

CURRICULUM VITA



PERSONAL DATA

Full Name : Gamal Mohamed Hashem Ahmed
Date of Birth : 30.09.1960
Nationality : Egyptian
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EDUCATION

- 1994 Ph.D. Degree according to the Channel System between Brunel University, U.K. and Ain Shams University, Egypt.
Subject of the Ph.D. Research:
"A Digital PWM Inverter for Wide Speed A.C. Motor Control"
- 1988 M.Sc. Degree, Ain Shams University, Egypt.
Subject of the M.Sc. Research:
"Optimization of Reluctance Motor Design"
- 1983 B. Sc. Degree Ain Shams University, Egypt. General Grade Distinction with Honor.

Member of the planning committee – Engineering Sector – Supreme Council of Universities. Minister declaration no. 399 – 13/11/2018 to 12/11/2021.

Member of the Expert List – Engineering Sector – Supreme Council of Universities Dec. 2021 – Dec. 2024.

EMPLOYMENT RECORD

- From September 2022 to present ***Emeritus Professor*** of power electronics in the Department of Electrical Power and Machines, Ain Shams University,
- From April 2018 to September 2022 ***Professor*** of power electronics in the Department of Electrical Power and Machines, Ain Shams University,
- From September 2006 February 2018, ***Associate Professor*** in the Department of Electrical Power and Machines, Ain Shams University,
- From February 1994 up to August 2004 and From October 2005 up to August 2006, Assistant Professor in the Department of Electrical Power and Machines, Ain Shams University.
- From August 2004 up to October 2005, Head of Electrical Technology Department, Technical College, El-Zulfi – Saudi Arabia.
- From June 1991 up to June 1993 Postdoctoral Research Fellow and Instructor in the Electronics and Electrical Engineering Department Brunel University, U.K.

- From July 1988 up to June 1991, Teaching Assistant in the Department of Electrical Power and Machines, Ain Shams University.
- From September 1983 up to June 1988, Demonstrator in the Department of Electrical Power and Machines, Ain Shams University.

MEMBERSHIP OF SOCIETIES

-The Egyptian Syndicate of Electrical Engineering

COMMITTEE MEMBER

- Board member of the faculty council of engineering - Ain Shams University (ASU) – Credit Hours Engineering Program (CHEP). From September 2015.
- Board member of the faculty council of engineering - Ain Shams University (ASU) – from November 2014.
- Board member of the electrical power and machines (EPM) department faculty of engineering Ain Shams University – February 1994.
- Member of committee pointed to develop the new curriculum for under and post graduate courses in EPM department 2015.
- Director of the continuous improvement and quality assurance unit (CIQAU) in the faculty of engineering ASU – From November 2014 up to present.
- Member of committee pointed to develop the new curriculum for under graduate students for the faculty of engineering ASU Spring 2015.
- Member of committee pointed to develop the new curriculum for the credit hours engineering programs - faculty of engineering ASU – January 2017.
- Member of committee - Crisis and Disaster Management Unit – ASU FE, from August 2016.
- Member of committee – to prepare **NARS** 2018 – Electrical power component. Pointed form the national authority for quality assurance and accreditation of education **NAQAAE**. October 2017.
- Member of committee – to renew higher institution programs accreditation. Pointed from Supreme Council of Universities **SCU**– Egypt for one year starting November 2017.
- Member of committee pointed to develop engineering bylaw according to the credit hours system for faculty of engineering ASU.
- Coordinator for *Supreme Council of Universities* (SCU) – Ministry of Higher Education. July 2018.
- Coordinator for education unit, engineering syndicate, July 2018.
- Member of the committee pointed to prepare all requirements for dual degree with University East London. Which ended by acceptance and approve the degree. August 2018.

TEACHING EXPERIENCE

Instructor and Teaching since 1983 Up To Present.

Following are The Courses I Have Taught at Ain Shams University.

1. Post-Graduate Courses

- Electric Drive System,
- Application of Power Electronics,
- Advanced Electrical Laboratory
- Industrial power electronics
- Energy Conversions by Semi-Conductors
- Diploma Projects,
- Electromagnetism

2. Under Graduate Courses

- Fundamentals of Electrical Engineering for Electrical, Civil and Mechanical Engineering.
- Electrical Measurements I and II,
- Electrical Machine Theory and Design,
- Electric Circuits,
- Electrical Laboratory
- Utilization of Electric Energy
- Industrial Electronics
- Power Electronics 1 & 2
- Analysis of Power Electronics,
- Computer and Numerical Analysis,
- Energy Conversion,
- Electromagnetic Fields.
- Electrical Drives
- Programmable Logic Controller **PLC**
- Infrastructure planning

3. B.Sc. Projects

- Design and Built a Complete PLC, SCADA Based Control Systems for:
 - Three Dimensions Control of Cranes Used In Warehousing
 - Transportation Control of Seeds by Using Belts.
 - Sea Water Desalination.
 - Vertical Under Ground Parking.
- Design and Built A Complete Solar System For Rare Housing.
- Design and Built Three-Phase PWM Inverter and Single-Phase Multi-Levels PWM Inverter.
- Design and Built Robotic Arm.
- Design and Built a Full Automated Robotics (Participated in the Egyptian Robocon Contest for year 2003, 2004 and 2008)
- Design and built Multi-Level PWM Inverter (2010/2011)
- Automatic Parking Garage using PLC (2011/2012)
- Maximum Power Tracking of a Wind Energy Conversion System (2012/2013)
- Design and built PWM AC chopper (2014 & 2015)
- Power management for a big building (2016)
- Energy management for big buildings (2017 & 2018)

Teaching in other Universities in the Field of Electrical Power Engineering

1. Cairo University – Fayyom branch.
2. Akhbar El Yom Academy – Six October City.
3. Worker University – Ismaelia branch.
4. Industrial College – Cairo branch.
5. Thebes Academy – Cairo.
6. Arab Academy for Engineering, Science, and Maritime Transport, Cairo.
7. Misr International University (MIU).
8. British University in Egypt (BUE).
9. Technical College – Zulfi – Saudi Arabia.
10. Science Valley Academy – Al Obour City.

PRACTICAL EXPERIENCE

- Designed and Built a Complete On-Line Digital Control System for a Three-Phase Induction Motor at Brunel University, U.K.
- From September 1994 Up To September 2000, I Was The Main Electrical Engineering Consultant of AMCO Group (Seven Main Companies).
- Participate In The Egyptian Rival For Robotics (April 2003, April 2004, and June 2008).
- Built Multi-Levels PWM inverter controlled by Microcontroller (2010 to 2018)

TRAINING EXPERIENCE

Working as the Training Advisor from November 2005 up to May 2014, for the Egyptian Ministry of Water Resources and Irrigation (MWRI) – Mechanical and Electrical Department (MED) for Pumping Stations Rehabilitation Program. Under the joint venture consultants between CES – Consulting Engineers Salzgitter GmbH Germany and Hamza Associates Egypt.

1. Training in the Faculty of Engineering – Ain Shams University
 - Control of Electrical Machines
 - Industrial Applications of Power Electronics.
 - Power Transformers, Design, Operation, and Maintenance.
2. Training in the Technical College – Zulfi – Saudi Arabia
 - Electrical Distribution Systems.
 - Conventional Control of Induction Motors.
3. Training in Ministry of Water Resources and Irrigation (MWRI) in Mechanical and Electrical Department (MED)
 - Induction Motors Specification
 - Modern Control of Induction Motors
 - Inspection and Testing of Power Transformer
 - Power Management in Water Pumping Stations
 - Inspection and Testing of low, medium and high voltage power cables.
4. Training in Others places
 - Electronic Equipments Faults. (Kuwaiti Electrical Engineers)
 - Solar Energy Systems. (Industrial Technical College)
 - PWM Inverters. (Faculty of Engineering – Cairo University)
 - Operation and Maintenance of Electric Control Systems (Cleopatra Cigarettes Company)
 - Instrumentation Testing, Calibration and Condition Monitoring For Instruments Technician (Fresh Company, 10th of Ramadan City).
 - Power Quality (Cairo greater metro).
 - Power Quality (Drinking water authority).

Attending Training Courses

- Curriculum Development (Saudi Arabia – 20 H – February 2005)
- Continuous Improvement Skills For Education Quality (Saudi Arabia – 12 H – May 2005)
- Time and Stress Management (Egypt – 15 H – March 2006)

- Development Thinking Skills (Egypt – 15 H – April 2006)
- Using Technology in Teaching (Egypt – 15 H – August 2006)
- Economic and Marketing Aspects For Scientific Researches (Egypt – 15 H – August 2006)
- Qualifying to be Peer Reviewer for QAAP Project (Egypt – 04 H – January 2008)
- Qualifying to fill CIQAP Documents (Egypt – 06 H – May 2008)
- Qualifying to review QAAP2 Documents (Egypt – 04 H – October 2009)
- Qualifying to be Peer Reviewer for **CIQAP** Project (Egypt – 08 H – November 2009)
- Higher Education Institutes Self Evaluation. Conducted by NAQAAE (Egypt – (32 H – January 2011)
- External reviewer skills. Conducted by NAQAAE (Egypt – 30 H – October 2012).
- Examination paper specification, conducted by Ain Shams University Quality Assurance and Accreditation (Egypt 12 H – November 2012).
- Learning and Teaching Strategies, conducted by the Center of Studies – Faculty of Woman – ASU (Egypt 04 H – Jan. 2013).
- Intensive course on External Reviewer Skills. Conducted by NAQAAE (Egypt – 07 H – April 2013).
- Academic Advisors, conducted by Ain Shams University Quality Assurance and Accreditation Center (Egypt 12 H – December 2013).
- Strategic planning, conducted by Ain Shams University Quality Assurance and Accreditation Center (Egypt 12 H – January 2015).
- World university ranking (Egypt 8 H – February 2017)
- Writing ILOs skills, arranged by NAQAAE & Organisation internationale de la Francophonie (March 2017).
- **Examination and assessments methods**. Arranged by Training and Development Center – Ain Shams University (January 2018).
- **Effective communication skills**. Arranged by Training and Development Center – Ain Shams University (January 2018).
- **Use of technology in teaching**. Arranged by Training and Development Center – Ain Shams University (February 2018).
- **Time and meetings management**. Arranged by Training and Development Center – Ain Shams University (February 2018).
- **University's code of ethics**. Arranged by Training and Development Center – Ain Shams University (March 2018).
- Attending special training course for one week in “Conceive – design – develop – operate) **CDIO** in KTH, Stockholm, **Sweden**. April 2018.
- Attending special training course for one week in “sustainable development goals) **SDGs** in Graz, **Austria**. October 2018.
- Attending special training for implementation of the Dual Degree between University East London / Ain Shams University, UEL **England**. January 2019.
- Implementation of NARS 2018, arranged by NAQAAE. 29 – 30 January 2022.

ACTIVITIES RELATED TO EDUCATION QUALITY ASSURANCE AND ACCREDITATION

- Assigned as the **Director** of the continuous improvement and quality assurance unit (CIQAU) in the faculty of engineering ASU – November 2014 up to date.
- Pointed as the Deputy to the Director of the Quality Assurance Unit (QAU) - Faculty of Engineering - Ain Shams University (ASU) from October 2008 up September 2011 & from February 2012 up October 2014.
- Pointed as the Acting Director of QAU - Faculty of Engineering - ASU from October 2011 up January 2012.
- Member of the Quality team in the Electrical Power and Machines Department, Faculty of Engineering ASU.
- Member of the team responsible for designing the modern curricula for the Electrical Power and Machines Department, ASU.
- Member of QAU Faculty of Engineering - ASU, pointed to prepare all required documents according to the Quality Assurance and Accreditation Program (QAAP) regulations in attention to accredit the Faculty.
- Member of QAU Faculty of Engineering, Ain Shams University, pointed to prepare all required documents according to the Continuous Improvement and Qualifying for Accreditation Project (CIQAP) regulations in attention to accredit the Faculty.
- Head of the committee responsible for the faculty of engineering - ASU courses evaluation by students.
- Sharing in preparation of CIQAP project phase II required documents for Faculty of Engineering – ASU (December 2011).
- Head of the internal reviewer committee for the Faculty of Engineering – ASU, November 2012 and January 2013.
- Active member of the experts of the Program of Continuous Improvement and Qualification for Accreditation (PCIQA) in Higher Educational Institute.
- Pointed from PCIQA as a member of the Developmental Engagement (DE) visit to the Faculty of Engineering, Minufiya University in direction to be prepared for accreditation. (April 2007).
- Pointed from PCIQA to review and follow up the activities in relation to accreditation of five faculties in Southern Valley University, Luxor, Qena and Aswan, (October 2009).
- Pointed from PCIQA as a member of the Developmental Engagement (DE) visit to the Faculty of Electronic Engineering – Menouf branch – Menofia University in relation to prepare the faculty to be ready for accreditation. (November 2009)
- Pointed from PCIQA as a member of the Developmental Engagement (DE) visit to the Credit Hours Engineering Program in the Faculty of Engineering – Shubra branch – Benha University (December 2009).
- Pointed from PCIQA as the head of group pointed to monitor and to review CIQAP project progress in the Faculty of Engineering – Shbin El Kom - Minufiya University (January 2010).
- Pointed from PCIQA to review and follow up the activities in relation to accreditation of five faculties in Southern Valley University, Qena and Aswan, Egypt (April 2010).
- Pointed from PCIQA as a member of the Developmental Engagement (DE) visit to the Credit Hours Engineering Program in the Faculty of Engineering – Assuit University (March 2013).
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the Faculty of Engineering, Minufiya University (May 2013)

- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering, Aswan University* (March 2015) **Programs Accreditation**
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering, Mansoura University* (May 2015)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering, Cairo University* (December 2015)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering - Shubra, Banha University* (March 2016)
- Pointed from Supreme Council of Universities – Engineering department, to review the performance of Cairo higher institute for engineering computer science and management (February 2017)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering – Assuit University* (April 2017)
- Pointed from Ain Shams University – Vice Dean for graduate studies and research for technical visit to support faculty of computer and information science – Graduate institute of childhood studies toward accreditation form NAQAAE (March & May 2017)
- Point as quality head for Egyptian – Chinese University – faculty of Engineering (from January 2017)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for preparing NARS 2018 – Electrical power. (from October 2017)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering – Aswan University* (April 2018) **Programs Accreditation**
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE for accreditation reviewer visit to the *Faculty of Engineering – Future University* (May 2018)
- Pointed from **PCIQA** as a member of the Developmental Engagement (**DE**) visit to the **Credit Hours Engineering Program** (Electrical Power & Control) in the Faculty of Engineering – Shubra branch – Banha University (May 2018).
- Supervision and technical support towards accreditation by NAQAAE for many higher institutions. (2018 & 2019)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE as team leader for accreditation reviewer visit to the *Faculty of Engineering – Banha University*. (December 2019)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE as team leader for accreditation reviewer visit to the *Faculty of Engineering – Cairo University*. (February 2020) **Programs Accreditation**
- Many activities in relation to Blended Learning & Online Learning Such as: Issue "Instructors' Guide for E-Learning" – Designed and presented many Webinars for design Program & Course specifications according to NARS 2018 – Competences based learning (<https://www.youtube.com/watch?v=xcIX9Zj5jWc&t=3s>). (2020 – 2021)
- Pointed from the national authority for quality assurance and accreditation of education NAQAAE as team leader for accreditation reviewer visit to the *Faculty of Engineering – Cairo University*. (May 2022) **Programs Accreditation**

- Pointed from the national authority for quality assurance and accreditation of education **NAQAAE** as team leader for accreditation reviewer visit to ***Military Technical College***. (October 2022)

TECHNICAL REPORTS

- Author of the final training report, which cover 8 years (2005 – 2014) training activities financed by the German bank "KfW".
- Participated in the technical report concerning the effect of harmonics in malfunction of Toshka pumping station (2010).
- Issue few hundreds of inspections and expediting reports, for inspection for electrical equipments and materials carried out local in Egypt and in Arab world's such as ***Saudi Arabia, Yemen, Lebanon, Qatar & Jordan***.

INSPECTION ACTIVITIES

I am working in the field of electrical power inspection over fifteen years. This includes inspections in Egypt as well as other Arab countries such as Saudi Arabia, Jordan, Lebanon and Yemen. Currently I am Senior Inspector in a freelance base in the field of Electrical Power Engineering at these well reputed inspection companies:

- ✓ CANSPECT CORPORATION (International Inspection and Consulting)-Ontario, Canada
- ✓ Intertek International, Worldwide Inspection Company.
- ✓ MOODY International, Worldwide Inspection Company.
- ✓ Germanischer LLOYD (GL) – Nobel Denton, World wide Inspection Company.
- ✓ SA – International, Worldwide Inspection Company.
- ✓ TUV-NORD Middle East, ABU DHABI – U.A.E.
- ✓ Bureau Veritas, Egypt Branch

Dr Gamal is officially approved from the following international companies:

- Saudi Electricity Company (ESC)
- Saudi National Grid
- Qatar Petroleum
- Qatar General Electricity and Water Corporation - Kaharamaa

For prove please refer to my extended CV

Following are some of my ***main*** inspection activities:

Part 01: International Inspection

1. Inspected 475 distribution transformers ratings (50 KVA, 100 KVA, 200 KVA and 300 KVA at 11 KV and 33 KV) for UTEC, Riyadh, **Saudi Arabia**. December **2004**.
2. Inspected Lighting Materials and Galvanized Bolts for Abdulkarim Trading, Dammam, **Saudi Arabia**. May **2005**.
3. Inspected GRE pipes and fittings for Aimiantit, El-Khobar, **Saudi Arabia**. May **2005**.
4. Inspected Junction Boxes for Saudi Electric Supply Company, El-Khobar, **Saudi Arabia**. May **2005**.

5. Inspected one Diesel-Generator Sets [500 KVA] For Ministry of Health and Population of Republic of **Yemen**, June **2007**.
6. Inspected the electrical installation in new accommodation buildings and cabins in Yemen Liquefied Natural Gas Project (YLNG), **Balhaf, Yemen**. May **2008**, and June 2008.
7. Inspected low voltage power, control and instrument cables manufactured by Jordan New Cable Company (JNCC), Amman, **Jordan**. August 2009 and October **2009**.
8. Inspected Medium Voltage power cables (1x400 mm²) manufactured by MESC – Fujikura Cable Company – Al Mafrak – **Jordan** for Bemco Company Lebanon. May **2010**.
9. Inspected LV & MV over-head transmission line for ministry of electricity – Yemen. These cables manufactured by El Sewedy – **Aden – Yemen**. August **2010**.
10. Inspected low voltage power cable manufactured by Liban Cables – Beirut - **Lebanon**, on behave of Tatweer Petroleum – **Kingdom of Bahrain**. October 2011, December **2011** & January **2012**.
11. Inspected LVPC manufactured by **MESC Jordan** Factory, on behave of J. Ray Mcdermott Middle East INC, SA. March **2012**.
12. Inspected Cabling Structure System and on behave of **Technip UAE**, supplied by MAM International in **Sana'a – Yemen**, June **2013**.
13. Inspected automatic power factor correction panel on behave of Tbarak for Import & Export, **Doha – Qatar**, July & September **2014 – January, March, June & December 2015**.

Part 02: Local Inspection (Selected Samples ONLY)

14. Inspected Eleven Diesel-Generator Sets [From 100 KVA To 250 KVA] For The United Nation –Branch. September **2001. Egypt**
15. Inspected Eight Complete Lightning Systems For Petrojet. December **2002. Egypt**
16. Inspected 825 KVA Diesel Generator Set For Orascom –. March **2003. Egypt**
17. Inspected six explosion proof fluorescent lighting fixture complete with all accessories and fittings. Petrojet (Somed Petrol line project) –. August **2003. Egypt**
18. Inspected Measuring and control cables manufactured by United Industries El-Sewedy Cables for Ras Laffan Liquefied Natural Gas Company Limited **Saudi Arabia**.,Feb. 2008, and April **2008. Egypt**
19. Inspected High Voltage Cables manufactured by El-Sewedy Cables for installation of 110 kV XLPE cable circuit for reinforcement al Shoqiyah at Makkah al Mukarammah, **Saudi Arabia**. March 2008, May 2008, November 2008, December **2008**, and July **2010. Egypt**
20. Inspected Low Voltage Switchgears manufactured by Schneider Electrical for New Doha International Air Port, Qatar. March **2008. Egypt**
21. Inspected medium voltage transformers (800 kVA, and 1000 kVA) manufactured by ABB- during November 2008 up to February **2009. Egypt**
22. Expedited and Inspected Low Voltage Cables manufactured by El-Sewedy Cables for installation of the New El Riyadh Power Plant, **Saudi Arabia**. April **2009**, and May **2009. Egypt**
23. Inspected HV and MV power cables manufactured by El-Sewedy Cables for Petrofac International Limited (**UAE**) for El Merk project **Algeria**. November and December **2009. Egypt**
24. Inspection of MV power cables manufactured for East Port – Port Said Egypt. March **2010. Egypt**
25. Inspected LV power, lighting, control and earthing cables manufactured by El-Sewedy Cables for Petrofac International Limited (**UAE**) for El Merk project **Algeria**. January, March and April **2010. Egypt**
26. Inspected Medium Voltage power cables manufactured by El Sewedy for Port Said Authority February, March and April **2010. Egypt**

27. Inspected Medium Voltage Switchgears and Ring Main Unit manufactured by ABB Egypt for Port Said Authority April **2010. Egypt**
28. Inspected LV power, lighting, control and earthing cables manufactured by El-Sewedy Cables for Al Fanar Company Saudi Arabia. April **2010. Egypt**
29. Inspected bare copper earthing cabled for Award Brand Company, Saudi Arabia. April **2010. Egypt**
30. Inspected Prefabricated Module (Shelter with its components: LV switch gears, control panels, UPS, HVAC system and fire fighting) for Gulf of Suez Petroleum Company (**GUPCO**), manufactured by EMAS and MARIA **Egypt. May 2010. Egypt**
31. Inspected Medium Voltage power cables manufactured by El Sewedy for SAPAC – **Saudi Arabia, June 2010. Egypt**
32. Inspected Cable Trays with their accessories manufactured by MEMCO in behave of **GUPCO. July 2010. Egypt**
33. Inspected High Voltage Power Cables manufactured by El-Sewedy Cables "Egytech" rated as 1x630 mm² - 132 kV XLPE cable in behave of **Qatar Petroleum. August & September 2010. Egypt**
34. Inspected low voltage power cables manufactured by El-Sewedy Cables, with the amount of 282 KM. In behave of **Artenius company, Sines, Portugal. December 2010. Egypt**
35. Inspected HVPC rated 132 kV manufactured by El Sewedy on behave of Al Osasi, **Saudi Arabia. January 2012. Egypt**
36. Inspected Instrumentation, LVPC and MVPC manufactured in El Sewedy Cable, Egypt. On behave of National Petroleum Construction Company **NPCC Abu Dhabi, UAI** and Aub Dhabi Company for Onshore Oil Operations **ADCO. June 2011 to June 2012** in a monthly base. **Egypt**
37. Inspected HV power cables in behave of Al Ojaimi, **Saudi Arabia, November, December 2011, February 2012, March 2012, July 2102 and October 2012. Egypt**
38. Inspected MV & LV power cables manufactured by Giza Cables Co. in behave of AIASH GENERAL TRADING AND AGENCIES CORP. **HODEIDAH, YEMEN. November 2012. Egypt**
39. Inspected 1500 KVA MTU generator, supplied by MCV to El Shikh Zaid Booster Pumping Station Authority – 6 October City -. November **2012. Egypt**
40. Inspected Low Voltage Switchgears on behave of Camp Support Services Integrated **CSSI, Algeria. Manufactured by Schneider Electrical, December 2012 & January 2013. Egypt**
41. Inspection, expediting and review design of Medium Voltage Mini-substation manufactured by ABB Egypt on behave of SNC – LAVALIN International Inc. **UAE – for Emirates Aluminum Smelter Complex Phase II Project. February and March 2013. Egypt**
42. Inspection of 60 m ALU SS Telecommunication tower with all bolts as part of Telecommunication System manufactured by Al Babtain Leblan Egypt. On behave of Alcatel – Lucent Shanghai Bell Information Products Co., LTD. Pudong, Shanghai, **CHINA. This is for BIR SEBA FIELD DEVELOPMENT PROJECT – Phase I Algeria. February, March and May 2013. Egypt**
43. Inspected **06, 12 and 48 Core S/M & M/M M LSZH J 026 DB RP** fiber optic cables on behave of Technip UAE, manufactured by El Sewedy Egypt, June and September 2013. **Egypt**
44. Inspected "LVPC, MVPC, fiber optic cable, earthing system and cable accessories" in behave of "**Renewable Energy Authority of Libya**", manufactured by El Sewedy. December **2013. Egypt**
45. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **Trading and Developmental Partnership (TDP), Saudi Arabia. October and December 2013, in a monthly base during 2014. Egypt**
46. Inspected 132 kV-1200 mm² power cables manufactured by El Sewedy - E in behave of **Ibn Omerah, Saudi Arabia, January, February, April, July, August & December 2013, in a monthly base during 2014, Egypt**

47. Inspected HVPC rated 115 kV, 1600 mm² manufactured by El Sewedy on behave of **Capital Lights, Saudi Arabia**. March, April, May, July, October & December **2013**, in a monthly base during 2014. **Egypt**
48. Inspected **12 Core S/M & M/M M LSZH J 026 DB RP** fiber optic cables on behave of **Kuwait Oil**, manufactured by El Sewedy Egypt, November 2013, January & July **2014**. **Egypt**
49. Witness "IP" tests for dry type medium voltage transformer enclosure and its cable junction boxes, in behave of Enppi – Egyptian petroleum company. The tests were carried out the site in
50. Inspected Extra high voltage power cable rated **220 kV** sized 1x1200 mm² CU/XLPE/CW/LEAD/HDPE in behave of **Kahramaa – Qatar**. In a monthly base during **2014, Egypt**.
51. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **Trading and Developmental Partnership (TDP), Saudi Arabia**. January **2015**. **Egypt**
52. Inspected HVPC rated 115 kV, 1600 mm² manufactured by El Sewedy on behave of **Capital Lights, Saudi Arabia**. January, March, May & July 2015. **Egypt**
53. Inspected HV power cables in behave of Al Ojaimi, **Saudi Arabia**, January, **February, April, July & December 2015**. **And from January to November 2016 Egypt**
54. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **Trading and Developmental Partnership (TDP), Saudi Arabia**. January to November **2016**. Egypt.
55. Inspected Extra high voltage power cable rated **220 kV** sized 1x1200 mm² CU/XLPE/CW/LEAD/HDPE in behaves of **Kahramaa – Qatar**. **January to November, & December 2016**, Egypt.
56. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **Capital Lights, Saudi Arabia**. January 2017. **Egypt**.
57. Inspected Extra high voltage power cable rated **220 kV** sized 1x1200 mm² CU/XLPE/CW/LEAD/HDPE in behave of **Kahramaa – Qatar**. In a monthly base during **2017, Egypt**.
58. Inspected HV power cables in behave of Al Ojaimi, **Saudi Arabia**, in monthly basis **2017**. **Egypt**
59. Inspected **12 Core S/M & M/M M LSZH J 026 DB RP** fiber optic cables on behave of in behave of **Kahramaa – Qatar**, manufactured by El Sewedy Egypt, November & December **2017**. **Egypt**.
60. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **MEDCO – Hyundai, Saudi Arabia**. July 2018. **Egypt**.
61. Inspected HVPC rated 132 kV, 1200 mm² manufactured by El Sewedy on behave of **El Swedy transmission and distribution, Saudi Arabia**. July 2018 / June 2019. **Egypt**.
62. Inspected high voltage power transformer (25 MVA, 34.5/13.8 kV). Manufactured by el Sewedy Transformer. On behave of Saudi Electricity Company SEC. February 2021, **Egypt**.

