

Curriculum Vita

Name: Hany El Said Fawaz

Ph.D. in Mechanical Engineering

Address: 396 Omr ebn-elkhatab street, Gesr Elswiz, Cairo.

Nationality: Egyptian

E-mail: ehf20012001@hotmail.com

Mobile. 01006169834

Education		
Name of College, etc	From - To	Qualifications
Benha university Faculty of Engineering	2007 - 2011	Ph.D. 2011
Al Azhar university Faculty of Engineering	2003 - 2006	M.Sc. 2006
Ain Shams University Faculty of Engineering	1996 - 2001	B.Sc. 2001

Employment		
Name and Address of Employer	Post Held	Brief description of duties and responsibilities
National Research Centre, NRC, Egypt	Researcher 2011 to Present	Conducting research in the field of Mechanical Engineering.
National Research Centre, NRC, Egypt	Research assistant 2006-2011	Conducting research in the field of Mechanical Engineering.
Arab organization for industrialization	2002-2006	Mechanical Designer

Ph. D Thesis:

Flow characteristics and heat transfer over corrugated plates

Master Thesis :

Programming of design and performance prediction of centrifugal pumps

List of Publications

-Hussein M. Maghrabie , M. Attalla , **H.E. Fawaz** , M. Khalil (2017) “ **Effect of jet position on cooling an array of heated obstacles**”, Journal of Thermal Science and Engineering Applications, Transactions of the ASME.

-Hussein M. Maghrabie , M. Attalla , **H.E. Fawaz** , M. Khalil (2017) “**Numerical investigation of heat transfer and pressure drop of in-line array of heated obstacles cooled by jet impingement in cross-flow**”, Alexandria Engineering Journal, Hosted by Elsevier.

-M. F. Abd Raboo, M. T. S Badawy, R. S. Sakr, A. G. Gomaa, H. R. Rashed, and **H. E. Fawaz** (2017)“**Numerical investigation of cutting edge effect on fluid flow and heat transfer for in-phase trapezoidal air channels**”, Alexandria Engineering Journal, Hosted by Elsevier.

- **H. E. Fawaz**, M. T. S. Badawy, M. F. Abd Rabbo, Amr Elfeky (2017) “ **Numerical investigation of fully developed periodic turbulent flow in a square channel fitted with 45° in-line V-baffle turbulators pointing upstream**”, Alexandria Engineering Journal, Hosted by Elsevier.

-S. A. Elbelady, **H. E. Fawaz**, A. M. Abdul Aziz (2016). " **On line self tuning PID control using neural network for tracking control of a pneumatic cylinder using pulse width modulation piloted digital valves**", International Journal of Mechanical & Mechatronics Engineering IJMME-IJENS, Vol.16, No.3, pp.123-136

-**H. E. Fawaz**, A. M. Abdul Aziz (2016). " **Position Control of a Pneumatic Actuator using Digital Valves and Fuzzy PI Controller**", International Journal of Mechanical & Mechatronics Engineering IJMME-IJENS, Vol.16, No.1, pp.10-22

-Farouk Owis, M .T. S. Badawy, K. A. Abed, **H. E. Fawaz** and Amr Elfeky (2015) “**Numerical Investigation of loaded and unloaded diffuser equipped with a flange**”, International Journal of Scientific & Engineering Research, Volume 6, Issue 11, pp. 312-341

-Ahmed S. Abd El-Hamid and Ahmed, h. Eissa, A.M. Abouel-Fotouh and **H. E. Fawaz** (2014). "**Adaptive PID control Parameters Optimization using Trust-Region-Reflective Algorithm for pH Neutralization Process**", International Journal of Scientific & Engineering Research, Volume 5, Issue 10, pp. 702-712

-A.M. Abouel Fotouh and **H. E. Fawaz** (2014) "**Investigation of the Effect of Inducing Impingement Wall Velocity on the Flow Field and the Heat Transfer Process in a Semi Confined Impinging Configuration**", Current Science International 3(3), pp. 279-289.

-M. F. Abd Raboo, M. T. S Badawy, R. S. Sakr, A. G. Gomaa, H. R. Rashed, and **H. E. Fawaz** (2012) "**Numerical investigation of laminar forced convection in sinusoidal air channels**", Journal of Energy, Heat and Mass transfer, Volume No. 34, pp. 261-289.

-**H. E. Fawaz**, "**Flow characteristics and heat transfer over corrugated plates**", *Ph.D.* Thesis, Faculty of Engineering at Shubra, Benha university 2011.

-M. F. Abd Raboo, M. T. S Badawy, R. S. Sakr, A. G. Gomaa, H. R. Rashed, and **H. E. Fawaz** (2010) "**Flow characteristics and heat transfer for in-phase sinusoidal air channel**", Journal of Faculty of Engineering, Benha University, Volume No. 12(1), pp. 133-153.

-M. F. ElRefaei, M. T. S. Badawy, H. M. Sadek and **H. E. Fawaz** (2008) "**Computer aided design of Centrifugal pumps**", 3rd International Conference on Engineering Sciences & Technologies under the name of "Engineering Sciences & Technologies" as speaker, March 24-26, 2008, Engineering Research Division, National Research Centre, Cairo, Egypt.

-**H. E. Fawaz**, "**Programming of design and performance prediction of centrifugal pumps**", M.Sc Thesis, Faculty of Engineering, Al Azhar university (2006).

Projects :

-Principal Investigator of the project title : "**Developing pneumatic actuators via pneumatic artificial muscles driven by fuzzy logic controller under embedded Linux platform**", Project No. 11090122 from 1/7/2016 to 1/7/2019.

-Participant of the project title: "**Installation, operation and testing of 3 KW wind generator at NRC land in 6 October City**", Project No. 11050118 from 1/7/2016 to 1/7/2019.

-Co-Principal Investigator of the project title: "**Advancing local machining capacity through local design and manufacture of computer controlled electrical cutting machines**" Project No. 10050003 from 1/7/2013 to 1/7/2016.

-Participant of the project title : **“Development of an economical and sustainable irrigation pump and water delivery to remote and rural areas”**, Project No. 10040001 from 1/7/2013 to 1/7/2016.

-Principal Investigator of the project title : **“Improving hydraulic system performance using hybrid fuzzy PID control algorithm”**, Project No. P90601 from 1/7/2012 to 1/7/2013

-Participant of the project title: **“Technological and Engineering Development for Production of Desalination Hollow Fiber Membranes”**, From 2011 till now.