

**DR. BAJODAH, Abdulrahman H.***Professor, Aerospace Engineering Dept., King Abdulaziz University***Education**

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
PhD	Aerospace Engineering	Georgia Institute of Technology	2003
MS	Aerospace Engineering	Georgia Institute of Technology	1997
BS	Aeronautical Engineering	King Abdulaziz University	1992

**Academic Experience**

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title (Chair, Coordinator, etc.)</i>	<i>Full or Part-Time</i>
2004	2009	King Abdulaziz Univ.	Assist. Prof.		Full-Time
2009	2013	King Abdulaziz Univ.	Assoc. Prof.		Full-Time
2013	Date	King Abdulaziz Univ.	Professor		Full-Time

**Non Academic Experience (including Consultations)**

<i>From</i>	<i>To</i>	<i>Company/Entity</i>	<i>Title</i>	<i>Position Description (Brief)</i>	<i>Full or Part-Time</i>
2005	2006	Saudi Arabian Airlines		Coordinator of Scientific Collaboration program with KAU	Part-Time

**Certifications and Professional Registrations**

Registered Professional Engineer in Saudi Arabia.

**Current Membership in Professional Societies and Organizations**

	<i>Society/organization</i>	<i>Rank</i>	<i>Member Since</i>
1.	Saudi Society of Aerospace Sciences (SSAS)	member	2003
2.	International Federation of Automatic Control (IFAC)	member	2007
3.	Aerospace technical committee, IEEE Control Systems Society	member	2011
4.	American Institute of Aeronautics and Astronautics (AIAA)	Senior member	1988
5.	European Embedded Control Institute (EECI)	member	2010

**Honors and Awards**

1. Special Study in Aerospace Engineering, Post-doctoral summer research award, granted by the British Aerospace Inc., and sponsored by the British Council, Summer 2006, 2008, 2009, 2010, 2011.
3. Visiting Scholar, School of Mechanical Engineering, Georgia Institute of Technology. January-February 2008.

**Service Activities (within and outside of the institution)**

1. Graduate program committee, the aeronautical engineering department, KAU.

**Principal Publications/Presentations from the Past Five Years**

1. AH Bajodah and DH Hodges, "Canonical Kane's Equations of Motion for Discrete Dynamical Systems," *AIAA Journal* 57 (10), 4226-4240, 2019
2. Uzair Ansari, Abdulrahman H Bajodah, "Launch vehicle ascent flight attitude control using direct adaptive generalized dynamic inversion," *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, 233(11), 4141-4153, Sept. 2019
3. U Ansari, AH Bajodah, B Kada, "Development and experimental investigation of a Quadrotor's robust generalized dynamic inversion control system," *Nonlinear Dynamics* 96 (2), 1541-1557, April 2019.
4. U Ansari, AH Bajodah, MT Hamayun, "Quadrotor control via robust generalized dynamic inversion and adaptive non-singular terminal sliding mode, *Asian Journal of Control* 21 (3), 1237-1249, 2019
5. U Ansari, AH Bajodah, "Quadrotor motion control using adaptive generalized dynamic inversion, 2018 Annual American Control Conference (ACC), 4311-4316, 2018.
6. Uzair Ansari, Abdulrahman H Bajodah, " Robust generalized dynamic inversion based control of autonomous underwater vehicles, *Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment*, 232(4), 434-447, May 2017
7. U Ansari, IM Mehedi, AH Bajodah, UM Al-Saggaf, "Design and Implementation of Robust Generalized Dynamic Inversion Control for Stabilizing Rotary Inverted Pendulum," 18th European Control Conference (ECC), 2626-2631, 2019
8. U Ansari, AH Bajodah, "Quadrotor Control using Neuro-Adaptive Robust Generalized Dynamic Inversion," 8th International Conference on Systems and Control (ICSC), 1-6, 2019.
9. U Ansari, AH Bajodah, "Twin-rotor Attitude Control using Adaptive Generalized Dynamic Inversion with Neural Estimation," 8th International Conference on Systems and Control (ICSC), 7-12, 2019
10. U Ansari, AH Bajodah, "Autonomous Underwater Vehicles Attitude control using Neuro-Adaptive Generalized Dynamic Inversion," *IFAC-PapersOnLine* Volume 52, Issue 29, 2019, Pages 103-109.
11. U Ansari, AH Bajodah, "Spacecraft attitude manoeuvre using robust generalised dynamic inversion," *International Journal of Nonlinear Dynamics and Control* 1 (4), 317-331, Oct. 2019
12. U Ansari, AH Bajodah, "Quadrotor motion control using adaptive generalized dynamic inversion, 2018 Annual American Control Conference (ACC), 4311-4316, 2018.
13. Uzair Ansari, Abdulrahman H Bajodah, " Robust generalized dynamic inversion based control of autonomous underwater vehicles, *Proceedings of the Institution of Mechanical Engineers, Part M: Journal of Engineering for the Maritime Environment*, 232(4), 434-447, May 2017.

### **Recent Professional Development Activities** (*Workshops, training, etc.*)

1. IFAC Workshop: 50 Years of Nonlinear Control and Optimization, The Royal Society - London - UK, September 30 - October 01, 2010.
2. Adaptive Networks & Bio-Inspired Cognition, Atlanta, Georgia, USA, 14 Dec., 2010.
3. Guidance, Navigation and Control Applications in the Aerospace Industry Current Problems and Modern Solutions - A Workshop Sponsored by the IEEE Technical Committee on Aerospace Controls, Maui, Hawaii, USA, 14 Dec., 2012.
4. E-Learning and Distant Learning, KAU Centre for Teaching and Learning Development, Dec. 2013
5. Building Students' Moral Values, KAU Centre for Teaching and Learning Development, Dec. 2013
6. "Recent Changes in EAC of ABET Accreditation Requirements," QAAU Workshop, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, Jan. 2020