PERSONAL INFORMATION

Fahd A. M. Diab

Current: Electrical Engineering Department, Faculty of Engineering, Assiut University, Assiut 71516, Egypt.

Previous: USA, China, South Korea, KSA and I'm willing to relocate abroad ASAP.

0020 100 30 40 642

fahd.university@eng.au.edu.eg ; fah.maoad@yahoo.com ; fahd_diab@hrbeu.edu.cn

http://www.aun.edu.eg/membercv.php?M_ID=4895

https://www.researchgate.net/profile/Fahd_Diab

http://scholar.google.com/citations?user=45lu1NcAAAAJ&hl=en

https://www.linkedin.com/profile/preview?locale=en_US&trk=prof-0-sb-preview-primary-button

Sex Male | Date of birth 13 Dec 1986 | Nationality Egyptian

EDUCATION

2017–2018 — Postdoc Joint Researcher, **KOREATECH University, South Korea**

Laboratories of Electrical and Mechanical Engineering Department.

Laboratory of HRDI, Clean Room, PLC, Hybrid Automotive.

Laboratories of Academy-Industry Cooperation: Many labs regarding inspection on Materials.

Doosan Heavy Industry Factory, South Korea http://www.doosanheavy.com/en/

Hyundai Heavy Industry Factory, South Korea https://english.hhi.co.kr/

Hyundai Steel Company Factory, South Korea https://www.hyundai-steel.com/en/index.hds

2013 –2016 — **PhD Degree** (**Power Systems and Renewable Energy**)

(***Techno-Economic Feasibility Study and Environmental Evaluation of Hybrid Renewable Energy Systems***)

Harbin Engineering University, Harbin, China

- Hybrid Renewable Energy Systems (PV, Solar, Wind, Hydrokinetic, Marine, Biomass, Diesel, Battery ....).
- Environment Friendly Applications and GHG Emissions.
- Renewable Energy Policy and Sustainable Development Systems.
- Smart Grid.

2010 – 2013 — **M.Sc. Degree** (**Electrical Engineering**)

(***Analysis and Design of a New Electrostatic Motors***)

Assiut University, Assiut, Egypt

- High Voltage Engineering.
- Power Systems Protection.
- Electric Drives.

2003 – 2008 — **B.Sc. Degree** (**Electrical Engineering**)

Assiut University, Assiut, Egypt

- Very good with honor's degree.
- Project grade: **Distinction**.

RESEARCH ACHIEVEMENT AND PUBLICATIONS

[1] **Fahd Diab***, Hai Lan and Salwa Ali. Novel Comparison Study between the Hybrid Renewable Energy Systems on Land and on Ship. **Renewable & Sustainable Energy Reviews**, 2016; 63: 452-463.
(SCI International Journal… (IF: 9.184) …. Published)

[2] **Fahd Diab***, Hai Lan*, Lijun Zhang and Salwa Ali. An Environmentally Friendly Factory in Egypt Based on Hybrid Photovoltaic/Wind/Diesel/Battery System. **Journal of Cleaner Production**, 2016; 112: 3884-3894.
(SCI International Journal… (IF: 5.651) …. Published)

[3] **Fahd Diab***, Hai Lan*, Lijun Zhang and Salwa Ali. An Environmentally-Friendly Tourist Village in Egypt Based on a Hybrid Renewable Energy System—Part One: What Is the Optimum City? **Energies**, 2015; 8: 6926-6944.
(SCI International Journal… (IF: 2.676) …. Published)

[4] **Fahd Diab***, Hai Lan*, Lijun Zhang and Salwa Ali. An Environmentally-Friendly Tourist Village in Egypt Based on a Hybrid Renewable Energy System—Part Two: A Net Zero Energy Tourist Village. **Energies**, 2015; 8: 6945-6961.
(SCI International Journal… (IF: 2.676) …. Published)

[5] **Fahd Diab***, Salwa Ali. An Economic and Environment Friendly Solution for the Rural Households' Energy Crisis in Egypt. **Journal of Renewable and Sustainable Energy**, 2016; 8: 045904- 045921.
(SCI International Journal… (IF: 1.337) …. Published)

[6] Mazen Abdel Salam, Adel Ahmed, Hamdy Ziedan and **Fahd Diab***. Analysis of Corona Discharge Based Electrostatic Motor. **International Journal of Plasma Environment Science and Technology**, **Japan**, "IJPEST", 2014; 8: 60-69.
(International Journal……..…..……..……Published)

[7] Mazen Abdel Salam, Adel Ahmed, Hamdy Ziedan and **Fahd Diab***. Analysis of Corona Discharge in Electrostatic Motor Gaps. **Journal of Engineering Science** "JES", Assiut University, **Egypt,** 2013; 41: 1842-1856.
(Egyptian Journal……..…..…..……Published)

[8] **Fahd Diab***, Hai Lan. Feasibility Study of Smart Monofloat Hydrokinetic Power for the Rural Households in Naga Hammadi, Egypt. **ASME 2016 Power and Energy Conference, June 26-30, 2016, Charlotte, North Carolina, USA.**
(International Conference……..…..……Published)

