DR. AL-BAHI, Ali M.

Professor, Aeronautical Engineering Dept., King Abdulaziz University

Education

Degree	Field	Institution	Year
PhD	Aeronautical Engineering	ENSAE, Toulouse, France	1983
MS	Aeronautical Engineering	ENSAE, Toulouse, France	1980
BS	Aeronautical Engineering	Cairo University, Egypt	1975

Academic Experience

From	To	Institution	Rank	Title (Chair,	Full or
				Coordinator, etc.)	Part Time
1987	1993	King Abdulaziz Univ.	Assist Prof.		Full Time
1993	1999	King Abdulaziz Univ.	Assoc. Prof.		Full Time
1999	Date	King Abdulaziz Univ.	Professor		Full Time

Non Academic Industrial Experience (including Consultations)

From	To	Company/Entity	Title	Position Description	Full or
				(Brief)	Part Time
1975	1977	Egyptian Air Force Training Center	Corporal	Instructor	Full Time
1977	1978	Aircraft Engines Factory, Helwan,	R&D	Redesign of Engine	Full Time
		Cairo, Egypt.	Engineer	Control System (H-300)	
1983	1987	Aircraft Engines Factory, Helwan,	R&D Senior	Performance of Gas	Full Time
		Cairo, Egypt.	Engineer	Turbine Engines	

Funded Research Projects and Patents from the Past Five Years

- 1. Grant No. 429/023, King AbdulAziz University, Research Project, Development Of Introduction to Engineering Design II into a Project-Based Active/Cooperative Learning Course, 2010.
- 2. Strategic research project No. 10-MAT1267-03, King AbdulAziz City for Science and Technology KACST, *Aviation Security Design of a Nuclear Instrument For Contraband Detection*, 2011, running.
- 3. HiCi Research Initiative Funded Project, King Abdulaziz University, *Large Eddy Simulation of Flow past Tandem Cylinders in Passages with Heat Transfer*, 2012.
- 4. Strategic research project No. 12-MAT2721-03, King AbdulAziz City for Science and Technology KACST, Design of An Instrument for Measurement of Oil, Water, Vapour and Sand Layers in Oil Separators Using Neutron, 2014, running.
- 5. Strategic research project No. 12-ENE2236-03, King AbdulAziz City for Science and Technology KACST, *Improving the thermal Resistance of Building facades in Saudi Arabia, 2014, running.*

Certifications and Professional Registrations

Registered Professional Engineer in Egypt

Current Membership in Professional Societies and Organizations

	Society/organization	Rank	Member Since
1.	American Inst. of Aeronautics & Astronautics, AIAA	Senior Member	1981
2.	American Society of Engineering Education, ASEE	Member	2005
3.	Institute of Electrical and Electronics Engineers, IEEE	Member	2011
4.	Egyptian Syndicate of Professional Engineers	Member	1975
5.	Society of Women Engineers	Member	2014
6.	Saudi Society for Aerospace Sciences	Member	2003
7.	Saudi Council of Engineers	Member	2005

Honors and Awards

- Ranked first among 120 BS graduates from the Aeronautical Engineering Department, Cairo University, Egypt, 1975
- 2. Vice President Elected, Egyptian Section of the International Solar Energy Society (1985-87).
- 3. "Senior Member" of the American Institute of Aeronautics and Astronautics (AIAA).
- 4. 1991, 1993, 2001, 2007 and 2008 Faculty of Engineering, King Abdulaziz Univ. Awards
- 5. 2003 King Abdulaziz Rector's Distinguished Faculty Award.
- 6. Member of the Editorial Board of the Civil Aviation Journal, Presidency of Civil Aviation, Kingdom of Saudi Arabia (2008-)

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

- 1. Academic advisor, more than 150 students, over 20 years, Aeronautical Eng. Dept., KAU, 1992-present
- 2. Aeronatical Eng. Program coordinator for ABET accreditation (2000-2011).
- 3. Director of the Faculty of Engineering Academic Accreditation Unit, KAU, 2006- present.
- Member IEEE Gulf Region Accreditation Subcommittee, IEEE Committee on Global Accreditation Activities, 2010- present.
- 5. Member of King Abdulaziz Univ. Scientific Chairs Research Committee, 2010- present
- 6. Coordinator of several KAU and Faculty of Engineering Committees (Scientific Chairs, Curriculum, Postgraduate, Strategic Planning), KAU, present.

Principal Publications/Presentations from the Past Five Years

- 1. Ibraheem AlQadi, Majed AlHazmy, <u>Ali Al-Bahi</u>, and Wolfgang Rodi, "Large Eddy Simulation of Flow Past Tandem Cylinders in a Channel," Flow, Turbulence and Combustion, Volume 95, Issue 4, pp 621–643, Dec. 2015.
- 2. <u>Ali M. Al-Bahi</u> and Abdelfattah Y. Soliman, "Designing a Resilience Module in an Introductory Engineering Design Course for Freshmen," 2016 IEEE Global Engineering Education Conference (EDUCON), 10-13 April 2016, Abu Dhabi, UAE, downloadable from: http://ieeexplore.ieee.org/document/7474640/
- 3. <u>Ali M. Al-Bahi</u> and Abdelfattah Y. Soliman, "On the Assessment of Sustainability of Engineering Education," WEEF & GEDC, The world Engineering Education Forum, 6-10 Nov 2016, Seoul, Korea.
- Abdelfattah Y. Soliman and <u>Ali M. Al-Bahi</u>, "Rethinking Educational Approaches in Product Design to Achieve Sustainability Objectives," 2017 IEEE Global Engineering Education Conference (EDUCON), 25-28 April 2017, Athens, Greece.
- 5. Nizar A. Qattan and <u>Ali M. Al-Bahi</u>, "Reliability Analysis of T-56 Turboprop Engine Turbine," Accepted for presentation in 64th Annual Reliability & Maintainability Symposium (RAMS), Reno, Nevada, USA, 22 25 January 2018.
- 6. <u>Ali M. Al-Bahi</u>, Abdelfattah Y. Soliman, and Nader M. A. Mohamed, "Investigating Neutron Back Scattering Technique for the Detection of Oil Water Separation Levels in Horizontal Gravity Oil Separators," J. Radioanalytical and Nuclear Chemistry, Vol. 315, Issue 2, pp. 323-330, DOI: 10.1007/s10967-017-5675-2, FEB 2018.
- Ali M. Al-Bahi, Abdelfattah Y. Soliman, and Nader M. A. Mohamed, "Detection of Illicit Material Using Neutron Activation: Weakness and Solutions J. Radioanalytical and Nuclear Chemistry, Vol. 315, Issue 3, pp. 557-564, DOI: 10.1007/s10967-017-5689-9, March 2018.
- