

## CURRICULUM VITAE



### Dr. Ihsan A. Baqer

#### 1 Personal Details

- Date of Birth: 25/1/1981
- Place of Birth: Baghdad (IRQ)
- Place of Live: Iraq - Baghdad
- Phone Number: +964 7500143845 (Iraq)
- E-mail Address: 20007@uotechnology.edu.iq

#### 2 Education

- **University of Technology, Baghdad**  
Ph.D – Mechanical Engineering / Applied Mechanics  
Enrollment Date: 1/10/2009  
Graduation Date: 11 / 3 / 2014  
Thesis Grade: 90 % [70 : pass mark 100 : best].  
Course Average: 82.292 %  
Total Average: 86.916 %
- **Ph.D study contained these subjects:**  
Miscellaneous Topics in Mathematics, Stress Analysis, Dynamic of Rotary Machines, Advanced Vibration, Robotics, Composite Materials, Advanced Tribology , Advanced Mechanical Behavior of Materials, English Language.
- **University of Technology, Baghdad**  
M.Sc. – Mechanical Engineering / Applied Mechanics  
Enrollment Date: 16/10/2004  
Graduation Date: 28 / 12 / 2006  
Thesis Grade: 86 % [70 : pass mark 100 : best].  
Course Average: 82.25 %  
Total Average: 83.5 %
- **M.Sc. study contained these subjects:**  
Advanced Mathematics, Advanced Elasticity, Advanced Dynamic, Advanced Vibration, Numerical Analysis, Automation, Plates and Shells Theory, Lubrication ,Fracture mechanics, Mechanical Behavior of Materials.
- **University of Technology, Baghdad**  
B.Sc. – Mechanical Engineering / General  
Graduation Date: 25 / 6 / 2002  
Grade 80.882 / 100 [ 50 : pass mark 100 : best]  
2<sup>nd</sup> rank out of 83 graduates

- **B.Sc. study contained these subjects:**

Engineering Drawing & Descriptive, Mechanical Drawing, Engineering mechanics, Mechanics of materials, Mechanics of machines, Manufacturing processes, Mathematics, Engineering Analysis, Thermodynamics, Vibration, Machine design, Fluid Mechanics, Automatic control, Heat transfer, Air-Conditioning & Refrigeration, Electrical Engineering, AutoCAD, Industrial Management.

### 3 Work Experiences

- 2007-2014 Asst. lecturer at the Department of Mechanical Engineering/University of Technology / Tutorial lectures: mechanical design.
- 2014-till now Senior lecturer at the Department of Mechanical Engineering/University of Technology / lectures: mechanical design.
- 2016-till now Supervision on two thesis for M.Sc. at the Department of Mechanical Engineering/University of Technology.

### 4 Research Interests

- Mechanical Design
- Modeling and Simulation
- Robotic Design and Control
- Artificial Intelligent Algorithms
- Measurements and Experimental tests

### 5 Publications

- Somer M. Nancy, Mauwafak A. Tawfik, Ihsan A. Baqer "Static and Dynamic Calibration for FlexiForce Sensor Using a Special Purpose Apparatus", Journal of Innovative Systems Design and Engineering, Vol.4, No.1, 2012. (Published by IISTE, USA, www.iiste.org).
- Somer M. Nancy, Mauwafak A. Tawfik, Ihsan A. Baqer "Grasping Force Prediction for Underactuated Multi-Fingered Hand by Using Artificial Neural Network", Journal of Control Theory and Informatics, Vol.3, No.1, 2013. (Published by IISTE, USA, www.iiste.org).
- Somer M. Nancy, Mauwafak A. Tawfik, Ihsan A. Baqer "A Novel Fingertip Design for Slip Detection under Dynamic Load Conditions", ASME Journal of Mechanisms and Robotics, Vol.6, No.3, August 2014.
- Somer M. Nancy, Mauwafak A. Tawfik, Ihsan A. Baqer " A Novel Approach to Control the Robotic Hand Grasping Process by Using an Artificial Neural Network Algorithm", Journal of Intelligent Systems, Vol.26, Issue.2, April 2017.
- Mauwafak Ali Tawfik; Ihsan Abdulhussein Baqer; Hayder Ahmed Abdulrazzaq ,“SLIP DETECTION FOR A SPECIFIC DESIGN OF FINGERTIP IN MULTI-DIRECTION UNDER DIFFERENT LOAD CONDITIONS”, Journal of Engineering and Sustainable Development, 23(01):103-116, 2019.
- MA Tawfik, IA Baqer, AD Abdulsahib , “Grasping Force Controlling by Slip Detection for Specific Artificial Hand (ottobock 8E37)”, Engineering and Technology Journal, Vol. 36, Part A, No. 9, 2018.
- WA Soud, IA Baqer, MR Ahmed ,“Experimental Study of 3D Printing Density Effects on the Mechanical Properties of the Carbon-Fiber and Polylactic Acid Specimens”, Engineering and Technology Journal, Vol. 37, Part A. No. 04, 2019.
- Ihsan A. Baqer, Mauwafak A. Tawfik, Hayder A. Abdulrazzaq ,“ANN Control Based on Patterns Recognition for A Robotic Hand Under Different Load Conditions”, Journal of University of Babylon for Engineering Sciences, Vol.(26), No.(5): 2018.

- Marwah Sabah Fakhri , Ihsan A. Baqer , “Numerical Analysis of Contact Area under Slippage Conditions”, Journal of University of Babylon for Engineering Sciences, Vol. (27), No. (1): 2019.
- Baqer, Ihsan A.; Abd Soud, Wafa; Ahmed, Mohammed R. , “Design optimisation for a novel underactuated robotic finger by genetic algorithms”, Australian Journal of Mechanical Engineering, 2020.

Book: Ihsan A. Baqer, Somer M. Nacy, Mauwafak A. Tawfik, "Modeling of 3D Grasping of Artificial Hand Under Dynamic Load", Scholars' Press ,2015.

## 6 Relevant Skills and Hobbies

### 6.1 Engineering and Computer Skills

- Engineering Design : Solidworks, Multi-physics Comsol, Ansys Workbench.
- Programming Languages: Matlab, Simulink, Labview.
- Operation Systems: Windows.
- Microsoft Office: Word, Excel, Power Point.

### 6.2 Language Skills

- English
- Arabic (Mother Language).

### 6.3 Hobbies

Computer software packages, Graphical design, Internet surfing, Sports, Cinema and reading.

## 7 Management Experiences

2007-2009	Registration manager in the Department of Mechanical Engineering.
2007-2009	Member of the Committee discipline students in the Department of Mechanical Engineering.
2014-2015	Member of the auditing committee of graduate rates in the Department of Mechanical Engineering.
2014-2015	Member of the Committee Examination in the Department of Mechanical Engineering.
2014-2015	Member of the Committee of quality in the General Mechanics Branch/Department of Mechanical Engineering.
2015-2017	Manager of Documents and Alumni Unit in the Department of Mechanical Engineering.
2017-till now	Coordinator of Mechanical Eng. Dept.-University of Technology-Iraq

## 8 References

**Asst. Prof. Moayed Razoki Hasan Al-Abudat**

Head of Mechanical Engineering Dept./University of Technology-Iraq.