

Curriculum Vitae

Name: Tawfiq Hussein Mohamed Elmenfy

Assistant Prof. of Automatic Control

Nationality: Libyan

Date of Birth: 1/1/1969 Tripoli

Specialization:

- Automatic Control System
- Power Plant Control
- Power System Stability & Control



Contact information

E-mail : tawfiq.elmenfy@uob.edu.ly

elmenfy@yahoo.com

Mobile: 0914247782 (Libya) or
(0927619035)

Academic Qualifications:

2006/2009	Ph.D. Electrical Engineering Cairo University, Egypt (Awarded the Best PhD Thesis)
2003/2005	M. Sc. Electrical Engineering Cairo University, Egypt
1986/1990	B. Sc. Electrical Engineering Bright Star University of Technology, Libya

Academic Field of Interest

Control systems: Adaptive control, intelligent control, power system control, wind energy conversion control and fuzzy logic control.

Current Job: (2014/2015)

- Dean, Faculty of Engineering, University of Benghazi.
- Staff Member at Electrical & Electronics Engineering Department, Faculty of Engineering, University of Benghazi.

(2013/2014)

- Head of Consultancy and Researches Office at Faculty of Engineering, University of Bnehgazi

Practical Experience (1991 to 2003)

- ✓ Thirteen years had been work in Gas Turbine Power Stations at General Electricity Company of Libya (GECOL).

Through these time I have worked in many positions and area as

- Control systems in Gas turbine Power Plants overhauling Supervisory (five times).
- DCS programming (Procontrol p13- Procontrol p14)
- DCS (T3000 Siemens Gas Power Plant)
- PLC Programming, Hardware Configuration for (Simatic s5- Simatic s7/300, Simatic s7/400, Simatic s7-200, AC-800M control builder)
- PLC Programming (Mitsubishi- Alen Bradelly, Modicon, Amron).
- Working as trouble-shooter and problems analyzer for power plant Control and power system stability.
- Numerical Generator & Transformer protections (REG 216, REL 316)
- Excitation system, Automatic Voltage Regulator (AVR), and Power System Stabilizer (PSS).

Grant:

- Performance of Power system stabilizer UNITROL D in Benghazi North Power Plant. Awarded by National Academy for Scientific Research (NASR) in Libya (2010).

Committees at GECOL:

1. Supervision on National Dispatch Centre and Tripoli Dispatch Centre at GECOL.
2. Head of the Instrumentation & Control Specifications of Benghazi North Combined Cycle Power Plant.
3. Key Persons Committee of Gas Turbine Power Plants.

Training

- 1- Training in Switzerland at ABB Company in the field of Gas turbine operation and control system. (for three months).
- 2- Training in Germany at ABB Company in the field of Programming of PLC and Gas Turbine troubleshoot. (for three months)
- 3- Training in Ireland at ESBI Company in the field of programming and used of PLC SIEMENS (SIMATIC S5 & S7). (for five months)
- 4- Familiar with MATLAB programming & Simulink to design software simulator for Power Plants with its control systems.

General Presentations:

1. PLC to control the fuel flow pump presented to Brega Oil Company (2001).
2. Boiler temperature control presented to Brega Oil Company (2002)
3. Programming of the maintenance by the computer presented to Sirt Oil Company (2003).
4. Maintenance and Calibration of the instrumentation and control presented to Brega Oil Company (2003).
5. Monitoring and Control of the Fire Fighting System presented to Brega Oil Company 92003).
6. Generator and Transformer Protection presented to General Electric Company of Libya (2003).
7. Operation and Control of the Gas Turbine Power Plants presented to General Electric Company of Libya (2003).
8. Level Measurement Transmitters presented to Brega Oil Company (2003)
9. Power Electronic Maintenance principal for presented to Sirt Oil Company (2003).
10. PLC Simatic S7- 300/400 presented to GECOL (2008).
11. PLC Simatic S7-300 presented to Iron& Steel Company (2009).
12. Electrical engineering course presented to the engineering in GECOL (2009).
13. DCS AC800M course presented to the El-Naher Company (2011).
14. PLC Simatic S7- 300/400 presented to GECOL (2014)

