# **Curriculum Vitae**

For

#### **Mohamed Othman Ibrahim Othman** Assistant Professor in Mechanical Engineering and Industrial

Assistant Frofessor in Neenancear Engineering and industrial Engineering Department, College of Engineering, Majmaah University, KSA, Majmaah, Riyadh,11952, P.O.Box 66, Kingdom of Saudi Arabia on sabbatical leave from Helwan University, Mechanical Design Department, Faculty of Engineering, El-Mataria Helwan University Cairo, El-Mataria,11724, Egypt E-mail: <u>a\_osman9@yahoo.com</u> <u>m.othman@mu.edu.sa</u> Tel. No. : 002-01270661507 00966503347820



## **Education**:

2015 Ph.D.	Mechanical Design [Materials]	Helwan University, Egypt
2008 M.Sc.	Mechanical Design [Materials]	Helwan University, Egypt
2002 B.Sc.	Mechanical Engineering [Power]	Helwan University, Egypt

#### Key Qualification:

Fundamentals of Engineering Drawing & System Dynamics & Machine Dynamics & Engineering Mechanics (Statics) & Engineering Mechanics (Dynamics) & Mechanics of Materials& Automatic Control & Thermodynamics II & Operation Research & Mechanical Vibration & Machine Element Design & Mechanical Design II

#### Work Experience:

2011-201	7	Ass.	Lecturer			<u>Majm</u>	aah Univ.	
Taught: Several Courses including: Machine Ele			ement Design, Mechanical Drawing, AutoCAD,					
	Mechanic	al Vibrati	on, Theory	of Mac	hine, Integ	ral Calculus,	Differentia	l Calculus,
	Fundamen	ntals of	Engineering	g Techr	nology, M	echanics of	Materials,	Operation
	Research,	Thermody	ynamics II, I	Mechani	ical Measur	rement and Me	echanical D	esign.
2008-2011 Ass. Lecturer Helwan Uni		<u>n Univ.</u>						
Taught:	Several	Courses	including:	Stress	Analysis,	Mechanical	Drawing,	AutoCAD,
	Mechanic	al Vibratio	on, Theory o	of Machi	ne.			

# 2004-2008DemonstratorHelwan Univ.

*Taught* Several Courses including: Mechanical Design, Machine Element Design, Strength of Materials, Stress Analysis, Mechanical Drawing, AutoCAD and Mechanical Vibration

#### **Computer Expertise:**

**Software:** Spreadsheets (EXCEL), [ANSYS] Finite Element Program (CFD), Mat LAB Microsoft word, AutoCAD and Solid works.

#### References:

- 1- Prof. Y. M. Shabana, Mechanical Design Dept., Helwan University in Mataria Cairo, EGYPT Tel 2-(02) 01155603536.
- 2- Prof. R. M. Gadelrab, Mechanical Design Dept., Helwan University in Mataria Cairo, EGYPT Tel 2-(02) 01005184534.
- 3- Associate Prof. K. Zied, Mechanical Design Dept., Helwan University in Mataria Cairo, EGYPT Tel 2-(0966) 0566031224.

#### Patent:

1. <u>Registration for Patent No. 1 from:</u>

King Abdul-Aziz City for Science and Technology

**Registration** No. : 116370492

Date: (26-6-1437H) (4-4-2016)

Invention Name: "Creep Testing Machine for Ring Specimens using in Natural Gas Piping Systems"

2. <u>Registration for Patent No. 2 from:</u>

King Abdul-Aziz City for Science and Technology Registration No. : 117380278 Date: (26-6-1437H) (04-04-2016)

Invention Name: "Creep Testing Machine for Muti Ring Specimens using in Natural Gas Piping Systems"

3. <u>Registration for Patent No. 3 from:</u>

King Abdul-Aziz City for Science and Technology Registration No. : 117380287

Date: (16-4-1438H) (14-01-2017)

Invention Name: " Pre-Cracking Machine for Polymeric Ring specimens"

4. <u>Registration for Patent No. 4 from:</u>

King Abdul-Aziz City for Science and Technology Registration No. : 117380624 Date: (25-7-1438H) (22-04-2017) Invention Name: "Smart Convenient Tracks in Trains for Special Needs"

# 5. <u>Registration for Patent No. 5 from:</u>

King Abdul-Aziz City for Science and Technology Registration No. : 117380625 Date: (26-7-1438H) (23-04-2017)

