### **CURRICULUM VITA**

### Mostafa Abdelmohimen Hussein, Ph.D

Michigan University Dearborn Fellow Mechanical Engineering Department Shoubra Faculty of Engineering, Benha University 108 Shoubra st., Cairo, Egypt Tel. +966 – 560383210

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#### **EDUCATION:**

- Ph.D. Mechanical Power Engineering, Department of Mechanical Engineering, Shoubra Faculty of Engineering, Benha University, Egypt, 2010.
- M.Sc. Mechanical Power Engineering, Department of Mechanical Engineering, Shoubra Faculty of Engineering, Benha University, Egypt, 2006.
- B.Sc. Mechanical Power Engineering, Department of Mechanical Engineering, Shoubra Faculty of Engineering, Benha University, Egypt, 2000.

#### AREAS OF EXPERTISE:

- 1. Fluid Mechanics.
- 2. Hydraulic Machines.
- 3. Heat transfer.
- 4. Thermodynamics.
- 5. Computational Fluid Dynamics (CFD).
- 6. Measurements.

**PERMANENT JOB:** Lecturer, Mechanical Engineering Department, Shoubra Faculty of Engineering, **Benha University**, **Egypt**.

\*Head of Alumni Unit\*, Shoubra Faculty of Engineering.

CURRENT JOB: Assistant Professor, Mechanical Engineering Department, College of Engineering, King Khalid University, Saudi Arabia

#### **WORK EXPERIENCE:**

Oct. 2010 – Lecturer, Mechanical Engineering Department,

present Shoubra Faculty of Engineering, Benha University, Egypt.

Head of Alumni Unit, Shoubra Faculty of Engineering.

Giving Training courses in INTERLINK training & consultation, Egypt

Jan. 2006 – Oct. 2010	Assistant Lecturer & Researcher, Mechanical Engineering Department, Shoubra Faculty of Engineering, Benha University, Egypt.
July 2002 – Jan. 2006	Demonstrator, Mechanical Engineering Department, Shoubra Faculty of Engineering, Benha University, Egypt.
April 2002 – July 2002	Housing & Building Research Center, Ministry of Housing, Utilities & Urban Communities, Egypt.
Dec. 2001 – April 2002	Cars maintenance engineer in Ministry of Housing, Utilities & Urban Communities, Egypt.
Oct. 2000 – Nov. 2001	Egypt Military Force, (Military Service) Engine Department (test and repair of diesel engines injection pumps).

### **TEACHING ACTIVITIES:**

University of Benha, Mechanical Engineering Departments Courses:

- 1. Fluid Mechanics,
- 2. Thermo Dynamics,
- 3. Heat Transfer,
- 4. Gas Dynamics,
- 5. Hydraulic Machine,
- 6. Measurements,
- 7. Fluid Power, and
- 8. Power stations.

#### **SKILLS:**

### **Computer**

- Excellent user of Microsoft Office (Word, Excel & PowerPoint).
- Excellent user of Internet applications for research
- Excellent user of Buildings simulation programs (Doe-2 and Visual Doe)
- Excellent user of Fluid and Heat transfer simulation programs (CFD programs, Fluent).
- Excellent user of Computer language (Basic and C)

## **Language**

- Fluent in spoken and written Arabic (native).
- Excellent in spoken and written English.

### **PUBLICATIONS:**

# A. Journal Papers

- Mostafa A. Hussein, George B. Hanna, Moncef Kararti, "Analysis of Day lighting Benefits for Office Building in Egypt" Journal of Solar Energy Eng. August 2005 Volume 127, Issue 3, 366-371.
- Mostafa A. Hussein, Tarek. A. Mekhail, Samir S. Ayad, and Karam M. El-Shazly "An Investigation of the Effect of Anti-Vortex Film Cooling On a Flat Plate" Engineering and Scintific Research Journal (ESRJ), Faculty of Engineering Benha University, ISSN 1687 1340, Volume No.(12) No.(1), pp 34 51, 2010.
- Mostafa Abdelmohimen, Maher G. Higazy, "LES of Turbulent Mixing In Anti-Vortex Film Cooling Flows" Int. J. of Multidisciplinary and Current research, Nov/Dec 2013,146-152.
- Mostafa Abdelmohimen, "Numerical Investigation of Film Cooling from Two Rows of Holeswith Anti-Vortex HolesAttached to the Upstream Row" International Journal of Engineering and Technology Innovation, , 2015, In Press

# **B. Referred Conference Papers:**

- Mostafa A. Hussein, George B. Hanna, Moncef Kararti, "Analysis of Day lighting Benefits for Office Building in Egypt" SOLAR 2004 CONFERENCE July 11-14, 2004 Portland Oregon USA.
- George B. Hanna, Nabile M. Guirguis, Hend S. Osman, Mostafa A. Hussein, "*Energy Analysis for New Residential Buildings in Egypt*" International Conference: Future Vision and Challenges for Urban Development, Cairo, Egypt: 20-22 December 2004.
- Karam M. El-Shazly, Alaa-Eldin Zohir Ali, Ali A. Abdel-Aziz, Mostafa A. Husein, "Heat Transfer Characteristics of pulsated Flow Downstream of Abrupt Expansion Through Pipes" 2<sup>nd</sup> International Conference on Advances in Engineering Sciences & Technology, NRC, Egypt, Nov. 12-14, 2005.
- Mostafa Abdel-Mohimen, Tarek Mikhael, Samir S. Ayad, and Karam M. El-Shazly, "An Investigation of the Effect of Anti-Vortex Film Cooling on Flat Plate" Tenth International Congress of Fluid Dynamics (ICFD 10), 16-19 December, 2010, Ain Soukhna, Red Sea, Egypt.
- M. A. H. Abdel-Mohimen, T. A. Meakhail, S. S. Ayad, and K. M. El-Shazly, "Effect of Pressure Gradient on Film Cooling from Holes Supplemented by Anti-Vortex Holes" 15<sup>th</sup> International Conference on AEROSPACE SCIENCES & AVIATION TECHNOLOGY, May 28 30, 2013, Military Technical College, Cairo, EGYPT.

### C. Theses:

• Ms.c "An Experimental Investigation of Heat Transfer to Turbulent Pulsating Flow Downstream Sudden Pipe Expansion", 2006, Mechanical Power Engineering, Shoubra Faculty of Engineering, Benha University, Cairo, Egypt.

• Ph.D "Study of the Film Cooling due to Jet in Cross Flow", 2010, Mechanical Power Engineering, Shoubra Faculty of Engineering, Benha University, Cairo, Egypt.

# WORKSHOPS AND CONFERENCES ATTENDED

• Study Tour from 18th April to 2nd May 2004 in Chemniz / Germany organized by iproplan® Planungsgesellschaft mbH in cooperation of UNDP Egypt and UN DESA.

"Energy Saving in Residential and Commercial Building in Germany"

- Deliver a lecture in study Tour for Energy Simulation (VDoe3.1) to Palestinian Group from 28 Feb to 3 March 2004 under supervision of HBRC in cooperation of UNDP.
- Proffessional Fellows program, 10th October 2011 to 10th November 2011 in USA. Organized by UNIVERSITY OF MICHIGAN-DEARBORN. Sponsored by United States Department of States.

"Engineering Pathways from Education to Employment Program"