

Dr. Ahmed El-Tayeb Mohamed Maowed Khalil

Assistant Professor



PROFILE

Dr. Ahmed El-Tayeb is an Assistant Professor for the Faculty of Energy Engineering, Aswan University. Over a 7-year career, Ahmed El-Tayeb has been working on High Voltage Engineering, Non-thermal Plasma application energy harvesting projects.

IDENTITY

- Date of Birth: 2- May-1982
- Place of Birth: Qena, Egypt.
- Nationality: Egyptian
- Marital Status: Married
- Number of children: 3
- Gender: Male

CONTACT

MAILING ADDRESS:

Electrical Engineering Department,
Faculty of Energy Engineering, Aswan
University, Egypt.

Posta Code: 81528

Phone: (+2) 01155788755

WhatsApp: (+2) 01099074051

Skype: eng_eltaieb

Website:

<http://ahmedeltayeb.webs.com>

Email:

Ahmed_Al_Tayeb@aswu.edu.eg

Ahmed.kahlil@ejust.edu.eg

Eng_eltaieb@yahoo.com

EDUCATION

2019 Ph.D. SCHOLAR: Graduate School of Energy, Chemical and Environmental Engineering, Egypt-Japan University of Science and Technology, Alexandria, Egypt.

Research field: Generation of Corona-Discharge Plasma Using Electrical Pulsed Power System and Its Application for Industrial Wastewater Treatment.

Courses grade is excellent (GPA=3.75 A+)

2011 MSc student: M.Sc. of Electrical Engineering- Faculty of Energy Engineering, Aswan University, Aswan, Egypt.

Research field: Performance of Overhead Transmission Line Insulators under Polluted Condition.

Courses grade is excellent (GPA=3.75 A+)

2006 Bachelor of Electrical Engineering: Electrical Engineering Department, Faculty of Energy Engineering, Aswan University, Egypt.

Electrical Engineering, Final year graduation project title: Design and analysis of Nag Hammadi 500 kV Substation.

Courses grade is excellent (GPA=3 A)

WORK EXPERIENCE

Nov. 2019-Until know Assistant Professor at Department of Electrical Engineering, Faculty of Energy Engineering, Aswan University, Aswan, Egypt.

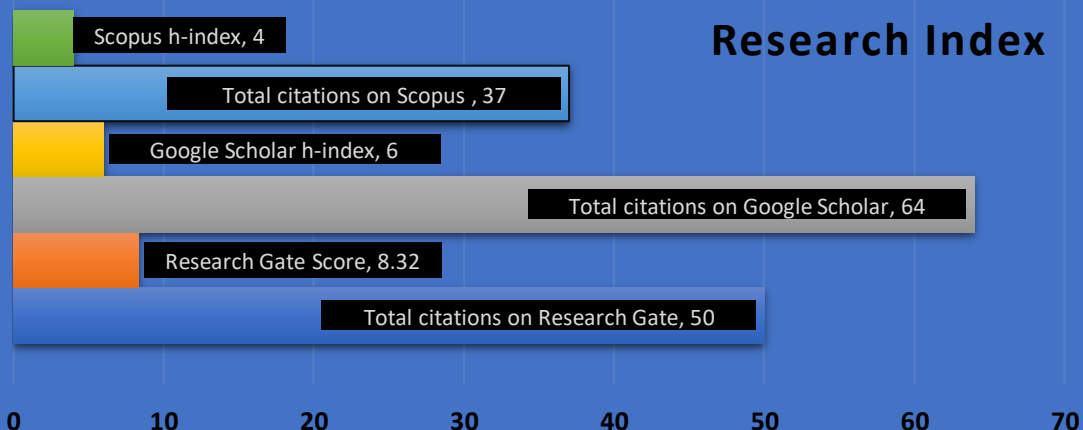
Nov. 2016- May 2019 Lecturer at Department of Electrical Engineering, Faculty of Energy Engineering, Aswan University, Aswan, Egypt.

Oct. 2013- Sept. 2016 PhD Student at Graduate School of Energy, Chemical and Environmental Engineering Egypt-Japan University of Science and Technology (E-JUST).

July 2011- Sept. 2013 Assistant Lecturer at Department of Electrical Engineering, Faculty of Energy Engineering, Aswan University, Aswan, Egypt.

Mar. 2007- June 2011 Teaching Assistant at Department of Electrical Engineering, Faculty of Energy Engineering, Aswan University, Aswan, Egypt.

