CURRICULUM VITE

<u>Name :</u>	Wael Mahmoud Khair Aldien
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<u>Citizenship :</u>	Egyptian.
<u>Telephone:</u>	0020882287835
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Date of Birth :	November, 29, 1973
<u>Marital Status :</u>	Married.
Present Position :	Lecturer.
	Mechanical Engineering Dept., Faculty Of Engineering, Assiut University.
Degrees Held:	• Ph. D. of Mechanical Engineering, University of Assiut (2007).
	 Preparatory Ph.D. courses (2003).
	• M. Sc. of Mechanical Engineering, University of Assiut (2001).
	 Preparatory M. Sc. courses (1998).
	• B. Sc. of mechanical Engineering, Assiut University (1996).
Academic Positions:	♦ 1996- 2001 Teaching Assistant.
	♦ 2001- 2007 Assistant Lecturer.
	◆ 2007- now Lecturer .
Working positions	• Integrated technology transfer unit director 2009 till now
	• ASRT upper Egypt development center in SOHAG supervisor
	2014 till now
Research Work :	1. M.Sc. thesis titled "Study of the Variation of Fracture Toughness of Particulate Strengthed Composites under Static and Dynamic Loading Conditions "
	◆ During my work toward my M. Sc. degree from 1998 to 2001
	passed successfully the following five post graduate courses:
	1. Advanced Topic in fracture mechanics
	2. Advanced Engineering Mainematics. 3. Finite element.
	4. Electronics and programming
	5. Powder metallurgy.
	◆ During the course of my M.Sc. preparation I have designed and
	manufactured :
	1. Split HOPKINSON Pressure Bar Arrangement

	2. Static compression and fracture apparatus equipped
	with load and displacement measuring
	instrumentation
	3. Floating Die for Powder compaction
	I have also gained an excellent background in
	4. signal processing, oscilloscopes, Instrumented
	Amplifiers and A/D cards management
	5. load cell design and manufacturing
	6. Worked to some extent with the ANYSIS and
	ABAQUS Finite Element packages
	2. Ph. D. thesis titled "Study of the Fracture Toughness of Powdered
	Manufactured Aluminum Matrix Composites Under Different
	Loading Rates"
	• During my work toward my Ph. D. degree from 2003 to 2007:
	I passed successfully five graduate courses which are:
	1. Mechanical Behavior of Engineering Materials.
	2. Advanced topics in Experimental stress analysis
	3. C++. Programming language
	4. Advanced Topic in Elasticity and Plasticity
	Powdered Monufactured Aluminum Matrix Composites Under
	Different Loading Dates" during this work
	Different Loading Rates during this work
	• I have enhanced the previously made Split HOPKINSON
	Pressure Bar Arrangement
	• Developed a new method for the production of aluminum SiC
	composite using powder metallurgy with sintering
	temperature above aluminum melting point
	• Proposed a new method to measure crack initiation and
	propagation under both static and dynamic loading conditions
	I have gained an excellent expertise on using SOLIDWORKS program
	and good expertise on using COSMOSWORKS
<u>Language :</u>	Arabic, Native language.
	English, First foreign language.
<u>Courses Taught :</u>	I have been assisting in teaching of the following undergraduate courses:
	Machine design 1, machine design 2, machine construction, Production
	Technology, metal forming, material science, measurements
	Engineering drawing, Mechanical Engineering Laboratories,
	Introduction to SOLIDWORKS 2008, Co-Supervising on a few B. Sc.
	Projects. Root cause failure analysis
Patent:	• Flexible refrigeration for butcher shops
	 Eichhornia, water hyacinth mechanical harvesting and squeezing
	system to eliminate water weight effect on water hyacinth removal
	Hygiene dish washing machine with minimum water usage for food carts
	 Vertical hydride wind turbine with mechanism to eliminate hybrid system defects
	Small compact fab. Lab. System

