

Dr. Mofid Mahdi

Assistant Professor



Personal Data:

Nationality | Australian
Date of Hire | 2010
Date Rank Obtained | 2010
Department | Mechanical Engineering
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Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	ME	Applied Mechanics	Sydney University	Australia	1998
Masters (M.Sc.)	ME	Thermo-fluids	METU	Turkey	1988
Bachelor (B.Sc.)	ME	General	Garyounis University	Libya	1985

PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions):

PhD	Numerical Investigation of grinding process
Master	FEM code development for the simulation of 2D thermo-mechanical problems

Experiences:

Title of Job	Address of Work	Country	Date	
			From	To
Assistant Prof	King Faisal University	KSA	2010	Prersent
			From	To
Senior Lecturer	Bolton University	UAE	2009	2010
			From	To
Senior Lecturer	JIC-Royal Commission	KSA	2006	2009
			From	To
Assistant Prof	The Hashemite University	Jordan	2000	2005
			From	To

Research Interests:

1. Numerical Methods.
2. Solid Mechanics.
3. Fluid Mechanics.

4. Engineering Materials Processing.
5. Optimization

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	Iqbal Marie , M. Mahdi , Randa Oqab Mujallia	Morphological characterization of ANSYS 3-D modelled aggregates, International Journal of Pavement Engineering, https://doi.org/10.1080/10298436.2022.2044037 Received 04 Dec 2021, Accepted 14 Feb 2022, Published online: 03 Mar 2022 .	International Journal of Pavement Engineering, Published online: 03 Mar 2022	Click Here
2	Abdul Kareem Abdul Jawwad, Nabeel ALShabatat, Mofid Mahdi	The effects of joint design, bolting procedure and load eccentricity on fatigue failure characteristics of high-strength steel bolts	, Engineering Failure Analysis 5 February 2021, Volume 122, April 2021, 105279	Click Here
3	Abdul Kareem Abdul Jawwad, Mofid Mahdi, Nabeel Alshabatat	The role of service-induced residual stresses in initiating and propagating stress corrosion cracking (SCC) in a 316 stainless steel pressure-relief-valve nozzle set,	Engineering Failure Analysis, Volume 105, November 2019, Pages 1229-1251	Click Here
4	Mahdi, Mofid, and Iqbal Marie.	Three-Dimensional Modelling of Concrete Mix Structure for Numerical Stiffness Determination.	Computational Engineering and Physical Modeling 1.3 (2018): 15-27	Click Here
5	Mofid Mahdi, Iqbal Marie	Numerical Simulation of Concrete Mix Structure and Detection of its Elastic Stiffness	, Journal of Computational Engineering and Physical Modeling. Article 2, Volume 1, Issue 1, Winter 2018, Page 12-22	Click Here
6	Mofid Mahdi,	A Thermal Analysis of An Improved Rankine Steam Power Cycle	International Journal of Mechanical Engineering (IJME), Vol.1, Issue 2 Nov 2012 25-36.	Click Here
7	Mofid Mahdi	An Optimal Two-Dimensional Geometry of Flywheel for Kinetic Energy Storage	Int. J. of Thermal & Environmental Engineering, Volume 3, No. 2 (2011), 67-72 .	Click Here
8	MAHDI, M. and ZHANG, L.	A finite element model for the orthogonal cutting of fiber-reinforced composite materials	, Journal of Materials Processing Technology, 2001, 113/ 1, 373-377.	Click Here

9	MAHDI, M. and ZHANG, L.	An adaptive three-dimensional finite element algorithm for the orthogonal cutting of composite materials	Journal of Materials Processing Technology, 2001, 113/1, 368-372.	Click Here
10	MAHDI, M. and ZHANG, L.	A Numerical Algorithm for the Full Coupling of Mechanical Deformation, Thermal Deformation and Phase Transformation in Surface Grinding	Computational Mechanics, 2000, 26/2 148-156.	Click Here
11	MAHDI M. and ZHANG L.	Applied Mechanics in Grinding, Part 7: Residual stresses induced by the full coupling of mechanical deformation, thermal deformation and phase transformation	, International Journal of Machine Tools and Manufacture, 1999, 39: 1285-1298.	Click Here
12	MAHDI, M. and ZHANG, L.	Residual Stresses in Ground Components Caused by Coupled Thermal and Mechanical Plastic Deformation	Journal of Materials Processing Technology Volume 95, Issues 1–3, 15 October 1999, Pages 238-245	Click Here
13	MAHDI, M. and ZHANG, L.	Applied Mechanics in Grinding , Part VI: Residual Stresses and Surface Hardening by Coupled Thermo-Plasticity and Phase Transformation	Int. J. Mach. Tools Manufact, 38/10-11 (1998) 1289-1304.	Click Here
14	MAHDI, M. and ZHANG, L.	Applied Mechanics in Grinding-V: Thermal Residual Stresses	, Int. J. Mach. Tools Manufact., 37/5 (1997) 619-633.	Click Here
15	ZHANG L. C and MAHDI, M	Plastic Behavior of Silicon Subjected to Micro-Indentation	Journal of Materials Science, 31/21 (1996) 5671-5676.	Click Here
16	MAHDI, M. and ZHANG, L. C.	The Finite Element Thermal Analysis of Grinding Processes by ADINA	Computer & Structure, 56, (2/3) (1995) 313-320	Click Here
17	ZHANG, L. C. and MAHDI. M.	Applied Mechanics in Grinding, Part IV: Grinding Induced Phase Transformation.	Int. J. Mach. Tools Manuf., 35/10, (1995) 1397-1409.	Click Here

Language Proficiency:

1. Arabic
2. English
3. Turkish