stability in Electric Distribution Network with Rigorous Load Modeling. (Ain Shams University – Egypt - December 2013)
17. Maximum Power Point Tracking of PV System using Fuzzy Logic Controller (Arab Academy for Science & Technology - Egypt - December 2013)
18. Modeling of Solar Power Generators for Reliability Studies. (Ain Shams University – Egypt - January 2014)
19. Fault Location for Distribution Systems Containing Distributed Generators (Tanta University – Egypt - February 2014)
20. Enhancing Distance Relay Performance for Transmission Line Protection (Cairo University – Egypt - March 2014)
21. Digital Protection of Electrified Railways Network System. (Helwan University – Egypt - May 2014)
22. Adaptive Distance Protection for Power Networks with FACTS (Ain Shams University – Egypt - June 2014)
23. Demand Side Management Strategies in Deregulated Market (Ain Shams University – Egypt - June 2014)
24. Improving the Performance of Distribution Systems with the Aid of Intelligent Cooperative Agents (Ain Shams University – Egypt - June 2014)
25. Modeling and Operation of Smart Grid (Mansoura University – Egypt - July 2014)
26. Coupling Wind Farm with Nuclear Power Plant (Ain Shams University – Egypt - July 2014)
27. Investigation of Resonance and Ferro-resonance Overvoltages due to Cable Transformer Interaction (Menofia University – Egypt - August 2014)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

28. Function Based Optimized Protection Schemes for Distribution Substations (Ain Shams University – Egypt - November 2014)
29. Enhancement of Electric Distribution Networks Reliability (Ain Shams University – Egypt - December 2014)
30. Protection of AC Feeding System for Electrified Railways (Ain Shams University – Egypt - January 2015)
31. Implementation of an Economical Multifunctional Digital Relay for Three Phase Induction Motors (Cairo University – Egypt - March 2015)
32. Enhancing of Distribution System Performance using Distributed Generation (Cairo University – Egypt - April 2015)
33. Hybrid Classifier for PQ Disturbances using S-Transform and AI Techniques (Port Said University – Egypt - May 2015)
34. Analysis of Multifunction DSP-based Numerical Relay for Distribution Systems with Distributed Generators (Assuit University – Egypt - May 2015)
35. Proposed Digital Differential Protective Algorithm for Synchronous Generators using TACS Models of ATP Program (Cairo University – Egypt - June 2015)
36. Demand Side Management of Smart Grid (Arab Academy for Science & Technology - Egypt - June 2015)
37. Simulation of Renewable Energy System using MATLAB (Al-Azhar University – Egypt - June 2015)
38. Protection of Power Systems with Distributed Generation Considering Variation of Operating Condition (Mansoura University - Egypt - June 2015)
39. Fault Location Determination Technique Independent of Line Constants for Power Transmission Systems (Menofia University - Egypt - June 2015)
40. Analysis and Control of Overvoltages on Vacuum Circuit Breaker Switched Large Induction Motors using Wavelet Technique (Benha University - Egypt - July 2015)
41. Analytical Study for Determining the Harmonic Distortion Responsibility in Distribution Systems (Cairo University - Egypt - July 2015)
42. Energy Management and Operational Planning in Micrgrids (Ain Shams University - Egypt - August 2015)
43. Advanced Control of Modern Aircraft Electric Power Systems (Aswan University - Egypt - August 2015)
44. Islanding Detection & Operation in Smart Grid Systems (Ain Shams University - Egypt - September 2015)
45. Improvement Performance of Some Tapes Insulation in High Voltage Application (Aswan University - Egypt - November 2015)
46. Allocation and Sizing of Distribution Transformers and Feeders for Optimal Integrated Planning of MV/LV Distribution Networks using Biogeography Based Optimization Method (Cairo University - Egypt - December 2015)
47. Power Transformer Protection using Artificial Intelligence Methods for Pattern Recognition of 3D Images (Helwan University - Egypt - February 2016)
48. A Transient Protection Technique for Multi-Terminals HVDC Transmission Lines (Helwan University - Egypt - March 2016)
49. Analysis and Control of Integrated Distribution Networks based on Distributed Generation Systems (Ain Shams University - Egypt - April 2016).
50. New Approaches for Out-of-step Detection (Ain Shams University - Egypt - June 2016).
51. Impact of Including Distributed Generation Units on the Performance of Electrical Power Distribution Systems (Cairo University - Egypt - July 2016).
52. Control of Active and Reactive Power of a Three Phase Grid Connected PV Inverters (Ain Shams University - Egypt - September 2016).
53. Improvement of Power Quality using Multiple Types of FACTS Devices (Aswan University - Egypt - September 2016).

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

54. A Proposed Busbar Protection Scheme Immune to the Impact of Outflow Current during Internal Faults (Cairo University - Egypt - November 2016).
55. Microgrid Performance with Integrated Renewables Supported by Energy Storage Systems (Ain Shams University - Egypt - June 2017).
56. Optimal Sizing of Different Configurations of Renewable Distributed Generation Systems for a Green Building (Cairo University - Egypt - July 2017)
57. Capacitors Allocation to Optimally Improve the Electric Distribution System Performance with Distributed Energy Resources (Suez Canal University - Egypt - July 2017)
58. Use of Optimization Techniques to Enhance Power Systems Performance (Ain Shams University - Egypt - August 2017)
59. Modeling and Simulation of Photovoltaic System and Performance Evaluation of Maximum Power Point Tracking (Al-Azhar University - Egypt - September 2017)
60. Stability of Power System using Robust Control (Cairo University - Egypt - September 2017)
61. Transformer Fault Diagnosis Using Dissolved Gas Analysis Techniques Under Measurement Uncertainties (Arab Academy for Science & Technology - Egypt - October 2017)
62. Short circuit calculation for full converter based wind power plants (Cairo University - Egypt - November 2017)
63. Optimal Placement of Dispatchable and Non-dispatchable Distributed Generation of Different Technologies (Cairo University - Egypt - January 2018)
64. Multiple-Arm Passive Filters Design based on Different Reactive Power Division Approaches (Cairo University - Egypt - February 2018)
65. Implementation of Artificial Intelligent based Controller for Industrial Process (Al-Azhar University - Egypt - March 2018)
66. Impact of Defective DG on Distribution System Performance (Ain Shams University - Egypt - April 2018)
67. Enhancing the Performance of Renewable Energy Systems via Energy Storage Capabilities (Ain Shams University - Egypt - April 2018)
68. Effect of Shading on PV Cells Performance and Its Connection with Electrical Power Systems (Zagazig University - Egypt - May 2018)
69. Speed Control of Brushless DC Motor Based on Wavelet Neural Network (Wavenet) (Technical College, Middle Technical University - Iraq - June 2018)
70. Optimal Location and Sizing of FACTS Devices for Enhancing Power System Loadability and Voltage Stability (Cairo University – Egypt - June 2018)
71. Multi-Objective Optimization of Double-Tuned Filters in Distribution Power Systems using Non-Dominated Sorting Genetic Algorithm (Cairo University - Egypt - June 2018)
72. Power System Analysis: Stability and Control (Military Technical College - Egypt - July 2018)
73. On the Improvement of Perturb-and-Observe Based MPPT in PV Systems (Assuit University - Egypt - August 2018)
74. Stability and Control of an Inverted Pendulum Motion (Ain Shams University - Egypt - September 2018)
75. Enhancement of Renewable Energy Operation by Optimization Techniques (Ain Shams University - Egypt - November 2018)
76. A New Protection Technique for Transmission Lines Connected with Wind Farm (Helwan University - Egypt - December 2018)
77. Low Voltage Ride Through Capability Improvement of Grid Connected Photovoltaic Power Plants (Ain Shams University - Egypt - December 2018)
78. Fault Location of Simultaneous faults based on Travelling Waves Technique (Tanta University - Egypt - January 2019)
79. Investigation of Novel Directional Protection Techniques Based on Current Only Measurements (Ain Shams University - Egypt - March 2019)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

80. Improving the Performance of the Photovoltaic Energy Conversion System (Zagazig University - Egypt - May 2019)
81. A Proposed Economical Based Approach for Optimal Sizing and Placement of Distrusted Generation (Cairo University – Egypt - July 2019)
82. Satellite Electrical Power Supply System (Military Technical College – Egypt - October 2019)
83. Optimization of Speed Control of Permanent Magnet Synchronous Motor Using Particle Swarm Optimization and Cuttlefish Camouflaging Optimization (Alexandria University – Egypt - November 2019)
84. Dynamic Performance Improvement of Automatic Voltage Regulator System using Computational Evolutionary Algorithms (Ain Shams University - Egypt – February 2020)
85. Applying Multi-Objective Optimization for Enhancing Directional Overcurrent Relays Coordination (Cairo University – Egypt - May 2020)
86. Power Transformers Protection based on Artificial Intelligence (Helwan University – Egypt - July 2020)
87. Optimal Management of Distribution Networks regarding Reactive Power Generation (Ain Shams University – Egypt - August 2020)
88. Optimization of Renewable Energy Sources in Hybrid Energy Systems (Cairo University – Egypt - October 2020)
89. Performance Improvement of Permanent Magnet Synchronous Generator with Wind Energy Conversion System (Zagazig University – Egypt - October 2020)
90. The Voltage Quality Problems in the Egyptian Electric Power System (Al-Azhar University – Egypt - November 2020)
91. Performance Enhancement of Electrical Power System using FACTS Devices (Benha University – Egypt - December 2020)
92. Detection and Identification of Electric Power Quality Problems using Artificial Intelligence Technique (Suez Canal University – January 2021)
93. Development of Wide-Area Protection Scheme based on Power Measurements (Tanta University – Egypt – April 2021)
94. Frequency Stability Enhancement of Power System using Optimal Frequency Controllers (Ain Shams University – Egypt – July 2021)
95. Improvement of Double fed Induction Generator Voltage Stability Using FACTS Devices, and Determine the Learning Style for Matlab/Simulink to develop Motivation Students of Faculty of Industrial Education (Helwan University - Egypt – August 2021)
96. Optimal Design of Third-order Harmonic Passive Filters for Electric Power Distribution Systems Operating under Non-sinusoidal Conditions (Cairo University - Egypt – September 2021)
97. Reliability and Stability Improvement in Solar-Wind Hybrid power system with Battery Energy Storage Station (Al Azhar University - Egypt – October 2021)
98. Advanced Control of Hybrid Three-Phase Induction Water Pump Motor based on Solar-Hydrogen Energy (Suez Canal University - Egypt – December 2021)
99. Performance Enhancement of MV/LV Distribution Networks with Different Penetration of PV Sources (Menoufia University – Egypt – May 2022)
100. Performance Improvement of Stand-alone Photovoltaic Systems (Zagazig University – Egypt – June 2022)
101. Adaptive Solution for Out-of-Step Problem using Phasor Measurement Units (Helwan University – Egypt – July 2022)
102. Enhancing PV System Performance Using Optimization Techniques (Ain Shams University – Egypt – October 2022)
103. Investigating Low-Frequency Oscillations in Electrical Power Systems and Using Artificial Intelligence Techniques to Improve their Damping (Ain Shams University – Egypt – November 2022)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

104. Implementation of Advanced Optimization Techniques for Load Frequency Control (Aswan University – Egypt – November 2022)
105. Optimal Multi-Objective Smart Management Applications for Green Electric Vehicle Charging Systems (Cairo University – Egypt – January 2023)
106. Enhancing the Dynamic Performance of a Wind Driven Standalone Doubly Fed Induction Generator (DFIG) using Advanced Control Techniques (Minia University – Egypt – February 2023)
107. Economics and Reliability Analysis of Stand-Alone Electric Power Generation System from Renewable Sources (Fayoum University - Egypt – February 2023)
108. Multi-Objective Optimization for Harmonic-Constrained Hosting Capacity Maximization and Active Power Loss Minimization in Distorted Distribution Systems (Cairo University – Egypt – March 2023)
109. Enhancement of Directional Protection with Adaptive Coordination Schemes (Ain Shams University – Egypt – April 2023)
110. Performance Enhancement of Electrical Power System in the Presence of Charging Stations in Hybrid Electric Vehicles (Benha University – Egypt – April 2023)
111. Impact of Irrigation Load and Integration with PV Electricity Generation on Optimal Operation of Karot Distribution Line (Assuit University – Egypt – May 2023)
112. An Integrated Faults Identification for Power Transformers and Hybrid AC/DC System (Menoufia University – Egypt – June 2023)
113. Virtual Inertia Control of an Islanded Microgrid Considering High Penetration of Renewable Energy Sources (Ain Shams University – Egypt – July 2023)
114. Optimized Strategy to Enhance the DC-Microgrid Performance (Ain Shams University – Egypt – July 2023)
115. Developing a Collector System Aggregation Technique of a Large Scale Grid-Connected Wind Farm for Power System Studies (Cairo University – Egypt – July 2023)
116. Reactive Power Compensation using STATCOM in a PV Grid Connected System with a Modified MPPT Method (Cairo University – Egypt – August 2023)
117. Protection Coordination in Distribution Networks Incorporating Photovoltaic Systems (Tanta University – Egypt – October 2023)
118. An Intelligent Protection Scheme for Islanded Low-Voltage DC Microgrid (Helwan University – Egypt – November 2023)
119. Optimal Reactive Power Dispatch Considering Uncertainties of Renewable Energy Resources and Load Demand (Aswan University – Egypt – December 2023)
120. Design and Analysis of an off-Grid Hybrid Renewable Station for highway Emergency Hospital (Suez Canal University – Egypt – December 2023)

*** Supervision of High Diploma Projects in the Following Subjects:**

- Short Circuit Calculations using Digital Computers.
- Power System Grounding.
- Applications of Fuzzy Logic in Power Systems.
- Coordination of Protective Devices in Distribution Systems.
- Performance of Protective Relays in HV Substations.

*** Supervision of B.Sc. Projects in Electric Power Engineering in the Following Topics:**

- Design of Interior Electric Wiring for Residential, Commercial and Educational Buildings.
- Design of Secondary and Primary Distribution Systems.
- Planning of an Urban Area.
- Protection Coordination in Electric Power Systems.
- Implementation and Coordination of Digital Protective Relays.
- Microprocessor-Based Power System Protection & Simulation.
- Applications of Artificial Neural Networks and Wavelets in Power System Protection.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- Design of Protective Grounding Systems for Different Types of Electrical Systems.

Training and Continuous Education Activities

1- Giving Lectures in Different Electric Power Engineering Subjects (as a Part of the Continuous Education Activities of the Faculty of Engineering, Ain Shams University).

2- Preparing Lecture Notes and Teaching the Following Training and Continuous Education Courses to Electrical Engineers and Technicians in Egypt and Gulf area:

- “Fault Analysis” - African engineers
- “Relay Coordination and Setting” - African engineers
 - South Cairo Electricity Distribution Company - Egypt – December 16, 2019.
- “Scientific Publishing”
 - Future University in Egypt, April 22, 2019.
- “Energy Utilities Preparation for the Renewable Energy Resources Integration”
 - 6th October University, Egypt – April 6, 2019.
- “Distribution Energy Resources (DER) Technologies, Reconfiguration, and Integration with the Grid” - African engineers
- “Integration of Distributed Generation and Energy Storage with the Grid” - African engineers
 - South Cairo Electricity Distribution Company - Egypt – February 14, 2017.
- “Emergency Power Supplies, Electrical Distribution System Design, Installation and Commissioning”
 - Jeddah – Saudi Arabia – October 8-12, 2011.
- “Electric Safety” – Iraqi engineers
 - South Cairo Electricity Distribution Company - Egypt – December 12, 2010.
- “Instrument Transformers and Their Applications in Protective Relaying Systems” – African engineers
 - South Cairo Electricity Distribution Company - Egypt – January 20 - 21, 2010.
 - South Cairo Electricity Distribution Company - Egypt – February 23 - 24, 2010.
- “Advanced Protective Relays for Electrical Power System”
 - Jeddah – Saudi Arabia – January 9 - 13, 2010.
- “Power Quality: Problems and Solutions”
 - Jeddah – Saudi Arabia – June 23, 2009.
- “Power System Quality, Monitoring and Harmonics”
 - Jeddah – Saudi Arabia – June 6 - 10, 2009.
 - Medina – Saudi Arabia – December 12 - 16, 2009.
- “Power System Reliability”
 - Jeddah – Saudi Arabia – May 2 - 6, 2009.
- “Power System Protection – Theory & Applications”
 - Muscat – Oman – April 18 - 22, 2009.
- “Substation Protection and Troubleshooting”
 - Medina – Saudi Arabia – December 27 - 31, 2008.
- “Lightning and Surge Arresters”
 - South Cairo Electricity Distribution Company - Egypt – November 20, 2008 & January 5, 2009.
- “Voltage Stability in Electrical Power Systems – Problems and Solutions”
 - Jeddah – Saudi Arabia – November 15 - 19, 2008.
- “Power Systems Protection – General Concepts”
 - South Cairo Electricity Distribution Company - Egypt – November 4 - 6, 2008.
 - South Cairo Electricity Distribution Company - Egypt – December 29 – 30, 2010.
- “Power System Stability”
 - Egyptian Electricity Association - Cairo - Egypt – October 2008.
- “Protective Relaying & Equipment Protection”

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- Jeddah – Saudi Arabia – May 24 - 28, 2008.
- Jeddah – Saudi Arabia – June 20 - 24, 2009.
- “Protection of Power Systems with Practical Case Study”
 - Abha – Saudi Arabia - April 12 - 16, 2008.
- “Electrical Power Systems Transients Investigation”
 - Riyadh – Saudi Arabia - March 29 – April 2, 2008.
- “Electrical Distribution Systems Protection”
 - Cairo – Egypt - February 17 – 21, 2008 & April 19 – 23, 2008.
- “Harmonics in Power Systems: Causes, Effects and Methods of elimination”
 - Kuala Lumpur – Malaysia – October 28 - November 1, 2007.
- “Mechanical Applications in Overhead Transmission Lines”
 - Dammam – Saudi Arabia – July 15 – 19, 2007.
- “Electrical Safety and Precautions”
 - Dubai – UAE - June 12 – 16, 2005.
- “Power System Protection and Relaying”
 - Riyadh – ABB in Saudi Arabia, June 5 – 16, 2004.
 - Riyadh – Saudi Arabia, September 20 – 24 & September 27 - October 1, 2003.
 - Riyadh – Saudi Arabia, June 12 – 16, 2003.
- “Electrical Load Forecasting”
 - Delta Electricity Distribution Company – Egypt – April 2003.
- “Electrical Switchgear: Applications and Principle of Operation”
 - Enppi Petroleum Company – Cairo – Egypt - March 2002.
- “Application of Artificial Intelligence in Power Systems”
 - IEEE Committee in Egypt - Cairo– December 2001.
- “Illumination and Design of Interior Electric Wiring for Residential, Commercial and Educational Buildings”
- “Design of Secondary and Primary Distribution Systems”
 - Educational Buildings Association – Cairo – Egypt - November 2000.
- “Load Flow and Short Circuit Calculations Using Digital Computers”
- “Disturbances in Power Systems”
 - Egyptian Electricity Association – Cairo - October 1999.
- “Electrical Measuring Instruments”
 - Continuous Education Center, Ain Shams University – Cairo - May 1998.

Attending Training Courses

- Modern Trends in Teaching (Egypt – June 2005).
- Time and Stress Management (Egypt – July 2005).
- Teaching Evaluation Methods (Egypt – January 2006).
- Economic and Marketing Aspects for Scientific Researches (Egypt – October 2006).
- Using Technology in Teaching (Egypt – January 2007).
- Qualifications of Head Department. (Egypt – April 2016).

Other Academic Activities:

- Chair of IEEE Education Society Chapter in Egypt (Since March 2014 - Present).
- Editor-in-Chief Future Engineering Journal.
- Editor of Electric Power Components and Systems Journal (Since April 2013 - Present).
- Senior Editor of Ain Shams Engineering Journal (ASEJ) 2010-2017.
- Associate Editor of International Journal of Electrical Engineering Education (IJEEE).
- Member of the Advisory Board of Renewable Energy and Sustainable Development Journal.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- Guest Editor, Special Issue on New Optimization Techniques for Electrical Power Systems Problems, Journal of Electrical and Computer Engineering.
- Guest Editor, Special Issue on Intelligent Control in Electric Power Systems, Journal of Bioinformatics and Intelligent Control.
- Guest Editor, Special Issue on Optimal Power Flow: Optimization and Control of Electric Power Systems, Energies
https://www.mdpi.com/journal/energies/special_issues/optimal_power_flow_optimization_control_electric_power_systems
- Guest Editor, Special Issue on Sustainable Microgrid Systems: Technologies, Applications and Trends, Processes
https://www.mdpi.com/journal/processes/special_issues/8PZ68DE78F
- Guest Editor, Special Issue on Applications of Neural Network Modeling in Distribution Networks, Applied Sciences
https://www.mdpi.com/journal/applsci/special_issues/GRE66V29J3
- Guest Editor, Special Issue on Advanced Protection for the Smart Grid, Frontiers in Energy Research Journal
<https://www.frontiersin.org/research-topics/46240/advanced-protection-for-the-smart-grid>
- Guest Editor, Special Issue on Local and Distribution Electricity Markets for Sustainable Energy Management, IET Generation, Transmission & Distribution
<https://ietresearch.onlinelibrary.wiley.com/hub/journal/17518695/homepage/call-for-papers/si-2023-000305>
- Guest Editor, Special Issue on RFID and 5G Synergies for Future Applications, International Journal of High Speed Electronics and Systems
- Guest Editor, Special Issue on New Models, Methods, and Critical Technologies for Hybrid Renewable Energy Systems, Computers and Electrical Engineering
 - Guest Editor, Special Issue on Innovative Approaches to Radiative Heat Storage and Electric Vehicle Transit: best Practices and Empirical Findings
<https://www.springer.com/journal/202/updates/25606400>
- Member of the Editorial Board of the following journals:
 - International Journal of Power System Optimization (IJPSO).
 - International Journal of Engineering, Science and Technology (IJEST).
 - International Journal of Electrical and Power Engineering (IJEPE).
 - International Journal of Innovations in Electrical Power Systems (IJIEPS).
 - International Journal of Electrical Energy Systems (IJEES).
 - The Online Journal on Electronics and Electrical Engineering (OJEEE).
 - The International Journal on Power Engineering and Energy (IJPEE).
 - International Journal of Power and Energy Conversion (IJPEC).
 - Journal of Energy and Power Engineering (JEPE).
 - International Journal of Intelligent Systems and Applications (IJISA).
 - International Journal of Engineering, Science and Applied Research (ETASR).
 - International Journal of Electrical and Electronic Engineering (IJEEE).
 - Journal of Advanced Science and Engineering Research (JASER).
 - International Journal of Intelligent Systems and Applications in Engineering (IJISAE).
 - International Journal of Advances in Power Systems (IJAPS).
 - Emerging Trends in Electrical, Electronics & Instrumentation Engineering: An international Journal (EEIEJ).
 - International Journal of Engineering Research in Electrical & Electronic Engineering (IJEREEE)
 - International Journal of Computational Science, Information Technology and Control Engineering (IJCSITCE)
 - Renewable and Sustainable Energy: An International Journal (RSEJ)
 - i-manager's Journal on Circuits and Systems