Research Index



L a n g u a g e s

- Mother tongue(s): Arabic
- Another language(s): English
- International Certificate in English Language TOEFL (IBT): 82
- International English Language Testing System IELTS: 6



Reading



Listening



Speaking



Writing

A w a r d

- Award from ICOPS 2015 Student Travel Grant presented from:
- IEEE Nuclear and Plasma Sciences.
- Society Plasma Science and Applications committee.
- the 42nd IEEE International Conference on Plasma Science (ICOPS).

R e v i e w e r

- Reviewer in the paper of 16th and 17th IEEE International Conference on Environment and Electrical Engineering.
- IEEE Transactions on Plasma Science.
- Turkish Journal of Electrical Engineering & Computer Sciences.
- Alexandria Engineering Journal.
- Journal of Hazardous Materials.
- Desalination and Water Treatment.

C o m p u t e r S K I L L S

- International Computer Driving License (ICDL).
- Information & Communication Technology Project (ICTP).
- Programming Languages: **MATLAB program, C++, Fortran**
- **CST STUDIO SUITE™** Programs.
- **MAXWELL 3D-2D** Programs.
- **COMSOL 3D-2D** Programs.
- **ANSYS** Programs.
- **Aspen HYSYS**.
- Office & Presentation Programs: **Office up to 2019**.
- Operating System: **Ms-Dos, Windows up to win 10**.

R e s e a r c h F i e l d s

- Plasma Physics and Engineering, Non-thermal Plasma, Plasma Processing Engineering and Plasma Nanotechnology Material.
- High Voltage Engineering, High Voltage cables, Electrostatic precipitation and other applications.
- Calculations of the electrostatic and Magnetic fields (Quasi-static fields) and their effects
- Using Nano-material technology to improve the properties of the dielectric materials .
- Treatment of Industrial Wastewater Using Non-Thermal Plasma.
- Industrial applications of high voltage engineering, Corona discharge plasma for generation of ozone and active radicals.
- Electrochemical Analysis Electroanalytical Chemistry Energy Storage.
- Electric Utility Generation, Transmission and Distribution and Operation, Planning & Engineering.
- Renewable Resources and Distributed Energy Resources, Hydroelectric Generation, Wind Generation, Solar Generation, Photovoltaic Cells- Solar Power Generation and Storage, Geothermal Generation, Hydroelectric Generation and Energy Storage.

D e s c r i p t i o n o f D u t i e s

I have been teaching the following courses for undergraduate and postgraduate students in Faculty of Energy Engineering, Aswan University-Aswan, Egypt:

- **High Voltage Engineering (1 and 2)** (3rd Year and M. Sc. Degree,)
- **Application of High Voltage** (4th Year)
- **Measurement Instruments of High Voltage** (1st year Diploma)
- **Electric and Magnetic Fields** (2nd Year)
- **Electrical Energy Utilization** (2nd Year)
- **Electrical Measurements** (2nd Year)
- **Theory of Electrical Circuits** (2nd Year)

Working over than 3000 hours in student laboratory for first, second, third, and fourth years.

Updating the contents of the courses taught for undergraduate levels at the Electrical Engineering Department, Faculty of Energy Engineering.

Attending lectures given to demonstratives, assistant lecturers to develop my teaching skills.

Achievement

- Principal researcher Project with title: "Design and Testing of Pulse Power Supply for Non-thermal Plasma Application Feeding by PV Solar System" funded from the cooperation between The Massachusetts Institute of Technology (MIT) to establish the Center of Excellence for Energy Research, Education and Entrepreneurship (COE - Energy) at Ain Shams University in Egypt in collaboration with partner universities: Mansoura University and Aswan University.
- Researcher, STDF – ID 10755, project title (Design and Development of a new innovative unit for treatment of wastewater discharged from petrochemical industries using electrical D.C and Pulsed power system), funded from The Science and Technology Development Fund (STDF).
- Principal researcher, STDF – ID 43247 Project with title: "Battery Energy Storage Systems Development Based on Nanotechnology Implementation and Smart Management System Design" funded from The Science and Technology Development Fund (STDF).
- Executive Director of the laboratory for testing oils used in electrical insulators Funded from the project of developing and accrediting laboratories in higher education institutions (Twelfth session), Higher Education Development Projects Management Unit, Ministry of Higher Education.

