

ALI H. ALHADIDI

Associate professor/ Mechanical Engineering

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

✉ ahadidi@ju.edu.jo

☎ 00962-65355000 (Ext.) 22811



ABOUT ME

I am an Associate 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, energy harvesting, and vibrations. I teach a variety of undergraduate and graduate courses in the mechanical engineering department in 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 Dean for Students and Training affairs

Sep. 2021 – Now

School of engineering.



University of Jordan

Associate Professor

Aug. 2021 – Now

School of engineering.

Relative courses: Advanced Finite Element Methods, Dynamics, Mechanical Vibrations, Robotics, Dynamics for civil engineers, Advanced dynamics.



University of Jordan

Assistant Professor

Aug. 2016 – Aug. 2021

School of engineering.

Relative courses: Dynamics, Mechanical Vibrations, Robotics, Dynamics for civil engineers, 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