

# **Basim M. Fadhil CV**

**Prof.Dr. Basim Mohammed Fadhil**

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**Date of Birth: 1962**

**Nationality: Iraqi**



**A Ph.D holder of Mechanical Engineering with a wide experience in lecturing, teaching and demonstrations to students at both undergraduate and postgraduate levels as well as assisting in the making of course works, projects and supervising several M.Sc.**

## **Education Qualifications**

***Post-doctorate –University on Nantes – France -2018***

***Ph. D. in Mechanical Engineering, University of Technology, Department of Machines & Equipment Engineering, 2001***

***Msc. in Mechanical Engineering , University of Technology, Department of Machines & Equipment Engineering ,1994***

***Bsc. in Mechanical Engineering , University of Technology, Department of Machines & Equipment Engineering,1985***

## **Academic Experience**

### **2011-Onward**

***Tutor Of the following Modules in the faculty of engineering /Koya University:  
Engineering Mechanics (Statics and Dynamics)***

***Mechanics of materials and FEM***

***Advanced Engineering Mathematics***

### **2006- 2011**

***Tutor of the following modules in Koya University, Erbil, Iraq:***

***- Engineering Mechanics (Statics and Dynamics)***

***- Advanced Engineering Mathematics***

***- Engineering of Materials***

### **2003-2006**

***Tutor of the Following modules in University of Technology, Department of Materials, Baghdad, Iraq:***

***- Engineering Mechanics (Statics and Dynamics)***

***- Mechanical Metallurgy***

## ***Mechanical Behaviour of Materials (Postgraduate)***

**1997-1998**

***Lecturer in Mechanical Engineering department at the College of Engineering, University of Tikrit, Tikrit, Iraq.***

***Lecturer in Mechanical Engineering department at the College of Engineering, University Of Anbar, Anbar, Iraq.***

**1994-1996**

***Teaching Aid in the following subjects at University of Technology, Department of Machines & Equipment Engineering:  
Engineering Mechanics (Statics and Dynamics)***

<b>Academic Positions</b>	
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**2013-2017**

***Head of Manufacturing Engineering Department***

**2012-2013**

***Head of Geotechnical Engineering Department***

**2011-2012**

***Post Graduate And Scientific Affairs Director***

<b>Work Experience</b>	
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**1985-1987**

***Military service***

**1987-1990**

***Mechanical Engineer in Al Harith company***

**1994-1996**

***Head of Engines department in Al Harith company***

**2001-2003**

***Director of Al Rasheed Factory in Al Harith company***

<b>Skills</b>	
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- ***Ansys software***
- ***Abaqus software***
- ***Microsoft office***

## **Research Highlights**

a)Supervision of four Msc. Thesis, two at University of Technology, Department of Machines & Equipment Engineering ,and two at the University Of Technology, Department Of Materials, Baghdad, Iraq:

### **b)Paper presentation in the following scientific conferences:**

1-Fracture behaviour of metal matrix composites reinforced with continuous fiber (2nd Mechanical Engineering, Metallurgy and Material Engineering National Conference, Kuffa, Iraq, 2001).

2-The influence of ductile metal filament reinforced Al-Si alloy on the fatigue behaviour. (The first engineering combined conference,Baghdad,Iraq, 2002).

3- Evaluation of mechanical properties and failure mode of metal matrix composite reinforced by metal filaments.( The first engineering combined conference Baghdad,Iraq,2002).

4- "Simulation-based study of projectile impact on E-glass/epoxy composite material with different plies stacking sequence", (Seventh Jordanian International Mechanical Engineering Conference, Jordan, 2010), (JIMEC'7).

5-"Numerical study of ballistic impact of polycarbonate",. International Symposium on Humanities, Science & Engineering Research, Kuala Lumpur, Malaysia, (SHUSER2011)(2011).

6- Prediction of Crack Path through Matrix Reinforced With Hard Inclusions-Numerical Study. 11th International Fatigue Congress, Melbourne, Australia,2-7 March 2014

### **c) Published works in scientific publications:**

1-"Thermal behaviour analysis of Ic engine by finite element method" Engineering& Technology Journal, UOT, Vol.19, 2000.

2- "The influence of bonding mode and wire setting on the stress of metal matrix composites reinforced by continuous wire." Engineering& technology journal,UOT., Vol.26, No:2.,2008.

3-" Modeling and Investigating of Crack Propagation through Matrix Reinforced With Hard Inclusions", Zanco,journal of pure and applied sciences,salaghaddin university /erbil, Vol.20, No:3.,2008.

4-"Plane Stress Elasto-Viscoplastic Analysis for Cracked Metal Plate by Finite Element Method", Zanco,journal of pure and applied sciences,salaqhaddin university /erbil, Vol.20, No:4.,2008.

