## **CURRICULUM VITAE**

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## **Contact Addresses**

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## **Biographical Data**

**Place of Birth** Qena, Egypt **Date of Birth** January 14<sup>th</sup> 1976

NationalityEgyptGenderMaleMarital StatusMarriedMother LanguageArabicOther LanguagesEnglish

### **Education**

October 2012
July 2004
May 1999
: Ph. D., Electrical Engineering Department, Assiut University, Egypt.
: M. Sc., Electrical Engineering Department, Assiut University, Egypt.
: B. Sc., Electrical Engineering Department, Assiut University, Egypt with

accumulative average grade: very good with honor's degree (81.11%).

Ph. D. Thesis entitle : Diesel Engine Exhaust Treatment Using Non-Thermal Plasma

M. Sc. Thesis entitle : Electric Stress Distribution Along Winding Overhang of Electric

Machines

**B. Sc. Project entitle**: Soft Start and Soft Stop of A three-Phase Squirrel-Cage Induction Motor

## **Professional Experience**

November 2012 – till now : Assistant professor (lecturer), Electrical Engineering

Department, Faculty of Engineering, Assiut University, Egypt.

September 2008 – August 2010 : Researcher, Department of Environmental and Life Sciences,

Toyohashi University of Technology (TUT), Japan.

August 2004 – October 2012 : Assistant lecturer, Electrical Engineering Department,

Faculty of Engineering, Assiut University, Egypt.

**December 2000 – July 2004** : Teaching assistant, Electrical Engineering Department,

Faculty of Engineering, Assiut University, Egypt.

## **Teaching experience**

# Teaching the following undergraduate courses at Assiut University, Sohag University and South Valley University, Egypt:

- 1- Theory of Electric Fields
- 2- Electrical Properties of Materials
- 3- Power Electronics
- 4- High Voltage Engineering
- 5- Electric Power Distribution System
- 6- Energy Conversion and Utilization
- 7- Power Systems Protection
- 8- Energy economics

#### Assisted in teaching the following undergraduate courses at Assiut University, Egypt:

- 1- Introduction to computer
- 2- Theory of Electric Fields
- 3- Electrical Properties of Materials
- 4- Electrical power
- 5- Special machines
- 6- High voltage engineering
- 7- Power system analysis

#### Assisted in teaching the following undergraduate labs at Assiut University, Egypt:

- 1- Machines Lab
- 2- Power Lab
- 3- High voltage Lab

# Supervising the following B. Sc. projects for undergraduate students at Assiut University, Egypt.

- 1- A study on Photovoltaic Sizing, Configuration and Effects on Distribution System.(2013)
- 2- Electrical Design and Installation in Different Civil Buildings.(2014)

# Assisted in supervising the following B. Sc. projects for undergraduate students at Assiut University, Egypt.

- 1- Detection and Discrimination of Weak Points in Power Systems Using Ultraprobe 2000.(2001)
- 2- Design and Implementation of a Field Meter. (2002)
- 3- Electrification of Assiut University Hospitals.(2003)
- 4- Magnetic Field Underneath Three-Phase Transmission Lines.(2004)
- 5- Study of Assiut Western Distribution Network.(2005)

### **Research interests**

- 1- Partial discharge analysis and assessment in electric power equipments.
- 2- High Voltage Engineering.
- 3- Electromagnetic simulation and modeling and numerical field computation.
- 4- Applied electrostatics and high-voltage engineering, which includes electrostatic precipitation, environmental application of plasma.

### **Training**

- 1- Effective presentation
- 2- Code of ethics
- 3- Effective teaching
- 4- Modern methods in teaching
- 5- Use of technology in teaching
- 6- Credit hours system
- 7- Systems of examinations and students evaluation

## **Computer and Programming skills:**

- 1- MATLAB
- 2- FORTRAN
- 3- ANSYS simulation software package
- 4- COMSOL simulation software package
- 5- AutoCAD

### **Awards and grants:**

- 1- Egyptian Government Scholarship to Study Ph.D. (Channel system) in Japan 2008-2010.
- 2- Scholarship from Assiut University to study M.Sc. 2000-2004.
- 3- Egyptian Syndicate of Engineers award (one of the best two students during the B.Sc.).
- 4- 6<sup>th</sup> October University honoring award.

## **Activities:**

Preparation of the curriculum for both graduate and undergraduate programs.

### **Membership:**

- 1- The Egyptian Syndicate of Engineers
- 2- The Engineering Studies and Consultation Center in Assiut, Egypt.

### **Publications**

- [1] Hassan El-Kishky, Mazen Abdel-Salam, **Hassan Wedaa** and Yehia Sayed, "Design of Stress-Grading Systems Based On Power Loss Minimization", Electrical Insulation and Dielectric Phenomena, 2002 Annual Report Conference on, pp. 138-141, 2002.
- [2] Hassan El-Kishky, Mazen Abdel-Salam, **Hassan Wedaa** and Yehia Sayed, "Novel Techniques for Optimal Design and Analysis of Corona-Suppression Systems", Transmission and Distribution Conference and Exposition, 2003 IEEE PES, Vol. 2, pp. 841- 846, 7-12 Sept. 2003.
- [3] Hassan El-Kishky, Mazen Abdel-Salam, **Hassan Wedaa** and Yehia Sayed, "Time-Domain Analysis Of Nonlinear Stress-Grading Systems For High Voltage Rotating Machines", Electrical Insulation and Dielectric Phenomena, 2003 Annual Report Conference on, pp. 482- 485, 19-22 Oct. 2003.
- [4] Hassan El-Kishky, Mazen Abdel-Salam, Chad Frick, **Hassan Wedaa** and Yehia Sayed, "A GUI Module for the Design and Analysis of Stress-Grading Systems of High Voltage Rotating Machines", Electrical Insulation and Dielectric Phenomena, 2003 Annual Report Conference on, pp. 490-493, 19-22 Oct. 2003.
- [5] **Hassan Wedaa**, Mazen Abdel-Salam, Adel Ahmed and Akira Mizuno, "NO Removal Using Dielectric Barrier Discharges in a Multi-rod Reactor Stressed by AC and Pulsed High Voltages", IEEE Transactions on Dielectrics and Electrical Insulation, Vol. 18, No. 5, pp. 1743–1751, October 2011.
- [6] **Hassan Wedaa**, Mazen Abdel-Salam, Adel Ahmed and Akira Mizuno, "Characteristics of sliding discharge in a multi-rod reactor", Journal of Physics: Conference Series, Vol. 301, 012017 (4 pp.), 2011.
- [7] **Hassan Wedaa**, Mazen Abdel-Salam, Adel Ahmed and Akira Mizuno, "NO<sub>x</sub> Removal Using Dielectric Barrier Discharges in a Wire-cylinder Reactor Stressed by High Pulse Voltage", 12<sup>th</sup> ICESP (International Conference of Electrostatic Precipitation), Nuremberg, Germany, May 2011.
- [8] **Hassan Wedaa**, Mazen Abdel-Salam, Adel Ahmed and Akira Mizuno, "Two-dimensional modeling of dielectric barrier discharges using charge simulation technique-Theory versus experiment", IET Science, Measurement and Technology, Vol. 8, pp. 285–293, September 2014.

## **Referees**

Prof. Dr. Mazen Abdel Salam

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Ph. D. Supervisor

Prof. Mohammed Abo-Zahhad Abo-Zeid Head of Electrical Engineering Department Faculty of Engineering

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Ph. D. Supervisor