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- i-manager's Journal on Instrumentation and Control Engineering
- Reviewer of technical papers in the following journals:
 - ❖ IEEE Transactions on Power Systems
 - ❖ IEEE Transactions on Power Delivery
 - ❖ IEEE Transactions on Neural Networks
 - ❖ IEEE Transactions on Smart Grid
 - ❖ IET - Generation, Transmission and Distribution
 - ❖ IET – Renewable Energy Generation
 - ❖ Electric Power Systems Research (EPSR)
 - ❖ International Journal of Electrical Power and Energy Systems (IJEPES)
 - ❖ International Journal of Emerging Electric Power Systems (IJEEPS)
 - ❖ European Transactions on Electrical Power (ETEP)
 - ❖ International Transactions on Electrical Energy Systems
 - ❖ Applied Soft Computing
 - ❖ International Journal of Engineering Intelligent Systems (IJEIS)
 - ❖ Journal of Electrical Systems (JES)
 - ❖ World Journal of Modeling and Simulation (WJMS)
 - ❖ WSEAS Transactions on Power Systems
 - ❖ Electrical and Electronic Engineering Journal
 - ❖ Journal of the International Measurement Confederation
 - ❖ Journal of Biotechnology and Pharmaceutical Research
 - ❖ Scientific Research and Essays (SRE)
 - ❖ Indian Journal of Engineering & Materials Sciences (IJEMS)
 - ❖ International Journal of Bio-Inspired Computation (IJBIC).
 - ❖ Electrical and Electronic Engineering (SAP)
 - ❖ Journal of Renewable and Sustainable Energy (JRSE)
 - ❖ Scientia Iranica
 - ❖ Indian Journal of Science and Technology
 - ❖ Transactions on Systems, Signals & Devices
- Reviewer of Proposals of Scientific Projects:
 - ❖ Science and Technology Development Fund (STDF), Egypt
 - ❖ Qatar National Research Fund, Qatar
 - ❖ Engineering and Applied Science Research Center, Majmaa University, KSA
- Co-chair of the Egyptian Universities Promotion Committee – Committee 118 (September 2022 – September 2025).
- Co-chair of the Egyptian Universities Promotion Committee – Committee 118 (September 2019 – September 2022).
- Co-chair of the Egyptian Universities Promotion Committee – Committee 54 (March 2013 - May 2015).
- Member of the reviewers of the Egyptian Universities Promotion Committees (2008-present).
- Member of Steering Committee of Middle East Power Systems Conference (MEPCON).
- Chairman of sessions and reviewer of many international and local conferences.
- Chair of Egyptian Sub-Committee of the International Electrotechnical Commission: IEC-No. 44 (Safety of Machinery – Electrotechnical Aspects), IEC-No. 114 (Marine Energy – Wave, Tidal and Other Water Current Converters), IEC-No. 96 (Transformers, Reactors, Power Supply Units and Combinations Thereof), IEC-No. 115 (High Voltage Direct Current (HVDC) Transmission for DC Voltages above 100 kV)
- Member of the Egyptian Sub-Committees of the International Electrotechnical Commission: IEC-No. 27 (Industrial Electroheating and Electromagnetic Processing), IEC-No. 73 (Short Circuit Currents), IEC-No. 65 (Industrial-Process Measurement and Control Automation)
- Member of the Egyptian CIGRE` Sub-Committee D1: Materials and Emerging Technologies.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- Member of the Egyptian CIRED 6th Technical Session: Customers, Regulation, DSO Business & Risk Management.
- Senior Member in IEEE.
- Member in IET (formerly IEE).
- Member in Elsevier Science Topics.
- Member of the Renewable Energy latest news (Elsevier).
- Member in Egyptian Engineering Syndicate and Egyptian Engineers Committee.
- Member of the Post-Graduate Studies Committee in Faculty of Engineering, Ain Shams University since October 2007.
- Member of examiners committee of more than 116 M. Sc. and 65 Ph. D. theses.
- Coordinator of scientific seminars in Electric Power and Machines Department, Faculty of Engineering, Ain Shams University.
- Sharing of the renewal of laboratories of the Electrical Power and Machines Department in Faculty of Engineering, Ain Shams University and Industrial Education College in Cairo and the Construction of several laboratory experiments for under graduate and post graduate labs.
- Writing several lecture note text books for under graduate students.
- Participating in the university-level Quality Assurance and Accreditation Program (QAAP). [Electrical power program: course specifications, reports, and workshops]
- Participating in construction and upgrading the Curriculum Plan for under-graduate Program 2008-2013 for the Faculty of Engineering, Ain Shams University.
- Participating in the university-level Continuous Improvement and Qualifying Accreditation Program (CI QAP) project.
- Participating in the activities of local and international conferences (Presenter, International Program Committee Member, Session Chairman, Program Chair)

Consultation and Technical Field Experience

From **March 1997 - November 1997**: worked as a consultant engineer for Misr Engineering Office (μ), Cairo, Egypt.

From **January 1997 – November 1999**: worked as a designer and consultant engineer for G.S. Electrical Contracting & Suppliers, Cairo, Egypt.

From **March 1999 – present**: worked as a consultant engineer with the Electrical Power Engineering Consultation Unit, Engineering Consultancy Center, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

From **January 2006 – January 2007** : worked as a head of consultant engineers of the electrical group in the General Directorate for Projects & Maintenance, King Saud University, Riyadh, Kingdom of Saudi Arabia.

- Evaluating technical offers for Gabel El Zayt 220/22 kV GIS Substation for Wind Farm in Egypt. (January – October 2011)
- Designing and Supervising the Construction of the Electrical Systems (Illumination, Electric Power Distribution Systems, Telephone Systems, Fire Alarm Systems, Closed-Circuit TV systems, and/or Sound Systems) for the following Projects:
 - Extensions of Buildings of Faculty of Medicine, Ain Shams University, Abbassia, Cairo, Egypt. (2014 – 2015)
 - Third Stage of Extension of Emergency Building of King Kkalid University Hospital, King Saud University, Riyadh, KSA. (2006 – 2007)
 - Extensions of Buildings of Faculty of Engineering, Ain Shams University, Abbassia, Cairo, Egypt. (1999 – 2000)
 - State Security Headquarters in the 6th of October City, Egypt. (2002)
 - Zizinia Housing Complex, Al-Tagammo Al-Khames, New Cairo Satellite, Cairo, Egypt. (2003)
 - National Association of Social Insurance in Egypt. (2004)

