



Gamal El-Din El-Saeed Mohamed Aly

Prof.

EDUCATION

- **Ph.D.**, In philosophy in Engineering, Electric Power Systems, 1988, Energy Institution, Russia
- **M.Sc.**, Master of science in Engineering, in Electric Power Systems, 1983, Department of Electrical Engineering, Faculty of Engineering, Menoufya University, Egypt
- **B.Sc.**, Science in Electric Power Systems, 1979, Department of Electrical Engineering, Faculty of Engineering, Menoufya University, Egypt (excellent with honor degree).

ACADEMIC EXPERIENCE (FULL-TIME)

- **Professor** at Electric Power Systems, Department of Electrical Power and Machines Engineering, Faculty of Engineering, Tanta University, Egypt, 28/12/1999.
- **Associate Professor** at Electric Power Systems, Department of Electrical Power and Machines Engineering, Faculty of Engineering, Tanta University, Egypt, 01/10/1998.
- **Associate Professor** at Department of Electrical Power and Machines Engineering, Faculty of Engineering, Menoufya University, Egypt, 29/06/1994.
- **Assistant Professor** at Department of Electrical Power and Machines Engineering, Faculty of Engineering, Menoufya University, Egypt, 26/03/1989.
- **Assistant lecturer** at Department of Electrical Power and Machines Engineering, Faculty of Engineering, Menoufya University, Egypt, 15/12/1983.
- **Instructor** at Department of Electrical Power and Machines Engineering, Faculty of Engineering, Menoufya University, Egypt, 15/10/1979.

NON-ACADEMIC EXPERIENCE (FULL TIME)

PROFESSIONAL REGISTRATIONS/CERTIFICATIONS

- **Certificate of the training** of trainers (ToT) course, which was held at Tanta University in the period from 18-20 December 2005.

ADMISTRATIVE POSITIONS

- **Chairman** of the Department of Machinery and Electrical Power Engineering, Faculty of Engineering, Tanta University, from 11/01/2000 to 15/12/2002.
- **Chairman** of the Water Engineering Department, Faculty of Engineering, Tanta University, from 03/09/2005 to 12/13/2003.
- **Vice Dean** of the Faculty of Engineering for Graduate Studies and Research - Tanta University from 01/08/2006 to 16/12/2006.
- **Acting Dean** of the Faculty of Engineering, Tanta University, from 01/08/2006 to 16/12/2006
- **Dean** of the Nile Higher Institute for Commercial Sciences and Computer Technology in Mansoura from 01/12/2007 to 31/07/2015.
- **Dean** of the Nile Higher Institute for Engineering and Technology in Mansoura, from 01/08/2015 to 31/07/2017.
- **Professor**, Department of Instrumentation and Electrical Power Engineering, Faculty of Engineering, Tanta University, from 01/08/2017 to date.



PROFESSIONAL ORGANIZATIONS AND MEMBERSHIPS

- Member of the Higher Committee for Quality Assurance and Accreditation Project, Faculty of Engineering, Tanta University
- Member of the Board of Directors for the evaluation of the quality assurance and accreditation project, Faculty of Engineering, Tanta University
- Trainer in the project to develop the capabilities of faculty members at the universities of Tanta, Banha and Kafr El-Sheikh since 2005.
- Preparing the internal regulations of the college for the college postgraduate studies, with the credit hour system, which was approved by the Tanta University Council on 06/27/2006.
- Member of the Supreme Committee for the project to develop the list of postgraduate studies with the credit hour system and the establishment of modern diplomas.

HONORS AND AWARDS

None.

SERVICE ACTIVITIES (INTERNAL AND EXTERNAL)

- Participation in the establishment of electrical power engineering laboratories at the Faculty of Engineering, Tanta University and Kafr El-Sheikh.
- Participating in supervising the establishment of several university facilities, such as supervising the construction of University Hospital, the Faculty of Specific Education building, the Faculty of Agriculture building at Tanta University, and the Scientific Research Academy building in the center of the Delta.

SUPERVISION SUPERVISED MASTER'S AND PHD THEISES

- Supervising **23 master's theses** that have been completed and discussed, and the degree has been awarded, in addition to **3 master's theses** that are still under supervision.
- Supervision of **9 doctoral dissertations** that have been completed, discussed, and awarded degrees.
- Discussion of **38 master's thesis** and **15 doctoral thesis**.

PUBLICATION LIST

1. O.H.Abdalla, S.A.Hassan and G.E.M.Aly, "Effect of System Parameters on The Dynamic Stability of a Wind Turbine Generating System", The Ninth Annual O.R.Converence Special Issue ,Vol. 9,No. 1,Feb. 1983.
2. O.H.Abdalla, S.A.Hassan and G.E.M.Aly,"Small Disturbance Stability of Wind Turbine Generating Unite", 19th UPEC, 1984, Aberdeen, U.K.
3. O.H.Abdalla, S.A.Hassan and G.E.M.Aly,"Blade Pitch Conotrol of Wind-Turbine Generator System", First ASAT conference, Cairo, Egypt ,16, May, 1985 , Vol . III, pp., 1985.
4. G.E.M.Aly , A.A.El-Zeftawy and E.S.Abdin , " Comparative Study of Different Wind Energy System in Egypt ", The Second Cairo International Symposium on Renewable Energy Sources , Cairo , Egypt , 1-4 Oct., 1990 , Vol. 2 , pp. 509 - 516 , 1990.



5. G.E.M.Aly, " An Algorithm for Algebraic Analysis of Wind Speed Variations", Al - Azhar Engineering Second International Conference , AEC'91 , Dec. 21 – 24 , 1991 , Vol. VII , pp. 480 -486 ,1991.
6. G.E.M.Aly, " Dynamic Stability Analysis of a Wind Driven Permanent Magnet Synchronous Generator", International Conference on Applications of Solar & Renewable Energy , April 19 -22 , 1992 ,Cairo , Egypt , No. 56 , pp. 623 - 631 , 1992.
7. G.E.M.Aly, " Modelling and Analysis of a Wind Turbine Driven Induction Generator ", 1992 , International Renewable Energy Conference , June 22 - 26, 1992 , Amman , Jordan ,Vol. II , pp.575 - 582, 1992.
8. G.E.M.Aly and A.A.Mohamed , " Dynamic Stability of Wind Energy Conversion System ", Al - Azhar Engineering Third International Conference , AEC'93 , Dec. 19 – 21 , 1993 , Vol. 5 , pp. 320 -328 ,1993.
9. G.E.M.Aly and A.A.El-Zeftawy, "Sensitivity Analysis of Wind Energy Conversion System Economy", Engineering Research Bulletin , Faculty of Engineering , &Technology, Menoufiya University, Vol. 16, Part 2, pp. 141-155 , 1993.
10. G.E.M.Aly and A.A.El-Zeftawy, "Correlation Between Renewable Energy Source's Energy Output and Load", Proceeding of Cairo Fifth International Conference on Energy & Environment ,Cairo, Egypt, June 6, 1996, Vol. I, pp. 513-521,1996.
11. G.E.M.Aly , A.A.El-Zeftawy, A.A.El-Hefnawy and S.A.Eraky, " Construction and Technical Performance of Residential Photovoltaic Power System", Engineering Research Bulletin , Faculty of Engineering , Menoufiya University, Vol. 20, No. 3, pp. 57-70, Sept.- Oct., 1997.
12. G.E.M.Aly, A.A.El-Zeftawy, A.A.El-Hefnawy and S.A.Eraky, "Technical Assessment of Electric Utility-Interactive Residential Photovoltaic Power Systems", Electric Power System Research 51 (1999) pp. 175-185, Received 30 June 1998 , Accepted 27 October 1998.
13. G.E.M.Aly , A.A.El-Zeftawy, A.A.El-Hefnawy and S.A.Eraky, "Reactive Power Control on Residential Utility-Interactive PV Power Systems", Electric Power System Research 51 (1999) pp. 187 - 199, Received 30 June 1998 , Accepted 27 October 1998.
14. G.E.M.Aly and A.A.El-Zeftawy, " Hybrid of Solar Photovoltaic and Wind Energy to Supply an Isolated Load", Engineering Research Bulletin ,Faculty of Engineering , Minufiya University, Vol. 22, No. 1, pp. 79-92, January , 1999.
15. G.E.M.Aly, " Effect of The Load on Photovoltaic Power System Economy ", Engineering Research Bulletin , Faculty of Engineering , Minufiya University, Vol. 22, No. 2, pp. 65-78, July, 1999.
16. G.E.M.Aly, " Batttries Charging Using DC Generator Driven by a Vertical Axis Wind Turbine", Engineering Research Bulletin , Faculty of Engineering , Minufiya University, Vol. 22, No. 2, pp. 207-218, July, 1999.
17. El-Zeftawy A.A., El-Hefnawy A.A., Aly G.E.M. and Eraky S.A., "Technica Assessment of Operating Stand-Alone Residential Photovoltaic Power System in Egypt", Proceeding of The Sixth Arab International Solar Energy Conference AISEC-6, Muscat Sultanate of Oman, March 29-April 1st 1998, Paper No. AST/81, 1998.
18. G.E.M.Aly , A.A.El-Zeftawy, A.A.El-Hefnawy and S.A.Eraky, " Solar Radiation Analysis and Modelling ", Proceeding of Cairo Seventh International Conference on Energy & Environment ,Cairo, Egypt, March 11-13 , 2000, Vol. II, pp. 253-266 ,2000.
19. G.E.M.Aly , A.A.El-Zeftawy, A.A.El-Hefnawy and S.A.Eraky, "Economical Assessment of Operating Photovoltaic Power System for Residential Applications", Proceeding of Seventh International Meddle East Power Systems Conference,MEPCON'2000 Ain Shams University , Cairo, Egypt, March 28 - 30 , 2000, Volume II , pp.759-763 , 2000.
20. Aly, G.E.M. , El-Gharbawy ,A.E. and El-Zeftawy, A.A. , "Wind Energy Evaluation and Operation Wind Generators in Egypt ", Proceeding of the Syrian Engineering Society



- Symposium on Energy Sources and Continuous Development in Arab Countries ,Damascus, Syria , October 28-30, 2000 .
21. A.A. El – Hariri ,M. A. Hassanin and G.E.M.Aly , “ A Literature Survey on Resistance Calculation of Grounding System”, Proceeding of Eighth International Middle – East Power Systems Conference , MEPCON'2001 University of Helwan , Cairo, Egypt , December 29 – 31 , 2001, Volume I , pp. 401 –408 ,2001.
 22. A.I.Taalab,H.A.Darwish,M.A.Elkhazendar, G.E.M.Aly and M.A.Alam, “Comparative Study of Fault Location Methods for Radial Distribution Systems ”, Proceeding of Eighth International Middle – East Power Systems Conference,MEPCON'2001 , University of Helwan , Cairo, Egypt ,December 29 - 31 , 2001, Volume II , pp. 801 –807 ,2001.
 23. G.E.M.Aly ,A.E.El-Gharbawy and A.A.El-Zeftawy, “Optimizing The Operation of Wind Generators at The Installation Site ”, Proceeding of Eighth International Middle – East Power Systems Conference, MEPCON'2001 , University of Helwan , Cairo, Egypt , December 29 - 31 , 2001, Volume II , pp. 951 –955 ,2001.
 24. G.E.M.Aly , H. El-Desouki and Amany El-Zonkoly , “ Optimal Reactive Power Planning Using Genetic Algorithm ”, Engineering Research Journal , Faculty of Engineering ,Minufiya University, Vol. 25, No. 2, pp. 31-42, April , 2002.
 25. G.E.M.Aly , H. El-Desouki and Amany El-Zonkoly , “ VAR Planning or Voltage Stability Improvement Using Genetic Algorithm ”, Engineering Research Journal , Faculty of Engineering ,Minufiya University,Vol. 25, No. 3, pp. 189 -199, July , 2002.
 26. G.E.M.Aly ,S.A.Eraki ,A.A.El-Zeftawy and A.M.Aboel-Azem ,“Alternative Design Methods of Photovoltaic Power System and Evaluation of Solar Radiation in Egypt ”, Proceeding of Cairo Eighth International Conference on Energy & Environment ,Cairo, Egypt, January 4-7 , 2003, Session 5B, pp. 1-12 ,2003.
 27. G.E.M.Aly , H. El-Desouki and Amany El-Zonkoly , “Reactive Power Planning in Distribution System Using Genetic Algorithm ”, Mansoura Engineering Journal , (MEJ) , Faculty of Engineering , Mansoura University,Vol. 28, No. 1, pp. E 11-E 19 , March 2003
 28. H. El-Desouki , Amany El-Zonkoly. and G.E.M.Aly , “ Optimal Active and Reactive Power Dispatch and Excitation System Controller Design Using Genetic Algorithm ”, The Seventh International Conference On Intelligent Engineering Systems, INES 2003 Proceedings ,Assiut – Luxor , pp. 288 –292 ,Egypt March 4-6 , 2003.
 29. G.E.M.Aly , N.El-S.Shaaban and A.A.El-Zeftawy, “Impact of Solar Heating Applications on Energy Conservation and Environment in Egypt”, Proceeding of Fourth Conference of Egyptian Rural Development , Faculty of Engineering ,Minufiya University , Shebin El-Kom , Egypt ,Vol. 2 , pp. 1061-1072 , September 15-17 , 2003.
 30. G.E.M.Aly,A.A.El-Zeftawy,S.A.Eraki and A.M.Aboel-Azem , “ Modelling of Alternative PV System Design Methods and Its Application in Egypt ”,Proceeding of Ninth International Middle –East Power Systems Conference, MEPCON'2003 , Minoufiya University, Shebin El- Kom , Egypt , December 16 - 18 , 2003, Volume , pp.671 –676 ,2003.
 31. G.E.M.Aly,A.A.Hob-Allah ,H. Desouki and K.M.M.Sheble , “ Medium- Term Electric Load Forecasting Based on Artificial Neural Network ”, Proceeding of Ninth International Middle – East Power Systems Conference, MEPCON'2003 , Minoufiya University, Shebin El- Kom , Egypt , December 16 – 18 , 2003, Volume , pp. 1 - 8 ,2003.
 32. A.Izzularab, G.E.M.Aly and D.A.Mansour , “ A New Technique Using Neuro-Fuzzy Approach for Transformer Fault Diagnosis”, Proceeding of Ninth International Middle – East Power Systems Conference MEPCON'2003 , Minoufiya University, Shebin El- Kom , Egypt , December 16 – 18 , 2003, Volume , pp.887 – 892 ,2003.
 33. G.E.M.Aly ,M.Shaker,M.A.Hassanein,M.Tawfik and M.Abdel-Aal , “ An Artificial Neural Network Approach For Accurate Identification Of Fault Location And Fault Resistance For



- Transmission Lines ”, Proceeding of Ninth International Meddle – East Power Systems Conference, MEPCON'2003 , Minoufiya University, Shebin El- Kom , Egypt , December 16 – 18 , 2003, Volume , pp.525 – 530 ,2003.
34. G.E.M.Aly,A.A.El-Zeftawy,S.A.Eraki and A.M.Aboel-Azem , “ Alternative Methodes for Design PV System to Supply – Water – Pump Set; Modelling and Application ”, The Eighth Arab International Solar Energy Conference & Regional World Renewable Energy Congress, Conference and Exhibition ,8-10 March ,2004 ,Kingdom of Bahrain .
 35. A.A.El-Zeftawy, G.E.M.Aly and N.El-S.Shaaban , “Impact of Solar Power Generation on Energy Conservation and Environment in Egypt”, The Eighth Arab International Solar Energy Conference & Regional World Renewable Energy Congress, Conference and Exhibition , 8-10 March ,2004 ,Kingdom of Bahrain .
 36. G.E.M.Aly ,A.E.El-Gharbawy and A.A.El-Zeftawy, “Assessment of Operating Wind Generators on Electric Utility Operation ”, Proceeding of Tenth International Meddle – East Power Systems Conference, MEPCON'2005 , University of Suez Canal , Port Said, Egypt , December 13 - 15 , 2005, Volume , pp ,2005.
 37. A.M.Aboel-Azem , G.E.M.Aly,A.A.El-Zeftawy and S.A.Eraki , “Optimization of Alternative PV Design Methods for Residential Application ”, Proceeding of Tenth International Meddle – East Power Systems Conference, MEPCON'2005 , University of Suez Canal , Port Said, Egypt , December 13 - 15 , 2005, Volume , pp ,2005.
 38. H . A. Abdelsalam , M. Abdelkrim , G.E.M.Aly, and K.M.Shebl , “Using UPFC for Power Flow Control and Dynamic Stability ”, Proceeding of Tenth International Meddle – East Power Systems Conference, MEPCON'2005 , University of Suez Canal , Port Said, Egypt , December 13 - 15 , 2005, Volume , pp ,2005.
 39. Sabah M. Elmasarawy ,Nabila G. Hassan , Mostafa E. Abddel-Karim and G.E.M.Aly , “ Neural Network For Detection of Harmonic and Reactive Currents in Nonlinear Load “,Fifth International Engineering Conference , Mansoura – Shaerm El-Shekh , March 27-31 , 2006 .
 40. A. A. Abou El-Ela , G.E.M.Aly and A. A. E. Shammah , " Optimal Planning and Operation of Actual Distribution Systems in Egypt Using Multi-Objective Genetic Algorithms " Engineering Research Journal (ERJ), Faculty of Engineering ,Minoufiya University,Egypt, pp. 117 – 124, April , 2007.
 41. A. Abou El-Ela , G.E.M.Aly and A. A. E. Shammah , " Multi-Objective Planning and Operation of Actual Distribution System Using Genetic Algorithms " International Energy Journal , pp. 293 – 300,August 2007 .
 42. A. Abou El-Ela , G.E.M.Aly and A. A. E. Shammah , " Optimal Sitting and Sizing of Capacitor Banks Using Multi – Objective Genetic Algrithm " Engineering Research Journal (ERJ), Faculty of Engineering , Minoufiya University,Egypt , 2008. .
 43. G.E.M.Aly ,A.E.El-Gharbawy and A.A.El-Zeftawy, “Integrated Wind Generator With Conventional Power System on Electric Utility ”, Engineering Research Journal (ERJ), Faculty of Engineering ,Minufiya University, Egypt , 2008.
 44. Dina M.Barakt ,Abd El-Wahab Hassan , Gamal E.M. Aly , “Maximum Power Point Tracking Based Multi - Level Inverter for Grid Connected PV Systems ”, International Journal of Scientific & Engineering Research Volume 12 Issue 1 , January -2021.



TRAINING WORKSHOPS

- Attended a course on teaching using technology, which was held at the Development Center at Alexandria University in the period between July 26-28, 2005.
- Attending seminars and workshops on the development of education and the project for developing the capabilities of faculty members and leaders, which were held in Cairo and Alexandria and at the Suez Canal University Center for the Development of University Education in Cairo to explain the guide to designing and evaluating training programs.
- Attending all engineering conferences in the field of electricity, energy and control systems that were held in Egypt. Most of the participants attending those conferences had research accepted for publication.
- Application of National Academic Reference Standards NARS 2018 Engineering Sector – (5-6/7/2020) – Nile Higher Institute for Engineering and Technology.
- Description of programs and courses according to NARS 2018, engineering sector - (12-13/7/2020) - Nile Higher Institute of Engineering and Technology.
- E-learning - (6-7/9/2020) - Nile Higher Institute for Engineering and Technology.
- Using electronic platforms - (20-21/9/2020) - The Higher Nile Institute for Engineering and Technology.
- The system of credit hours and academic advising - (4-5/10/2020) - Nile Higher Institute of Engineering and Technology.
- Hybrid Education - (11-12/10/2020) - Nile Higher Institute of Engineering and Technology.
- Fundamentals of Scientific Research - (2-3/12/2020) - Nile Higher Institute for Engineering and Technology.
- Statistical analysis using the SPSS program (2-3/1/2021) The Nile Higher Institute for Engineering and Technology.
- Internal Audit - (2-3/1/2022)- Nile Higher Institute of Engineering and Technology
- External review - (6-7/2/2022) - Nile Higher Institute for Engineering and Technology.
- Effective Communication Skills - (22-23/1/2022) - The Nile High Institute for Engineering and Technology.