[9] **Fahd Diab***, Hai Lan. New Approach to Combat Climate Change and GHG Emissions Affecting Human Health**. International Conference.**
(International Conference……..…..……Accepted)

[10] **Fahd Diab***. What is the Optimum Solar Penetration Level? -- Implications from the Economic and Environmental Perspectives.
(SCI International Journal……Submitted……Under Review)

[11] **Fahd Diab***. Optimization of Hybrid Biomass/Solar System for a Cost-effective and Reliable Energy Supply.
(SCI International Journal……..…..……Under Review)

[12] **Fahd Diab***. Comparative Study of Using Flywheel Energy Storage in the Hybrid Renewable Energy Systems.
(SCI International Journal……..…..……Under Review)

[13] **Fahd Diab***. A Review and Comparative Study between Off-Grid and Grid Connected Systems for Rural Electrification in the Eastern Mediterranean Region.
(SCI International Journal……..…..……Under Review)

[14] **Fahd Diab***. Literature Review and Future Prospects of Solar/Hydrogen Hybrid Energy Systems for Sustainable Development.
(SCI International Journal……..…..……Under Review)

RESEARCH INTERESTS

- **My Research Interests are under any topic in Electrical Engineering and it includes but are not limited to:**

- Hybrid Renewable Energy Systems (PV, Solar, Wind, Hydrokinetic, Marine, Biomass, Diesel, Battery ....).
- Environment Friendly Applications.
- Renewable Energy Policy and Sustainable Development Systems.
- Smart Grid.
- Power Systems Engineering.
- High Voltage Engineering.
- Electric Drives and Power Systems Protection.
- Electrical Engineering.

PROJECTS

- ✓ "***Study on the Application of Photovoltaic Technology in the Oil Tanker Ship***", Grant No. GK110900004. Execution period: January 2013-December 2015, China.
- ✓ "***Strengthening of the Research and Educational Capacity in Advanced Technology of Assiut University***" based on cooperation between KOREATECH University (Korea) and Assiut University (Egypt), July 2016- June 2020.
- ✓ "***Rapid Planning – Sustainable Infrastructure, Environmental and Resource management for highly dynamic metropolises***", based on cooperation between Assiut University, (UN-Habitat) and TU-Berline University in Germany, 2014-2019.

TEACHING EXPERIENCES

April 2010 – Present

- Electrical Testing Exp. course for 5th semester of Elec. Eng. Students.
- Electrical Testing Exp. course for 6th semester of Elec. Eng. Students.
- Electrical Testing Exp. course for 7th semester of Elec. Eng. Students.
- Electrical Testing Exp. course for 8th semester of Elec. Eng. Students.
- Electrical Testing Exp. course for 10th semester of Elec. Eng. Students.
- High Voltage Engineering course for 8th semester of Elec. Eng. Students.
- Electrical Machines course for 7th semester of Elec. Eng. Students.
- Electrical Circuits course for 3rd semester of Civil Eng. Students.
- Power Electronics course for 8th semester of Physics Science Students.
- Renewable Energy course for 9th semester of Elec. Eng. Students.
- Electric Field course for 3rd semester of Elec. Eng. Students.
- Power System course for 8th semester of Elec. Eng. Students.
- Electric Power Distribution course for10th semester of Elec. Eng. Students.
- Electrical Installations course for 6th semester of Sohag University Students.
- Utilization of Electrical Power for 8th semester of Sohag University Students.

Besides, I have several lectures about how to write scientific articles and how to be accepted in high rank SCI Journals for Int. Master and PhD students in China.

- *However, teaching interests can be any course related to Electrical Engineering*

Honors and Awards

✓ **I have been selected to be a Permanent International Peer Reviewer in Many SCI International Journals Including:**

- **IEEE** Transactions on Sustainable Energy, **IEEE** (**IF, 2017: 6.235**)
- Renewable & Sustainable Energy Reviews, ELSEVIER **(IF, 2017: 9.184)**
- Applied Energy, ELSEVIER (**IF, 2017: 7.900**)
- Desalination, ELSEVIER **(IF, 2017: 6.603)**
- Energy Conversion and Management, ELSEVIER **(IF, 2017: 6.377)**
- Journal of Cleaner Production, ELSEVIER **(IF, 2017: 5.651)**
- Renewable Energy, ELSEVIER **(IF, 2017: 4.900)**
- Energy, ELSEVIER **(IF, 2017: 4.520)**
- Solar Energy, ELSEVIER **(IF, 2017: 4.374)**
- Energy Policy, ELSEVIER **(IF, 2017: 4.039)**
- **IET** Renewable Power Generation, **IET (IF, 2017: 3.488)**

✓ Appointment as a Member of Advisor/Editorial Board at International Journal of Application and Innovation in Engineering & Management (IJAIEM).

✓ Membership of: IEEE, Faculty Members Syndicate and Egyptian Engineers Syndicate.