Journal Publications

1. T. Hussein, Saad, M.S., A. L. Elshafei, A. Bahget " Damping Inter-Area Oscillations using Fuzzy Adaptive Power System Stabilizers" *Electric Power Systems Research Journal*, 80 (2010) 1428–1436.
2. T. Hussein, A. L. Elshafei, A. Bahget " An Indirect Adaptive Fuzzy Power System Stabilizer for a Multi-machine Power System" *Proceedings on WSEAS Transaction on Systems and Control, Issue 5, vol. 2, May 2007, pp339-346.*
3. T. Hussein, A. L. Elshafei, A. Bahget "Robust Adaptive Fuzzy Logic Power System Stabilizer" *Proceedings on Expert system with applications* 36(2009), 12104-12112.
4. T. Hussein "Tuned of Power System Stabilizer (Unitrol D) in Benghazi North Power Plant Tuned By PSO" *32 International Journal of Energy Optimization and Engineering*, 2(2), 32-43, April-June 2013
5. Tawfiq Hussein Elmenfy " Adaptive Fuzzy Power System Stabilizer Tuned By Genetic Algorithm" *International Research Journal of Computer Science and Information Systems (IRJCSIS) Vol. 1(2) November, 2012.*
6. T. Hussein and A. Shamekh" Performance Assessment of Fuzzy Logic Power System Stabilizer on North Benghazi Power Plant" *Hindawi Publishing Corporation Conference Papers in Engineering Volume 2013, Article ID 635808, 6 pages, Accepted 12 May 2013.*

Conference Publications:

1. T. Hussein, A. L. Elshafei, A. Bahget" An Indirect Adaptive Fuzzy Power System Stabilizer for a Multi-machine Power System" *Proceedings of the 9th WSEAS International Conference on automatic control , modeling and simulation, Istanbul, Turkey, 27-29, May/2007, pp 24-29.*
2. T. Hussein, A. L. Elshafei, A. Bahget "Design of Hierarchical Fuzzy Logic Power System Stabilizer for Multi-machine Power System" *Proceedings of the 15th Mediterranean Conference on Control & Automation Athens, Greece, 27-29, July/ 2007. Paper no. T006-26.*
3. T. Hussein, M. S. Saad, A. L. Elshafei, A. Bahget " Damping Inter-area Modes of Oscillation Using an Adaptive Fuzzy Power System Stabilizer" *16th Mediterranean conference on control and automation Congress Center, Ajaccio, France, 27-29, June 2008.*

4. T. Hussein, A. L. Elshafei, A. Bahget " Comparison between Multi-band and Self-tuned Fuzzy Power System Stabilizers" *16th Mediterranean conference on control and automation Congress Center, Ajaccio, France, 27-29, June 2008.*
5. T. Hussein "Performance of Power System Stabilizer (Unitrol D) in Benghazi North Power Plant" *Conference of World Academy of Science, Engineering and Technology, Penang Malaysia, 74 2011.*
6. Tawfiq Hussein Elmenfy "Genetic Algorithm For optimum Design Of PID Controller In Load Frequency Control" *Conference of World Academy of Science, Engineering and Technology, Luzern, Switzerland, 12, 2012.*
7. T. Hussein and Awad El-shamekh " Fuzzy Logic Control Implementation as a Power System Stabilizer On Benghazi North Power Plant Benchmark" *ICECE Conference, Benghazi, Libya, 26-28, March, 2013.*
8. T. Hussein, Awad Elshamekh " Direct Adaptive Fuzzy Power System Stabilizer For a Multi-machine System" *2013 IEEE, UKSim 15th International Conference In Computer Modelling and Simulation.*
9. T. Hussein, Awad Elshamekh " Adaptive Rule-base Fuzzy Power System Stabilizer For a Multi-machine System" *2013 21st Mediterranean Conference on Control & Automation (MED), Platani-Chania, Crete, Greece, June 25-28, 2013*