

## CURRICULUM VITA



### PERSONAL DATA

**Name:** Dr. Bassam Ahmed AL-Bassam      **Rank:** Associate Professor  
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Mechanical Engineering Department,  
King Saud University, P.O. Box 800,  
Riyadh 11421, Saudi Arabia.      **Phone:** 4676684  
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### EDUCATION

Ph.D. in Mechanical Engineering, 1997, (Time-Optimal Control Design for Flexible Structures). State University of New York at Buffalo, USA.

M.Sc. in Mechanical Engineering, 1992, (Partial Eigenstructure Assignment with Output Feedback). State University of New York at Buffalo, USA.

B.Sc. in Mechanical Engineering, 1989, King Saud University, College of Engineering, Mechanical Engineering Department, Riyadh, Saudi Arabia.

### ACADEMIC RECORD WITH KSU

1. Oct. 2004 - Present: Associate Professor, Department of Mechanical Engineering
2. Nov. 1997 – Oct. 2004: Assistant Professor, Department of Mechanical Engineering
3. Feb. 1991 – Nov. 1997: KSU Scholarship, Master and Ph.D Degrees
4. Oct. 1989 – Feb. 1991: Teaching Assistant, Department of Mechanical Engineering

### OTHER RELATED EXPERIENCE: TEACHING, INDUSTRIAL, ETC.

1. September 2004 to September 2006: Part time consultant to King Abdulaziz City for Science and Technology (KACST).

2. October 2002 to June 2005: Chairman of Mechanical Engineering Department, College of Engineering, King Saud University.
3. June 2005 to January 2010: Vice Dean for Administrative Affairs, College of Engineering, King Saud University.
4. January 2010 January 2013: Manager of the Technical Administration for Student Housing Project.

### **CONSULTING, PATENTS, ETC.**

- King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia.

### **MEMBERSHIP IN SCIENTIFIC & PROFESSIONAL SOCIETIES**

AIAA

### **HONORS , AWARDS & GRANTS**

Graduate study scholarship, 1990-1997.

### **PRINCIPAL PUBLICATIONS**

1. **M. M. ElMadany, B. A. Al Bassam and A. A. Fayed**, "Preview Control of Slow-active Suspension Systems," Journal of Vibration and Control, UK, 2010, 17(2), 245-258.
2. **Foda, M. A., and Albassam, B. A.**, "Vibration Confinement in a General Beam Structure During Harmonic Excitations," Journal of Sound and Vibration, UK, 2006, Vol. 295, pp. 491-517.
3. **ElMadany, M.M., and Albassam, B.**, "Mechanical Engineering Curriculum Development for Qassim University, ICEE2006, International Conference on Engineering Education, March 2006, Qassim University, Qassim.
4. **Albassam, B.**, "Time-Optimal Control Design For Flexible Structures With One Rigid-Body Mode and Two Flexible Modes Using Multiple Inputs," Dirasat Journal, Jordan, 2004, Vol. 31, Issue 1, pp. 97-117.
5. **Albassam, B.**, "Robust Linear and Nonlinear Time-Optimal Control Design Using Multiple Inputs," Engineering Journal of the University of Qatar, Qatar, 2004, Vol. 17, pp. 139-162.
6. **Albassam, B.**, "Fast Maneuver Control Design For Flexible Structures Using Concentrated Masses," Journal of Sound and Vibration, UK, Accepted 8/5/2003.

7. **Albassam, B.**, "Optimal Near-Minimum-Time Control Design for Flexible Structures," Journal of Guidance, Control, and Dynamics, USA, 2002, Vol. 25, No. 4, pp. 618-625.
8. **Albassam, B.**, "Near Minimum-Time Control Design For Flexible Structures," AIAA Guidance, Navigation, and Control Conference & Exhibit, Denver, Colorado, USA, 2000.
9. **Albassam, B.**, "Numerical Technique For Solving Time- And Robust Time-Optimal Control Problems," AIAA Guidance, Navigation, and Control Conference & Exhibit, Denver, Colorado, USA, 2000.
10. **Albassam, B., Mook, D. J., and Singh, T.**, "Simultaneous Control of Orbit and Attitude Maneuvers for the GRO Satellite," Advances in the Astronautical Sciences, USA, 1997, Vol. 97.
11. **Albassam, B., and Mook, D. J.**, "Feedback Time-Optimal Control Synthesis For Flexible Structures With Damping," Advances in the Astronautical Sciences, USA, 1997, Vol. 95.
12. **Albassam, B., and Mook, D. J.**, "Feedback Time-Optimal Control Synthesis for Flexible-Link Manipulators," The 1997 International Conference on Mobile Planetary Robots and Rover Roundup, USA, 1997.

## **INSTITUTIONAL & PROFESSIONAL SERVICE IN THE LAST 5 YEARS**

### ***Institutional Service Activities:***

1. Member, College of Engineering Council, King Saud University (2002 - Present).
2. Coordinator, Department Higher Studies Committee (1997 - 1999).
3. Member, Department Scholarship Committee (1997-1999).
4. Coordinator, Department Scholarship Committee (1999-2002).
5. Coordinator, Mechanical Systems Group (1999 - 2002).
6. Coordinator, Automatic Control Lab. Committee (1997 - Present).
7. Member, Mechanical Engineering Department Council (1997 - Present).
8. Referee for several research proposals from major technical institutes.

### ***Professional Society Activities:***

1. Vibration Analysis and Diagnosis- short course
2. Dynamics of Rotating Machinery- short course

## **PROFESSIONAL DEVELOPMENT ACTIVITIES IN THE LAST 5 YEARS**

- Rotating Machinery Measurements, Bruel & Kjaer University (2004).
- Using PULSE 7700-General Operation and Practical Measurements, Bruel & Kjaer University (2004).