

Department of Aeronautical Engineering
Technical College-Najaf
Al Furat Al Awsat Technical University
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EDUCATION

- BS.c in Mechanical Engineering , University of Kufa, 2003.
- MS.c in Mechanical Engineering, Applied Mechanics, Kufaa University 2005.
- Ph.D, Mechanical Engineering, Vibration / Control, **Michigan State University** 2012.

PROFESSIONAL EXPERIENCE

Academic Employment

2017 –present Head of Department of Department of Aeronautical Engineering.
2015- present, faculty member in Department of Aeronautical Engineering.
2014-2015 Faculty member in Dept. of Mechanical Engineering, **Michigan State University**.
2013-2014 Head of Department of Automobiles Engineering- Technical College-Najaf.
2012 Member in Graduate Studies Committee, Department of Mechanical Engineering, **Michigan State University**.
2012 –**2013**, Faculty member in Department of Automobiles Engineering- Technical College- Najaf
2011-2012 Instructor in charge, Department of Mechanical Engineering, **Michigan State University**.
2005-2008 Assistant lecturer, Department of Automobiles Engineering- Technical College- Najaf.
2005-2008 Head of Office of Media and Students Activities.

Teaching Experience

2011 Instructor of ME461 4th level (Mechanical Vibrations) in Department of Mechanical Engineering at **Michigan State University**.
Instructor in charge in Department of Automobiles / Engineering- Technical College-Najaf from 2005 to 2008. The teaching experience includes Engineering courses such as:
Dynamics, design projects, Engineering analysis, Engineering Statics, Machines Design I & II, Theory of Machines, Strength of Material, Calculus I and II.

Research Interest Areas

Vibration control of continuous systems ,string, beams and membranes, Vibration control of space structure and deployable systems, vibration control of inflatable antenna, energy dissipation, nonlinear dynamics and vibrations, vehicle dynamics and stability, design of optimal control systems, nonlinear control systems, and Waves.

HONORS AND AWARDS

Awards

- **Science Day Shield** award form **Ministry of Higher Education and Scientific Research**, Iraq 2011. (for more details click [here](#))
- Gold Medal and certificate from PBD Honor Society at **Michigan State University** for outstanding international scholar performance 2010. (for honoring ceremony click [here](#))
- 1st outstanding student for PhD completion within 3 years in a system of 4 year standard period.
- 3rd prize for best poster in the Engineering Graduate Research Symposium 2011. (for more details click [here](#))
- Award and certificate for first outstanding student in ELC (English language course at Michigan State University) 2008 , among 321 students.

Appreciation Letters

- Appreciation letter from the **Minister of Higher Education and Scientific Research** outstanding publications during Ph.D study.
- Appreciation letter from the **Iraqi Culture Attaché** at USA Prof. Abdulhadi Al-Khalili for outstanding performance and achievements during Ph.D study at **Michigan State University** 2009.
- Appreciation letter from the **Iraqi Culture Attaché** Prof. Abdulhadi Al-Khalili for wining an academic award from The College of Engineering at **Michigan State University**, 2012.
- Appreciation letter from the Foundation of Technical Education in Iraq for outstanding academic achievements at **Michigan State University**.

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Society Memberships

- The American Society Of Mechanical Engineers (ASME), 2008-present
- IEEE , 2008-present
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), 2008-present.
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Editorial and Reviewing Service

Journals:

- Reviewer for - Journal of Sound and Vibration, **Elsevier**
- Reviewer of ASME/IDETC conference, Chicago, USA, 2012
- Reviewer of ASME/IDETC conference, Washington DC, USA, 2011.
- Reviewer of ASME/IDETC conference, Montreal, Canada, 2010.

PUBLICATIONS

Journals

- 1- Alsahlani, A. and Mukherjee, R., 2010 "Vibration of a String Wrapping and Unwrapping Around an Obstacle," Journal of Sound and Vibration, 329(14), pp. 2707-2715. (click here)
- 2- Alsahlani, A. and Mukherjee, R., 2011, "Vibration Control of a String Using a Scabbard-like Actuator," Journal of Sound and Vibration, 330(12), pp.2721-2732. (click here)
- 3- Alsahlani, A., Frank B. Mathis and Mukherjee, R., 2012, "Vibration Suppression of a String Through Cyclic Application and Removal of Constraints" Journal of Sound and Vibration, 331(20), pp. 4395-4405 (click here)
- 4- Alsahlani, A. and Mukherjee, R., "Dynamics of a Circular Membrane with an Eccentric Circular Areal Constraint: Analysis and Accurate Simulations," Simulation Modelling Practice and Theory 31 (2013) 149-168

Conferences

1. Alsahlani, Assaad "Boundary Element Method for Elasto-Plastic stress analysis for Two Dimensional Problems", Annual Conference of

Technical college in Najaf-Iraq 2008.

2. Alsahlani ,Assaad and Mukherjee, R “Energy lost in vibrating string collides with a constraint located at the boundary”, Annual Conference of Technical college in Najaf-Iraq 2009.
3. Alsahlani, Assaad and Mukherjee, R., “Dynamics and Energetics of a String Vibrating Against an Obstacle Placed at One Boundary,” ASME/IDETC 2010 conference , Montreal, Canada.
4. Alsahlani, Assaad and Mukherjee, R., “Suppression of String Vibration Using a Constraint Actuator at One Boundary” ASME/IDETC 2010 conference , Montreal, Canada.
5. Alsahlani, Assaad and Mukherjee, R., “Dynamics Simulation of a Circular MembraneWith an Eccentric Circular Areal Constraint”, ASME/IDETC 2011 conference, Washington DC, USA.
6. Alsahlani, Assaad , Frank B. Mathisand Mukherjee, R., “Vibration Suppression of Vibrating String by Using Boundary Constraint : Experimental Validation”, ASME/IDETC 2012 conference , Chicago, USA.
7. Alsahlani, Assaad and Mukherjee, R., “Vibration Suppression of a CircularMembrane by Using Circular Boundary Constraint”, ASME/IDETC 2012 conference, Chicago, USA.

Papers In Progress

1. Adel A. Eidan, Assaad AlSahlani and Dhafer Manea Hachim "Enhancement of The Performance Characteristics for Air-Conditioning System by Using Direct Evaporative Cooling in Hot Climates". (**Submitted to Elsevier**)
2. Vibration Control of a Circular Membrane by Using Moving Circular Boundary Constraint
3. Vibration control of vibrating sting using arbitrary located constraint.
4. Optimal control for vibrating continuous system: Theory and Experiment
5. Enhancement solar still performance by vibration induction.



JOURNAL OF SOUND AND VIBRATION

Certificate of Reviewing

awarded August, 2016 to

ASSAAD AL SAHLANI

In recognition of the review made for the journal

The Editors of *JOURNAL OF SOUND AND VIBRATION*

Elsevier, Amsterdam, The Netherlands