CONSULTATION ACTIVITIES

Preparing tender documents for complete automatic conveyor system. January 2014.

- Review technical specification for recycled paper and wood on behalf of ministry of education, Egypt. January 2014.
- Consultation support of electromechanical components in large water pumping station "Gerza P.S." and "Al Asher P.S.", on behalf of Arab Contractor, Egypt. January 2014.
- Consultation for new offices for credit hours engineering programs – Faculty of Engineering ASU, May – December 2015.
- Consultation for new renovation of the faculty of engineering 2020 plan. January 2019 up to date.

Design and construction supervision of the electric power required for the following projects

- D.O.K. car wind shield factory, 6th October City.
- Private Villa, Faid, Ismaelia.
- Amco Company, warehouse, Giza.
- Hurgada marine port, Hurgada.
- West Delta water conservation and irrigation rehabilitation project.
- Electrical power distribution system for 190000 Fedan in desert road (West delta irrigation project).

Sharing in Gap Analysis for Electronic production factory in tenth of Ramadan city through "First Egyptian Engineering" in cooperation with Industrial Modernization Center (IMC).

TECHNICAL VISITS

- To electrical power station in the High Dam, Aswan.
- To Shubra El Khemia and Sidi Kerar power stations.
- To Toshka water pumping station, to collect data to study the pumping station malfunction as affected by the harmonics content.
- To Zaghloul, El Zeni, El Max, Maruot and Mahalet Roh water pumping stations.
- To Gerza and Al Asher water pumping stations, to get accounted by the raised problem of the damaged soft-starters.

RESEARCH EXPERIENCE

- 33 International and Local journals and conferences Publications (Attached List)
- Four M.Sc. theses were granted.
- Supervising number of Ph.D. and M.Sc. post graduate students.
- Two research projects.

AWARDS

- 1980 - 1983 Distinction Awards from Ain Shams University.
- 1991 - 1993 Channel Grant from the Egyptian Government.
- Dr. Gamal is listed in "Who's Who in Science and Engineering" in the 9th edition, September 2006.

CONFERENCE ACTIVITIES

Attendance

- Universities Power Engineering Conference UPEC, 1992, Bath, England.
- Al Azhar Engineering 3rd International Conference, 1993, Cairo, Egypt.
- First International Conference on Electronics, Circuits and Systems, 1994, Cairo, Egypt.
- Middle East Power Conference MEPCON, 2001, Helwan, Egypt.
- Al Azhar Engineering 7th International Conference, 2003, Cairo, Egypt.
- Middle East Power Conference MEPCON, 2003, Shebin El Kom, Egypt.
- Third Saudi Technical Conference and Exhibition, December 2004, Saudi Arabia.
- Middle East Power Conference MEPCON, 2005, Port Said, Egypt.
- Middle East Power Conference MEPCON, 2006, El-Menia, Egypt.
- Middle East Power Conference MEPCON, 2008, Aswan, Egypt.
- The first international conference of the National Authority for Quality Assurance and Accreditation of Education titled "The Academic Standards and the Path towards Quality and Accreditation", June 2008, Cairo, Egypt.
- The first meeting for faculties enrolling in PCIQA, October 2009, Helwan University, Egypt.
- Middle East Power Conference MEPCON, 2009, Assuit University, Egypt.
- Middle East Power Conference MEPCON, 2010, Cairo University, Egypt.
- Middle East Power Conference MEPCON, 2012, Alexandria University, Egypt.
- Middle East Power Conference MEPCON, 2014, Ain Shams University, Egypt.
- Middle East Power Conference MEPCON, 2015, El Mansoura University, Egypt.
- Middle East Power Conference MEPCON, 2016, Helwan University, Egypt.
- 12 QS APPLE 2016– Annual Conference, November 2016 Putrajaya – *Malaysia*.
- Middle East Power Conference MEPCON, 2018, Menoufia University, Egypt.

Sharing in Conferences Activities

- Reviewer in the Power Electronics Specialists Conference PESCO 2004.
- Sharing in the Organizing Committee of the First Ain Shams University International Conference on Environmental Engineering 2005.
- Sharing in the Organizing Committee of the International Middle East Power Systems Conference "MEPCON 2014". Ain Shams University faculty of engineering.

