

# ALI H. ALHADIDI

Assistant professor/ Mechanical Engineering

📍 227 Mechanical Engineering Department,  
University of Jordan,  
Amman 11942 – Jordan.

✉ [ahadidi@ju.edu.jo](mailto:ahadidi@ju.edu.jo)

☎ 00962-65355000 (Ext.) 22811



## ABOUT ME

I am an Assistant professor in the school of engineering at the University of Jordan where I have been a faculty member since 2016. My research interests lie in the area of nonlinear dynamics and vibrations. I teach a variety of undergraduate courses in the mechanical engineering department in the area of dynamics-mechanical vibration and robotic systems.

## EDUCATION

2012 – 2016



**Clemson University, Clemson, SC, USA.**

Doctor of Philosophy (Ph. D.) in Mechanical Engineering.

2006 – 2009



**University of Jordan, Amman, Jordan.**

Master of Science (M.Sc.) in Mechanical Engineering.

2002 – 2006



**University of Jordan, Amman, Jordan.**

Bachelor of Science (BSc) in Mechanical Engineering.

## EXPERIENCE



**University  
of Jordan**

**Assistant Professor**

**Aug. 2016 – Now**

School of engineering.

Relative courses: Dynamics, Mechanical Vibrations, Robotics, Dynamics for civil engineers, Advanced dynamics, system dynamics and control.



**New York  
University  
Abu Dhabi**

**Visiting Scholar**

**Sep. 2019 – Sep. 2020**

Engineering Division.

Experimental research lab. Participated in a collaborative research in the field of fluid structure interaction.



**New York  
University  
Abu Dhabi**

**Visiting Scholar**

**May – Aug. 2017**

Mechanical Engineering Department.

Participated in a collaborative research with faculty in the area of system dynamics and control.



**University  
of Jordan**

**Lecturer**

**Aug. 2011 - Aug. 2012**

School of engineering.

Relative courses: Dynamics, Computer Applications for Engineers, Systems Control, and Engineering Drawing.



**University  
of Jordan**

**Graduate Research and  
Teaching Assistant.**

**Sep. 2006 - Jun. 2009**

Mechanical Engineering Department.

Conducted a research in the area of system dynamics and control, and mechanical vibration lab assistance.



**Royal  
Scientific  
Society**

**Part time lab Assistant**

**May 2007- Sep. 2008**

Responsible for conduct research in the area of the mechanical vibration system, testing specimens under excessive vibration, and writing technical reports.

---

## SELECTED PUBLICATIONS

---

**Philosophical  
Transactions of the  
Royal Society A, (2021)**

**Alhadidi, A. H.**, Khazaaleh, S., & Daqaq, M. F.  
Suppression of galloping oscillations by injecting a high-frequency excitation.

**Nonlinear Dynamics  
(2021).**

Noel, J., **Alhadidi, A. H.**, Alhussien, H., & Daqaq, M. F.  
A time-implicit representation of the lift force for coupled translational–rotational galloping.

**Nonlinear Dynamics  
(2021).**

**Alhadidi, A. H.**, & Gibert, J. M. (2021). A new perspective on static bifurcations in the presence of viscoelasticity.

**Applied Physics Letters  
(2020).**

**Alhadidi, A. H.**, Alhoussein, H., & Daqaq, M. F.  
Improving the sensitivity of galloping energy harvesters to flow fluctuations.

**Journal of Vibration  
and Acoustics (2019).**

Daqaq, M. F., Bibo, A., Akhtar, I., **Alhadidi, A. H.**, Panyam, M., Caldwell, B., & Noel, J.  
Micropower Generation Using Cross-Flow Instabilities: A Review of the Literature and Its Implications.

- Physica D: Nonlinear Phenomena (2016).* **Alhadidi, Ali H.**, Hamid Abderrahmane, and Mohammed F. Daqaq.  
Exploiting stiffness nonlinearities to improve flow energy capture from the wake of a bluff body.
- Applied Physics Letters (2016).* **Alhadidi, A. H.**, and Mohammed F. Daqaq.  
A broadband bi-stable flow energy harvester based on the wake-galloping phenomenon.
- Journal of Applied Physics (2015).* Bibo, Amin, **Ali H. Alhadidi**, and Mohammed F. Daqaq.  
Exploiting a nonlinear restoring force to improve the performance of flow energy harvesters.
- International Design Engineering Technical and Computers and Information in Engineering Conference (2016).* **Alhadidi, Ali H.**, Hamid Abderrahmane, and Mohammed F. Daqaq.  
Utilizing Bi-Stability to Improve the Performance of Wake-Galloping Energy Harvesters in Unsteady Flow.
- Dynamic Systems and Control Conference (2016).* **Alhadidi, A. H.**, and Mohammed F. Daqaq.  
A Broadband Bi-Stable Wake-Galloping Flow Energy Harvester.
- Conference on Smart Materials, Adaptive Structures and Intelligent Systems. American Society of Mechanical Engineers (2015)* **Alhadidi, Ali H.**, and Mohammed F. Daqaq.  
Exploiting Bi-Stability to Enhance Energy Capture From Turbulent Flows.
- Conference on Smart Materials, Adaptive Structures and Intelligent Systems. American Society of Mechanical Engineers, 2014* **Alhadidi, Ali H.**, Amin Bibo, and Mohammed F. Daqaq.  
Flow energy harvesters with a nonlinear restoring force.

---

## RECOMMENDATION LETTERS

Available upon request