



# Dr. Hussain Al Tammar

**Assistant Professor** 

## Personal Data:

Nationality | Saudi Date of Hire | 2021 Date Rank Obtained | 2021 Department | Mechanical Engineering Email | haltammar@kfu.edu.sa Office No | 1076 Office Phone No | +966 13 589 5410



## Education:

Academic Degree	Major	Specialty	Place of Issue	Address	Date
Doctorate (PhD)	Mechanical Engineering	Applied Mechanics	University of Wisconsin – Milwaukee	Wisconsin, USA	May 2019
Masters (M.Sc.)	Mechanical Engineering	Applied Mechanics	University of Wisconsin – Milwaukee	Wisconsin, USA	May 2014
Bachelor (B.Sc.)	Mechanical Engineering		Western Kentucky University / University of Kentucky	Kentucky, USA	May 2012

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

Doctoral	Structural Health Monitoring of Laminate Structures Using Shear-Mode Piezoelectric Sensors
Master	Damage Detection of Mixed-mode Cracks in Large Truss Structures Using Wavelet Transform

#### **Experiences:**

Title of Job	Address of Work	Nork Country		Date	
Assistant Professor	King Faisal University	Al-Absa Saudi Arabia	From	Aug. 2021	
Assistant Froiesson	King Faisar Oniversity		То	Present	
Assistant Professor	University of Jamestown	North Dakota USA	From	Aug. 2019	
Assistant Froiesson	Oniversity of Jamestown	North Dakota, OSA	То	May 2021	
Locturor	University of Wissensin Milwaykee	Missonsin USA	From	Jan. 2016	
Lecturer	Oniversity of wisconsin – winwaukee	WISCONSIII, USA	То	May 2019	

#### **Research Interests:**

- 1. Structural Health Monitoring: transducers and sensor networks, embedded systems, composites
- 2. Smart Material Systems and Structures: piezoelectric materials, multi-physics simulations, energy harvesting
- 3. Signal Processing: stochastic and probabilistic analysis, engineering optimization

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## Publications:

#	Name of author(s)	Title of Publication	Publisher and Date of Publication	Link of Publication
1	H. Altammar, S. Kaul	Adaptive Probabilistic Optimization Approach for Vibration-Based Structural Health Monitoring	MDPI, 2021	Click Here
2	H. Altammar, N. Salowitz	Ultrasonic Structural Health Monitoring Approach to Predict Delamination in a Laminated Beam Using d15 Piezoelectric Sensors	ASME, 2021	Click Here
3	P. Carrison, H. Altammar, N. Salowitz	Selective Actuation and Sensing of Antisymmetric Ultrasonic Waves Using Shear-deforming Piezoelectric Transducers	SAGE, 2020	Click Here
4	H. Altammar, A. Dhingra, and N. Salowitz,	Damage Detection Using d15 Piezoelectric Sensors in a Laminate Beam Undergoing Three- point Bending	MDPI, 2019	Click Here
5	H. Altammar, A. Dhingra, and N. Salowitz	Initial Study of Internally Embedded Shear Mode Piezoelectric Transducers for Detection of Joint Defects in Laminate Structures	SAGE, 2019	<u>Click Here</u>
6	H. Altammar, A. Dhingra, and N. Salowitz	Ultrasonic Sensing and Actuation in Laminate Structures Using Bondline-embedded d35 Piezoelectric Sensors	MDPI, 2018	Click Here

## Language Proficiency:

- 1. Arabic
- 2. English