Training

- Dec. 6 – Dec. 14, 2020:** Training Program with title (Training program for scholarship students abroad) presented from National Training Academy NTA, Cairo, Egypt.
- Jan. 15, 2020** Attending "Academia and Industry Day – Energy Edition" from the cooperation between The Massachusetts Institute of Technology (MIT) to establish the Center of Excellence for Energy Research, Education and Entrepreneurship (COE - Energy) at Ain Shams University in Egypt in collaboration with partner universities: Mansoura University and Aswan University.
- Aug. 9- Aug. 10, 2017** Training Program with title (Communication skills in different styles of education) presented from Development Center, faculty members and leaders, Aswan, Egypt.
- Jul. 15- Jul. 16, 2017** Training Program with title (The use of technology in teaching) presented from Development Center, faculty members and leaders, Aswan, Egypt.
- May 4- May 5, 2017** Training Program with title (Quality standards in the educational process) presented from Development Center, faculty members and leaders, Aswan, Egypt.
- Oct. 23- Oct. 27, 2016** Attending a course on (Advanced COMSOL Multiphysics 5.2) Presented by COMSOL at Egypt-Japan University of Science and Technology (E-JUST).
- May 29- June 3, 2015** Attending ICOPS-2015 Minicourse presented by IEEE Nuclear and Plasma Sciences and Society Plasma Science and Applications committee.
- April 16, 2015:** Workshop in, "Competitive Research Proposal Writing", Sponsored by E-JUST (CINTECH) through the existing module of the DAAD - Kairo Akademie (DKA).
- Mar. 29- April 2, 2015:** Training course in, "IRCA EnMS ISO 50001:2011 Auditor/Lead Auditor Training Course", Sponsored by TÜV Rheinland Egypt
- Nov. 18- 20, 2014:** Training course in "Basics of Life Cycle Assessment and SULCA Software What is LCA and why is it used Phases of LCA software and databases Practical Training with SULCA Software", E-JUST, New Borg El-Arab City, Alexandria, Egypt.
- Oct. 14, 2014:** workshop in, "Introduction to COMSOL Multiphysics, COMSOL Multiphysics for Oil & Gas Applications and Tutorials", Sponsored by COMSOL Multiphysics Workshop, Elnady Engineering & Agencies, COMSOL Representative in Arab Countries
- Sept. 7-11, 2014:** Training course in, "The Chemical Safety and Security Training Workshop", Sponsored by Chemical Security Engagement Program (CSP), Federation of Egyptian Industries (ECO-FEI) Environmental Compliance Office and Sustainable Development and the United States Department of State.
- Nov. 27 – Dec. 10, 2013:** Visit to Japan Kyoto University," Lectures, seminar and Workshops in Project Based Learning", Sponsored by Department of Chemical Engineering, Kyoto University.
- Mar. 3-11, 2010:** University teacher preparation: Faculty of Education, Aswan University, Ministry of Higher Education, Egypt.
- Dec. 29 – Dec. 31, 2009:** Training Program and passed the Examinations prepared by the Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Information and Communication) with Number of hours (12).

Invitation

➤ Visiting researcher to Japan Kyoto University," Lectures, seminar and Workshops in Project Based Learning", Sponsored by Department of Chemical Engineering, Kyoto University, Japan International Cooperation Agency (JICA) fellowship, visiting Chemical Engineering Department, Kyoto University, and Tokyo Institute of Technology, November 2013.

➤ Visiting researcher to Japan Kyoto University," Lectures, seminar and Workshops in Project Based Learning", Sponsored by Department of Chemical Engineering, Kyoto University, Japan International Cooperation Agency (JICA) fellowship, visiting Chemical Engineering Department, Kyoto University, and Tokyo Institute of Technology, November 2015.