SHARING IN LOCAL GOVERNMENT PROJECTS ACTIVITIES

- Electrical Vehicle, Granted From Ministry Of Environmental (26 000 L.E.). 2002.
- Enhancing Power Electronics and Power Systems Courses Using MATLAB /SIMULINK in LAN, Granted From The Higher Educational Enhancement Projects Fund (HEEPF) (50 000 \$). 2004.
- Electrical energy power saving project for Egyptian water pumping stations in cooperation with Consultant Engineering Salzgitter GmbH Germany and Hamza Associates, Egypt. Starting 2005 up till now.
- Continuous Improvement for Qualifying and Accreditation Project (CIQAP). This project financed from Ministry of Higher Education with total amount of 16 Million L.E. Project signed 01.04.2009.

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"Optimized Parameter Analysis of Reluctance Motors", Ain Shams University Annual Magazines, No. 22, Vol., 1, Elect. Eng., **Egypt, 1988**. pp. 117-131.
- 2 - **Gamal M. Hashem**, Richardson J., Kandil S.A., And El Sattar A.A.
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- 3 - **Gamal M. Hashem.**, Richardson J., Kandil S.A., And El Sattar A.A.
"Three-Phase Inverter Induction Motor Drive System with Wide Harmonic Elimination", Proceeding of the International Symposium on Technological Innovation In Guided Transports, Lille, **France**, September **1993**. pp.447-455.
- 4 - **Gamal M. Hashem**, Richardson J., Kandil S.A., and El Sattar A.A.
"Prediction Of Harmonic Levels In Inverter Controlled By Optimal PWM", Proceeding of The 28th International Universities Power Engineering Conference, UPEC-1993, Stafford, **U.K.**, September 1993. pp.610-613.
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"A Comparison Between Optimum And Natural-Sampled PWM Switching Techniques", Proceeding of Al Azhar Engineering Third International Conference, Cairo, **Egypt**, December **1993**. pp.446-454.
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"A Three-Phase PWM Drive System with Closed-Loop Control", Proceeding Of The 29th Universities Power Engineering Conference, UPEC, Galway, **Ireland**, September **1994** .pp.318-321.
- 8 - Richarson J, Bezanov G.J , and Gamal M. Hashem
"An Optimal PWM Algorithmic Modeling Technique For On-Line AC Drive Control", IEEE 6th **ICHPS 1994**. pp.1-7.
- 9 - Richardson J, Bezanov G.J, and **Gamal M. Hashem**
"Optimal PWM Waveform Modeling For On-Line AC Drive Control", IEE, Sixth International Conference On Power Electronics And Variable Speed Drives, Nottingham, **U.K**. September **1996**. pp.469-501.
- 10 - **Gamal M. Hashem**, Richarson J., Kandil S.A., and El Sattar A.A.
"Modeling Algorithm for Optimal Pulse Width Modulation", Ain Shams University Scientific Bulletin, **Egypt** Vol.37, No. 1, March 31, **2002**. pp.323-336.
- 11- Hussein M. Mashaly, and **Gamal M. Hashem**
"Generation Of Optimum Pulse Width Modulation Based on Artificial Neural Network ", Proceeding Of The 37Th International Universities Power Engineering Conference, UPEC-2002, Stafford, **U.K.**, September **2002**. pp.441-444.

- 12- A.M.A. Mahmoud, **Gamal M. Hashem** and Ahmed Madkour
 “Technical and Economical Impacts Affecting Selection of dc or dc Drive”, Proceeding of Al Azhar Engineering Seventh International Conference, Cairo, **Egypt**, April **2003**. pp.197.
- 13- **Gamal M. Hashem**, A. D. El-Koshairy, and Yasser M. A. Aziz
 “Steady State Performance Comparison Study of Inverter Fed Induction Motor with Different PWM Techniques”, Proceeding of Al-Azhar Engineering Seventh International Conference, Cairo, **Egypt**, April **2003**. pp.200.
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 “Probabilistic Power Loss Analysis of Electrical Distributed Generation Systems”, Proceeding of Canadian Conference on Electrical and Computer Engineering, Montreal, **Canada**, May, **2003**. pp.23-626.
- 15- **Gamal M. Hashem** and A. Y. Abdelaziz
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- 28- **Gamal M. Hashem**, "Experimental Verification of A Novel Generalized Initial Guessing Formula for SHEPWM Applied to AC/AC Converter," Proceeding of the sixteen International Middle East Power Systems Conference MEPCON 2014, Cairo, **Egypt**, December, **2014**. ID 208.
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