5-"Effect Of Interfacial Shear Stress On The Mechanical Properties Or Composite Materials" Iraqi Journal Of Mechanical Engineering And Materials Engineering / Faculty Of Engineering / University Of Babylon,Vol.8,No.1,2008.

6-"The effect of plies stacking sequence of E-glass/epoxy composite material on its damage behavior under impact loading ", Zanco,journal of pure and applied sciences, salaqhaddin university /erbil, Vol.21, No:4.,2009.

7- "Thermal Effects On Diesel Engine Piston And Piston Compression Rings", Engineering& Technology Journal,UOT, Vol.27.,No:8.2009

8-"Ballistic Impact On Ceramic Armour With Different Nosed Projectiles: Numerical Study", international journal of mechanical and materials engineering, (IJMME), Vol. 7 (2012), No. 1, 69–77.

9 -"Finite Element Modeling of Cylindrical Projectile Impact on Aluminum Plate", International Journal of Engineering and Technology, Volume 2 No. 9, September, 2012 .

10-"Effect of Plies Stacking Sequence and Tube Geometry on the Crush Behavior of Tube under Low Velocity Impact –Numerical Study", International Journal of Mechanics and Applications 2013, 3(2): 44-51.

11-"Assessment of Dynamic Behavior for Composite Laminate with Respect to the Absorbed Energy", International Journal of Composite Materials 2013, 3(3): 73-82.

12-"Crack Path Prediction Of Gear Tooth With Different Pressure Angles - Numerical Study" , International Journal Of Mechanical Engineering And Technology (Ijmet), Volume 4, Issue 5, September - October (2013).

13- "Assessment of Ballistic Performance for Transparent", Material, ARO, Volume II, No: 1, 2014

14-"Effect of Unidirectional and Woven Fibers on Impact Properties of Epoxy", Research Journal of Applied Sciences, Engineering and Technology 12(2): 197-205, 2016.

15-"Improving Mechanical Properties Of Epoxy By Adding Multi-Wall Carbon Nanotube", Journal Of Theoretical And Applied Mechanics 54 (2),2016.

16- *“Inversion of Aluminium Tube Under Conical Die by Using FE Technique”*, *International Journal of Engineering Trends and Technology (IJETT)* – Volume 43, Issue 1- January 2017.

17-*“Effect of reinforcement material on impact properties of epoxy”*, *Kurdistan Journal of Applied Research (KJAR)*, Volume 2 , Issue 3 , August 2017.

18-*“Using blister test to predict the failure pressure in bonded composite repaired pipes”*, *Composite structures*, 211,125-133, 2019.

19. *“Investigation of External and Internal Inversion for Aluminum Tube with Various Die Parameters Effect”* , *Engineering and Technology Journal* , Vol. 37, Part A, No. 7, 2019.

20-Low velocity impact of Kevlar and ultra high molecular weight polyethylene (UHMWPE) reinforced epoxy composites. *Multidiscipline Modeling in Materials and Structures*. Vol. 16 No. 6, pp. 1617-1630.

21-*Effect of Modeling Techniques on the Simulation: Calculating the Stress Concentration Factors in Square Hollow Section T-Joints as a Case Study*. *ARO-The Scientific Journal of Koya is University*. Volume VIII, No.1 (2020)

22-*“ Experimental and numerical investigation of hybrid armor against a ballistic impact”*, *Multidiscipline Modeling in Materials and Structures*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/MMMS-09-2020-0242>

#### **d) Attended Training Courses And WorkShops:**

-*Gas and Oil Development course, Istanbul /Turkey (Tpa), 2009*

- *Teaching Quality Assurance (TQA) (work shop), Ministry of Higher Education and Scientific Research, Erbil, Iraq*

-*Skills In Research Methodology,(Work Shop)-Koya University Oct.9-13,2011*

-*Reservoir Simulation Course, Istanbul /Turkey (Tpa), 2011*

-*Workshop of DasyLab hold by DAAD at Mechanical Engineering Department, Salahaldeen university-erbil,24-25 feb.,2014 .*

- *“Koya water” workshop holds by faculty of engineering/koya university, Erbil, 24-6-1014.*

-*“The application of engineering software in chemical and petrochemical engineering” workshop holds by faculty of engineering/koya university, Erbil, 24-5-2016*

***-“What it needs to gain ABET accreditation” workshop holds by faculty of engineering/koya university, Erbil, 22-11-2016.***

***-“English language teaching: a new perspective” workshop holds by Behar English Center /Koya University, Erbil, 15-3-2017.***

***-“International workshop: challenges of architectural and urban heritage, research and practice” holds by faculty of engineering/koya university, Erbil, 27-4-2017.***

***-Conference of “Management in Iraq between reality and the future” koya university, Erbil, 2-4/5/2017.***

***-Mathematics application in the real life”workshop holds by faculty of engineering/koya university, Erbil, 21-5-2017.***