

Dr. Mustafa Abdullah Alhusain

Assistant Professor



Personal Data:

Nationality | Saudi
Date of Hire | 1436/1/16
Date Rank Obtained | 1441/2/25
Department | Mechanical Engineering
Email | malhusain@kfu.edu.sa
Office No | 1068
Office Phone No | 013 589 8810

Education:

Academic Degree	Major	specialty	Place of Issue	Address	Date
Doctorate (PhD)	Mechanical and Mechatronics Engineering	Applied Mechanics - Solid Mechanics	University of Waterloo	Waterloo, Ontario, Canada	2022
Masters (M.Sc.)	Mechanical and Mechatronics Engineering	Applied Mechanics - Solid Mechanics	University of Waterloo	Waterloo, Ontario, Canada	2018
Bachelor (B.Sc.)	Mechanical Engineering	—	King Faisal University	Al-Hofuf, Al-Ahsa, Saudi Arabia	2014

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

PhD	Three-Dimensional CT Imaging and Microstructural Mechanical Modeling of Corrosion and Freeze-Thaw Damage of Concrete
Master	Development, Optimization and Testing of an Innovative Wedge Anchorage for CFRP Plates

Experiences:

Title of Job	Address of Work	Country	Date	
Lecturer	King Faisal University	Saudi Arabia	From	2019
			To	Present
Teaching Assistant	King Faisal University	Saudi Arabia	From	2014
			To	2019
CT Technologist	University of Waterloo	Canada	From	2019
			To	2022

Research Interests:

1. Development and Optimization of Mechanical FRP Anchorages
2. Corrosion detection and treatment
3. Microscale 3D Scanning using CT Imaging System
4. Metal- and Plastic-based 3D Printing
5. Non-destructive Testing of Materials
6. Advanced Microstructural Finite Element Modeling

Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	<u>Mustafa Alhusain;</u> Adil Al-Mayah	An Innovative Wedge Anchorage for CFRP Plates: Finite Element Modeling and Experimental Verification	Springer, 2022	Click Here
2	<u>Mustafa Alhusain;</u> Adil Al-Mayah	Three-Dimensional CT Imaging Analysis of Concrete: Effects of Water and Sand Contents on Pore Characteristics	Springer, 2022	Click Here
3	<u>Mustafa Alhusain;</u> Adil Al-Mayah	Novel Wedge Anchorage for CFRP Plates	Springer, 2021	Click Here
4	<u>Mustafa Alhusain,</u> Trevor G Quayle, Adil Al-Mayah	Three-Dimensional Characterization of Naturally Corroded Steel-Reinforced Concrete Using Computed Tomography	Springer, 2021	Click Here
5	<u>Mustafa Alhusain;</u> Adil Al-Mayah	Three dimensional imaging of reinforcement corrosion using micro-computed tomography: Literature review	Elsevier, 2021	Click Here

Language Proficiency:

1. Arabic
2. English