# Invention Name: "Smart Waiting Cabins for Pilgrims using Renewable Energies"

## **Publications:**

## 1. Conference:

- M. Osman, R. M. Gadelrab, E. M. Rabeih, and Y. M. Shabana, <u>"Dynamic Behavior of a</u> <u>Driveline Shaft Made of Composite Material"</u> Asian Conference on Mechanics of Functional Materials and Structures Matsue, Shimane, Japan, Nov. 2008.
- M. Othman, K. Zied and T. Elmahdy. <u>"Improving the In-plane Stiffness of the Hexagonal Re-entrant Auxetic Honeycomb Cores"</u> 16 th International Conference on AEROSPACE SCIENCES & AVIATION TECHNOLOGY, Military Technical College, Kobry Elkobbah, Cairo, Egypt, May. 2015.

# 2. Journals:

- M. Osman, Tawfeeq A. Alkanhal and S. A. Ahmed, <u>"Investigation into Tubular Structure Formed by Pitting Corrosion on the Surface of Carbon Steel</u>" Journal of Engineering Sciences, Assiut University, March, 2013, Vol. 41, pp. 483-500.
- M. Osman and S. A. Ahmed. "Investigation into Cavitation Damage Progress in the Incubation Period using Stepwise Erosion and Image Process Techniques Journal of Engineering Sciences, Assiut University, May, 2014, Vol. 42, pp. 683-702.
- Mohamed Osman, Khaled Zied and Tarek Elmahdy. "Enhancement of the in-plane stiffness of the hexagonal re-entrant auxetic honeycomb cores" <u>Physica Status Solidi</u>, July 2015.

# **Under Publication:**

M. Almutairi, N. Almutairi, S. Alsubaiei, A. Aldukhaiyel, A. Alghanim, H. Almutairi, M. Othman, I. Tlili,. <u>"Thermal behavior of auxetic honeycomb structure: An experimental and modelling investigation</u>" International Journal of thermal sciences, Elsevier.

# **Dissertations:**

- 1- Dynamic Behavior of a Driveline Shaft Made of Composite Material, M. Sc. Thesis, Helwan Univ., Egypt, August 2008.
- 2- Vibrational and Acoustical Characteristics of Novel Auxetic Honeycomb Structures, PhD. Thesis, Helwan Univ., **Egypt**, December 2015.

## **Students Projects:**

1. Project 2017 Majmaah University <u>"Experimental Study and Modeling of Thermal</u> <u>Characteristics for Honeycomb Sandwich Pane</u>" Mechanical and Industrial Engineering Department, Faculty of Engineering, Majmaah University, 2017, Majmaah-Saudi Arabia.

## **Research projects funded locally or internationally:**

Research title	Year of Funding	The funding agency
Investigation into Tubular Structure Formed by Pitting Corrosion on the Surface of Carbon Steel	1433-1434 H	Deanship of Scientific Research, Majmaah University
Investigation into Cavitation Damage Progress in the Incubation Period using Stepwise Erosion and Image Process Techniques	1434-1435 H	Deanship of Scientific Research, Majmaah University

# Participation of the member in the committees

No.	Committee Name	Committee Mission	Committee work Period
1	Quality Unit	Member of the quality unit in mechanical and industrial engineering department	2011, Academic year (1432- 1434H)
2	Formation of the Graduates Affairs unit	Member	1435-1438H
3	The Program and study plans unit	Member	1433-1438H
4	Documentation and Archiving Committee	Member	1436-1438H
5	Engineering Practice Committee	Member	1436-1437H
6	Senior Design	Member	1436-1437H
7	Community Services	Member	1436-1437H
8	study schedules and examinations unit	Member	1433-1438H

# **Training Courses**

No.	Name of Course	Place Taken	Date Taken
1	Strategic plan and academic Administration	Cairo, Egypt (Helwan University)	12-13, July, 2016
2	Local and global Competitive Research Projects	Cairo, Egypt (Helwan University)	17-18, July, 2016
3	Examination Systems and Evaluation of Students	Cairo, Egypt (Helwan University)	19-20, July, 2016
4	The Foundations of the Building and Development of Academic Course	Cairo, Egypt (Helwan University)	24-25, July, 2016
5	Quality Standards in the Teaching Process	Cairo, Egypt (Helwan University)	26-27, July, 2016
6	Feasibility Study of Research Projects	Cairo, Egypt (Helwan University)	31-1/8 /2/2006
7	Skills of Scientific Research	Majmaah University	27-5-1437Н