✓ Chinese Scholarship Council "CSC" PhD Scholarship.

✓ Win the first class representing Egypt at Harbin Engineering University, China.

✓ Best Graduation Project Award, Faculty of Engineering, Assiut University, 2008.

✓ A ward of Nahdet El-Mahrosa Organization for graduation project, 2008.

✓ Appreciation Certificate from UN HABITAT and German Ministry of Research and Education, 2017.

➢ The Selection Team at "**Renewable Energy Global Innovations**" has identified two articles of my publications as a ***Key Scientific Articles contributing to the excellence in energy research***. (https://reginnovations.org/key-scientific-articles/environmentally-friendly-factory-in-egypt-based-hybrid-photovoltaic-wind-diesel-battery-system/).

WORK EXPERIENCES

2010 – Present **Faculty Member**

Faculty of Engineering, Assiut University, Assiut, Egypt

- Scientific research and projects.
- Prepare and deliver lectures to undergraduate and/or graduate students.
- Ensuring students reach their full potential through the use of innovative teaching methods.
- Supervision and counseling of students on theoretical and practical activities.
- Supervise students' laboratory work.
- Evaluate and grade students' class work, laboratory performance, assignments, and papers.
- Compile, administer, and grade examinations.
- Maintain student attendance records, grades, and other required records.

- Prepare course materials such as syllabi, homework assignments, and handouts.
- Plan, evaluate, and revise curricula, course content, and course materials and methods of instruction.
- Supervise undergraduate and/or graduate teaching, internship, and research work.
- Keep abreast of developments in their field by reading current literature, talking with colleagues, and participating in professional conferences.
- Initiate, facilitate, and moderate classroom discussions.
- Select and obtain materials and supplies such as textbooks and laboratory equipment.
- Conduct research in my research field of interest.
- Serve on academic and administrative committees that deal with institutional policies, departmental matters, and academic issues.
- Prepare and submit required reports related to instruction.
- Act as advisers to student organizations.
- Any other duties assigned by the Dean.

2008 – 2010 **Electrical Engineer**

Cairo International Airport Power Plant, Cairo, Egypt

- Control, Operation, Protection and Maintenance of different Electrical Devices in the Airport, Heliport and Power Plant.
  - **It includes:**
    - Transformers.
    - Cables.
    - Bus Ducts.
    - Distribution Panels.
    - Counters.
    - Bagging Handling Systems.
    - Power Factor Correction.
    - UPS.
    - ATS.
    - Switch Gears.
    - Elevator and Escalators.
    - HVAC.
    - Electric Motors & Generators.
    - Transmission Lines.
    - Earthing Systems.
- Moreover, installation of the Emergency Diesel Generator Power Plant at Cairo International Airport, Terminal 2.

➢ In addition, attending several trainings and courses in several factories and companies including:

- ✓ Electricity Production Company (500 kV), Upper Egypt Electricity Distribution Company.
- ✓ Egypt Aluminum Company (Egyptalum).
- ✓ PBX Advanced course in Jelecom – Panasonic.
- ✓ PLC Advanced course in Japanese Company for Communications.
- ✓ Contribution at the training of energy field activities at the Engineering School of Assiut University and the School of Excellence, Assiut (Capstone).

What's more, attending several programs in **F**aculty and **L**eadership **D**evelopment **C**enter (FLDC) including:

- Credit Hour System.
- Strategic Planning.
- Student Evaluation.
- International Publishing of Research.
- Conference Organization.
- Code of Ethics.
- How to Compete For a Research Fund.
- Effective Presentation.
- Research Ethics.
- University Administration.
- Research Team Management.
- How to Design the Electronic Course.
- Legal Aspects in University Environment.
- How to use the Activities of the Egyptian Knowledge Bank.

GRADUATE COURSES

Pre- Master Courses

- ✓ Advanced Industrial Electronics.
- ✓ Advanced Control Engineering.
- ✓ Variable Speed Drives.
- ✓ High Voltage Engineering.
- ✓ Power Quality.

Pre- Doctor Courses

- ✓ Chinese Language.
- ✓ Modern Control Theory.
- ✓ Stochastic processes.
- ✓ Special Topics on Measurements.
- ✓ Survey of China.
- ✓ Academic Activity.

COMPUTER SKILLS

- ✓ Programming Language: MATLAB and Simulink.
- ✓ AutoCAD 2D & 3D, Designer & DIALux.
- ✓ Microsoft Office (Word, Excel, Power Point, Access and Visio) - ICDL.
- ✓ Hybrid Optimization of Multiple Electric Renewables Pro Software.
- ✓ Computerized Numerical Control - CNC.
- ✓ Virtual Instrumentation with LabVIEW.
- ✓ Solidworks.
- ✓ 3D Printing.

LANGUAGES

Mother tongue

- **Arabic**

Other languages

- **English**

  ITP TOEFL, IELTS (Excellent in Reading, Writing and Speaking)

- **Chinese**

REFERENCES

- **Available upon requested.**