

DR. KADA, Belkacem*Assistant Professor, Aeronautical Engineering Dept., King Abdulaziz University***Education**

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
PhD	Mechanical Engineering	Laval University, Canada	2006
MS	Mechanical Engineering	USTO, Oran, Algeria	1998
BS	Mechanical Engineering	USTO, Oran, Algeria	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>
1993	2000	Mascara University	Lecturer		Full time
2001	2006	Laval University	Teaching Assist.		Part time
2008	Date	King Abdulaziz University	Assist. Prof.		Full time

Non Academic Industrial Experience (including Consultations)

None

Funded Research Projects and Patents from the Past Five Years

1. Development of Control Algorithms for Unmanned Aerial Vehicle (UAV) 2010 (co-PI)
2. Strengthening CFRP Composites Using Carbon Nanotubes for Aerospace Application and Monitoring Damage Onset Strength Using Acoustic Emission Technique 2012-2013 (co-PI)
3. Solar powered UAV project in cooperation with Japanese researchers 2012-2013 (co-PI)

Certifications and Professional Registrations

None

Current Membership in Professional Societies and Organizations

<i>Society / Organization</i>	<i>Rank</i>	<i>Member Since</i>
1. American Inst. of Aeronautics & Astronautics, AIAA	Member	2013

Honours and Awards

None

Institutional and Professional Services (administration, committees, units, etc.)

1. Academic advisor for students of Aeronautical Eng. Dept., KAU, 2008 - present
2. Senior project supervisor (about 10 students) of Aeronautical Eng. Dept., KAU, 2008 - present
3. Master thesis supervisor (2 students) of Aeronautical Eng. Dept., KAU, 2011-2012
4. Member of department Labs committee, AE Dept., KAU, 2009-Date
5. Member of department Curriculum Development, AE Dept., KAU, 2012-Date

Principal Publications/Presentations from the Past Five Years

1. B. Kada. Arbitrary-Order Sliding Modes-Based Homing Guidance Strategy for Intercepting Highly Manoeuvrable Targets. Accepted for publication, AIAA Journal of Guidance,

- Control and Dynamics, 2014.
2. Kada, B., and Bensenouci, A., Adaptive Differential Evolution Tuned Backstepping Algorithm for Steam Valve Control, submitted to J. Control Engineering Practice, 2014
 3. Kada, B., “Higher order sliding mode control for missile autopilot design,” *International Conference on Aerospace, Mechanical, Automotive and Materials Engineering*, World Academy of Science, Engineering and Technology, Issue 70, 2012, pp. 174-178
 4. Kada, B., “A new methodology to design sliding-PID controllers: Application to missile flight control system,” *IFAC Conference on Advances in PID control, PID’12*, Brescia (Italy), 28–30 March 2012.
 5. Kada, B., “Outer-Loop Sliding Mode Control Approach To Longitudinal Autopilot Missile Design”, 18th *International Federation of Automatic Control World Congress*, Milano (Italy) August 28 - September 2, 2011.
 6. B. Kada and Y. Ghazzawi, A New Deadbeat Robust Control Design: Application to an UAV Flight Control System. World Congress on Engineering and Computer Science 2011, WCECS 2011: 19-21 October, 2011
 7. B. Kada and Y. Ghazzawi. Optimal Deadbeat Controller Design for an UAV Flight Control. WASET 2011: World Academy of Science, Engineering and Technology, September 28-30, 2011, Singapore

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

1. “Recent Changes in EAC of ABET Accreditation Requirements,” ASU Workshop, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, Jan. 2014
2. Quanser Lab Training, Quanser Technical support, Ontario, Canada, Nov. 2013
3. Three Festo Learning Systems Trainings, Nov. 2013, Dec. 2013 and Feb. 2014, Festo Didactic Turkey, Jeddah, Saudi Arabia
4. Data Acquisition and Signal Processing, National Instruments, June 2009, Jeddah, Saudi Arabia
5. LabView Basics I&2, National Instruments, May 23-27, 2009, Jeddah, Saudi Arabia