	 System to avoid car accidents injury using explosive remote operated sandwich shield
IT projects	Game3tek for online learning running
	• Gras for agricultural gaudiness and services under establishment
	• Dollny virtual incubator under establishment joint project with ITC
	Dokanek E commerce
Partner Institutions	OGS
	American chamber of commerce
	• ITC
	• IMC
	• ASRT
	Misr El Kheir Foundation
Projects :	I have been assisting in some other projects
	1. "Production of Ceramic Composites" Undergraduate Project in Faculty
	of Engineering, Assiut University.
	2. "Design and Manufacturing of Numerical Controlled High
	Temperature (1600 °C) Ceramic Sintering Furnace" Undergraduate
	Project in Faculty of Engineering, Assiut University.
	the Robocon for the years 2006 and 2007
	4 Work as a supervisor for the glass factory on the new valley
	5. "Plastic wood production unit" industrial project
	6. "BAHGAT group refrigerators factory Testing room redesign and
	upgrading" industrial project
	7. " BAHGAT group refrigerators factory CPT system redesign and
	upgrading" industrial project
	Some of the project I have been Supervising:
	1. "Production of Aluminum Foam" Undergraduate Project in Faculty of Engineering, Assiut University.
	2. "Design and Production of Numerical Controlled Dynamic Balancing
	University.
	3. "Design and construction of a solar chimney power plant"
	Undergraduate Project in Faculty of Engineering, Assiut University.
	4. "Design and construction of a smart mine detector robot equipped with
	a GPS sensor" Undergraduate Project in Faculty of Engineering, Assiut
	University.
	5. 3 Kwatt Vertical wind turbine designed to meet the Egyptian climate
	graduation project funded by ASK1
	Member of a the following projects:
	1. "Industrial ubiquitous aluminum foam components" the project is
	funded by BAHGAT group in cooperation with the industrial
	modernization center.
	2. Enhancing of the technology transfer unit at Assiut university
	ASRT

	3. Design and manufacturing of three mobile Fab. Lab (Tok-Tok fab.
	Lab.) funded by ASRT
	4. Establishing of an technological incubator in Assiut university funded by RDI
	5. Empowering the Bottom of the Pyramid – BOP via the Egyptian Social
	Innovation Cluster. With Misr El Kheir Foundation funded by RDI
	6. Flexible vocational education system funded by ITTU
	Office Director of the integrated technology transfer unit at ASSIUT
	university (ITTU)
1. Publications :	 M.R. Bayoumi, A. A. Khalil, A. A. Eisa and W. M. Khairaldien, "Characterization of Copper-Iron Composites Produced by Powder Metallurgy", Proceeding of IMEC 2004 International Mechanical Engineering Conference, December 5-8 2004, Kuwait. M.R. Bayoumi, A. A. Khalil, A. A. Eisa and W. M. Khairaldien, "Experimental Investigation on the Fracture Toughness of Copper- Iron Composites under Quasi-Static and Dynamic Loading Conditions", Proceeding of IMEC 2004 International Mechanical
	Engineering Conference, December 5-8 2004, Kuwait.
	3. W. M. Khairaldien, , A. A. Khalil, and M.R. Bayoumi, "Production of Aluminum-Silicon Carbide Composites Using Powder Metallurgy at Sintering Temperatures Above the Aluminum Melting Point", Journal of Testing and Evaluation Vol. 35, Issue 6,November 2007.
	 W. M. Khairaldien, , A. A. Khalil, and M.R. Bayoumi," Mechanical Properties Characterization of Aluminum-Silicon Carbide Composites Produced using Powder Metallurgy at Sintering Temperatures above the Aluminum Melting Point" The 10th International Mining, Petroleum, and Metallurgical Engineering Conference – March 6 – 8, 2007 assiut, Egypt.
	 W. M. Khairaldien, A. A. Khalil, and M.R. Bayoumi," The Dynamic Fracture Behavior of an Aluminum-Silicon Carbide Composites Produced using Powder Metallurgy Method", The 6th Jordanian International Mechanical Engineering Conference (JIMEC'6) 22 - 24 October 2007, Amman – Jordan.
	 Khaled I.E., Ali K. Abdel-Rahman, Mahmoud Ahmed and Wael M. Khairaldien, "Virtual Height Aided Solar Chimney: A New Design Virtual Height Aided Solar Chimney: A New Design" Proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition (IMECE2011).November 11-17, 2011, Denver, Colorado, USA
	 7. A. A. Hussein, W. M. Khairaldien, A. A. Khalil, A. A. Nasser "Characteristics of aluminium foam under different loading rates", 16th International Conference on Machine Design and Production June 30 - July 3, 2014, Izmir, Türkiye

8. SH. M. Ismael*, W. M. Khair-Aldien, A. A. Kalil and A. A. Nassr,
"Characteristic of anchor embedded on concrete under different
loading rate" 16th International Conference on Machine Design and
Production June 30 - July 3, 2014, Izmir, Türkiye
9. M. H. Ataa, M. M. Nemat-Allab, M.R. Bayomib and W. Khair-
Eldeen," Fabrication And Microstrucural Investigations Of
Aluminum/Steel Functionally Gradedd Electric Transition Joint By
Powder Metallurgy", Materials Sciences and Applications, 2011
10. M. H. Aata, M. M. Nemat-Alla, M. R. bayoumi and Khair-ELdeen,
"Microstructure and Microhardness investigations of aluminium
steel Functionally graded electric transition joint fabricated by power
metallurgy"5th Assiut Univ. Int. Conf. on Mechanical Engineering
Advanced Technology for Industrial Production, 2011