Continuous Training

- Dec. 27** – Training Program and passed the Examinations prepared by the
Dec. 28, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Introduction to PC Maintenance and Protection) with Number of hours (6).
- Dec. 20** – Training Program and passed the Examinations prepared by the
Dec.24, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Database) with Number of hours (24).
- Dec.13** – Training Program and passed the Examinations prepared by the
Dec.17, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Spreadsheets) with Number of hours (18).
- Dec. 6** – Training Program and passed the Examinations prepared by the
Dec.9, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Presentations) with Number of hours (18).
- Nov.16** – Training Program and passed the Examinations prepared by the
Nov.21, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Word Processing) with Number of hours (24).
- Nov.7** – Training Program and passed the Examinations prepared by the
Nov.12, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Using Computers and Managing Files) with Number of hours (24).
- Oct.31** – Training Program and passed the Examinations prepared by the
Nov. 3, 2009: Central Unit of IT Training (CUIT)- Supreme Council of Universities- South Valley University- with title (Concepts of IT) with Number of hours (18).
- April 26-28,2009:** Training Program with title (Strategic Planning) presented from Development Center, faculty members and leaders, South Valley University, Ministry of Higher Education, Egypt.
- May 23-25, 2009:** Training Program with title (Quality standards in the educational process) presented from Development Center, faculty members and leaders, South Valley University, Ministry of Higher Education, Egypt.
- May 6-8, 2007:** Training Program with title (Design a course) presented from Development Center, faculty members and leaders, South Valley University, Ministry of Higher Education, Egypt.
- March 2007** International Computer Driving Licence (ICDL) presented from European Computer Driving Licence Foundation, South Valley University, Egypt.
- May 27-29, 2006:** Effective management in the meetings: Development Center, faculty members and leaders, South Valley University, Ministry of Higher Education, Egypt.
- 2000-2005:** Training in High Dam and Aswan Reservoir Authority, 500 KV Nag Hamadi substations, El khazan Aswan substation (1), (2), Aluminium Egyptian Company.

Reference

➤ Professor Masaharu Shiratani,
Department of Electronics,
Graduate School of Information
Science and Electrical Engineering,
Kyushu University, FUKUOKA, 819-
0395 JAPAN.

Tel: +81(92)802-3734

Fax: +81(92)802-3734

E-mail:

siratani@ed.kyushu-u.ac.jp

➤ Professor Koichi Yasuoka,
Department of Electrical and
Electronic Engineering-Graduate
School of Science and Engineering-
Tokyo Institute of Technology. 2-
12-1, S3-3, Ookayama, Meguro-ku,
Tokyo 152-8552, Japan.

Tel: +81-3-5734-2185

Fax: +81-3-5734-2185

E-mail: Yasuoka@ee.titech.ac.jp

➤ Professor Ahmed Hassan
Mohamed El-Shazly, School of
Energy, Chemical & Petrochemical
and Environmental Engineering,
Egypt Japan University of Science
and Technology (E-JUST).

Phone: +2(0)1002598756

Fax: +2(0)34599520

Email: elshazly_a@yahoo.com

➤ Professor O. E. Gouda,
Department of Electrical
Engineering, Faculty of
Engineering, Cairo University,
Cairo, Egypt.

Phone: +2(0)1223984843

Fax: +2(0)25714185

Email: d_gouda@vahoo.com

International Published Journals

- **A. El-Tayeb** and Adel Z. El Dein, "Performance of Ceramic Insulator String for 132kV under Different Polluted Conditions", J. Energy Power Sources, Vol. 1, No. 3, 2014, pp. 152-160, Received: July 13, 2014, Published: September 30, 2014.
- O. E. Gouda, Adel Z. El Dein and **A. El-Tayeb**, "Prediction of Flashover Voltage and Dry Band Location for Polluted Ceramic Insulators Using Dynamic Open-Model ", J. Energy Power Sources, Vol. 1, No. 6, 2014, pp. 304-313, Received: September 6, 2014, Published: December 30, 2014.
- **A. El-Tayeb**, A. H. El-Shazly, M. F. Elkady and A. Abdel-Rahman, "Simulation and Experimental Study for Degradation of Organic Dyes Using Dual pin-to-plate Corona Discharge Plasma reactors for Industrial Wastewater Treatment", Contrib. Plasma Phys. 2016, 56, 855–869, DOI: 10.1002/ctpp.201500080.
- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady, and A. Abdel-Rahman, "Investigation of the Decolorization Efficiency of Two Pin-to-Plate Corona Discharge Plasma System for Industrial Wastewater Treatment", Plasma Phys. Rep. (2016) 42: 887-899. DOI:10.1134/S1063780X16090026.
- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady, A. Abdel-Rahman, "Non-thermal plasma as a new advanced technique for intensifying the industrial wastewater treatment", Desalination and Water Treatment 61 (2017) 230–239 DOI: 10.5004/dwt.2016.11343.
- **A. El-Tayeb**, A. H. El-Shazly and M. F. Elkady, "Investigation the Influence of Different Salts on the Degradation of Organic Dyes Using Non-Thermal Plasma", Energies 2016, 9(11), 874; DOI:10.3390/en9110874.