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

- Renewal and Designing of Primary and Secondary Electric Power Distribution Systems and /or Telephone Networks for:
 - Faculty of Commerce, Ain-Shams University, Abbassia, Cairo. (1999 – 2000)
 - Faculty of Medicine, Ain-Shams University, Abbassia, Egypt. (1999 -2000)
 - Faculty of Nurture, Ain-Shams University, Heliopolis, Egypt. (2000 – 2001)
- Redesign, testing and commisioning of Power Factor Correction Board for:
 - Central Association for Organization & Management Building, Nasr City, Cairo. (2004)
- Supervising the Construction of the Electrical Systems for the following Projects:
 - Faculty of Architecure and Planning, King Saud University, Riyadh, KSA. (2006)
 - Faculty of Applied & Medical Science, King Saud University, Riyadh, KSA. (2006)
 - Faculty of Computer Science, King Saud University, Riyadh, KSA. (2006)
 - High Constitution Court Building, Maadi, Cairo. (1998)
 - Neama Gulf Village -Sharm El-Sheikh. (1999)
 - Al-Nouran Building – Heliopolis. (1998)
 - Large cermony hall for workers association, Cairo. (1997)
 - Metal industrial center, Demiat. (1998)
 - Islamic Library, Nasr City, Cairo. (1998)
 - Forosia Village, Hurghada. (1997)
 - Artoc group, Cairo. (1997)
 - Gupco petroleum workers housing towers, Maadi, Cairo. (1997)
 - Commercial International Bank (CIB), Abbas El-Akkad, Nasr City, Cairo. (1997)
 - Royal Hills Village – 6th of October city. (1997)
 - Mrs. Penneti villa - 6th of October city. (1997)
 - Hilton Nabk - Sharm El-Sheikh. (1996)
 - Mermaid Beach Resort – Hurghada. (1996)
 - Misr Bank – Sadat City. (1996)
 - Al-Boustan residential and administration building, Cairo. (1996)
 - Roxi Garage, Cairo. (1996)
 - Belkas Public Hospital, Mansoura. (1996)
 - Egyptian Saudian Financial Bank – Mirghani, Heliopolis, Cairo. (1996)
 - Gulf Clothing Company Factory – New Cairo City. (1996)
 - Pastry Factory - 6th of October city. (1996)

Awards

- Egyptian Government Undergraduate Scholarship, October 1980 – June 1985.
- 1985 Distinction Award from Faculty of Engineering, Ain Shams University.
- University of Ain-Shams Graduate Scholarship, 1986 – 1990.
- 1994 - 1996 Channel Grant in Brunel University, England from the Egyptian Government.
- Winner of Ain Shams University Prize for Distinct Researches in 2002.
- Prize of Ain Shams University for international publishing in 2010, 2011, 2012, 2013, 2014 and 2015, 2017, 2018, 2020.
- Acknowledgement letter for the top ten cited papers in Electric Power Components and Systems Journal for the 2008-2010 time period.
- Prize of best researcher in Electrical Power and Machines Department, Faculty of Engineering, Ain Shams University for the period 2009-2012.
- Listed in Who's Who in the World® 2016 (33rd Edition).
- Best Paper Award in 19th International Conference on Lightning Protection (ICLP), Paris, 2017.
- Prize of best researcher in Future University in Egypt, 2019.
- Best Paper Award in 11th International Renewable Energy Congress (IREC), Tunisia, 2020.
- Recognized among the top 2% Scientists Worldwide according to Stanford University Study, 2020.
- Recognized among the top 2% Scientists Worldwide according to Stanford University Study, 2021.
- Recognized among the top 2% Scientists Worldwide according to Stanford University Study, 2022.
- Winner of Ain Shams University Appreciation Award in Advanced Technological Engineering Sciences in 2022.

RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

List of Journal Papers

- [1] Iraj Faraji Davoudkhani, Mahmoud Rerza Shakarami, **A. Y. Abdelaziz**, Adel El-Shahat, ‘Robust Design and Best Control Channel Selection of FACTS-based WADC for Improving Power System Stability using Grey Wolf Optimizer’, Accepted in Energy Reports.
- [2] Abdelfattah A. Eladl, Mohammed A. Saeed, Bishoy E. Sedhom, **A. Y. Abdelaziz**, Vladimír Bureš, ‘LoRaWAN-based IoT Protocol for Three Levels Central Protection Scheme in MT-HVDC Networks with ANFIS Restoration Algorithm’, Accepted in Energy Reports.
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RESUME of Prof. Dr. ALMOATAZ YOUSSEF ABDELAZIZ

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