International Published Conference

- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Non-thermal plasma as a new advanced technique for intensifying the industrial wastewater treatment ", The 7th conference in EuroMed Desalination for Clean Water and Energy, Palermo, Italy, 10–14 May 2015.
- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Simulation and experimental study for the effect of corona discharge plasma on the rate of wastewater treatment", The 7th conference in EuroMed Desalination for Clean Water and Energy, Palermo, Italy, 10–14 May 2015.
- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Investigation of the decolorization efficiency of pin-to-plate corona discharge plasma system for industrial wastewater treatment", The 42nd IEEE International Conference on Plasma Science (ICOPS), Antalya, Turkey May 24-28, 2015.
- **A. El-Tayeb**, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Decolorization of Acid Blue 25 Dye by Non-Thermal Plasma Advanced Oxidation Process for Industrial Wastewater Treatment", The 15th IEEE International Conference on Environment and Electrical Engineering (EEEIC 2015), Rome, Italy, June 10-13, 2015.
- **A. El-Tayeb**, A. H. El-Shazly and M. F. Elkady, "Impacts of Different Salts on the Degradation of Acid Blue 25 Dye Using Non-Thermal Plasma", The 16th IEEE International Conference on Environment and Electrical Engineering (EEEIC 2016), Florence, Italy, 7-10 June, (2016).

➤ **Professor. Adel Z. El Dein, The head of Electrical Engineering Department, Faculty of Energy Engineering, South Valley University, Aswan, Egypt.**
Phone: +2(0)1228008458
Fax: +2(0)972481234
Email: azeinm2001@hotmail.com

➤ **Professor Adel Abd Elrahman, Electronics and Communications Engineering Department, Egypt-Japan University of Science and Technology, New Borg El-Arab City, Alexandria, Egypt.**
Phone: +2(0)1275127146
Fax: +2(0) 34599520
Email: adel_b15@yahoo.com

➤ **Professor Marwa El-Kady, School of Energy, Chemical & Petrochemical and Environmental Engineering, Egypt Japan University of Science and Technology (E-JUST).**
Phone: +2(0)1227209936
Fax: +2(0) 34599520
Email: maroelkady@yahoo.com

- O. E. Gouda, Adel Z. El Dein, A. Thabet, and **A. El-Tayeb**, "Performance of Overhead Transmission Line Insulators under Polluted Condition", Master thesis 2011, Faculty of Energy Engineering, Aswan University, Aswan, Egypt.
- O. E. Gouda, Adel Z. El Dein, A. Thabet, and A. El-Tayeb, "Performance of Ceramic Insulator Type under Different Polluted Conditions", the 2nd International Conference on Energy Engineering ICEE-2, Aswan- Egypt.
- A. El-Tayeb, A.H. El-Shazly, M.F. Elkady, A. Abdel-Rahman, "Non-Thermal Plasma as a New Advanced Technique for Industrial Wastewater Treatment", 30th Water Treatment Technology Conference – AFC WTTC 2014.
- A. El-Tayeb, A.H. El-Shazly, A. M. Negm, M.F. Elkady, A. Abdel-Rahman, "Decolorization of Acid Blue 25 Dye by Corona Discharge Plasma System", 12th International Conference on Chemistry and its role in Development (ICCRD-2015), Mansoura & Sharm El-Sheikh, March 16-20, 2015.
- A. El-Tayeb, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " New Advanced Technique for Petrochemicals Wastewater Treatment Using Advanced Oxidation Process", the 2nd International Conference for Industry Academia Collaboration 2015 (IAC 2015), Al Azhar Conference Center, Cairo, Egypt, 6-8 April 2015.
- A. El-Tayeb, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Industrial Wastewater Treatment using Advanced Oxidation Process by Corona Discharge Plasma System ", 2nd E-JUST International Conference on innovative engineering was held from May 19 to May 21, 2015 at Bibliotheca Alexandrina.
- A. El-Tayeb, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Decolorization of Organic Dyes Using Advanced Oxidation Process by Corona Discharge Plasma System", The 2nd international conference new horizons in basic and applied science (ICNHBAS 2015), Hurghada, Egypt 1-6 August 2015.
- A. El-Tayeb, A.H. El-Shazly, M.F. Elkady and A. Abdel-Rahman, " Degradation of Organic Dyes using Gas-liquid electrical discharge reactors for Industrial Wastewater Treatment", The 3rd International Conference of Advanced Applied Sciences (ICAAS-III), Hurghada, Egypt 17-20th November 2015.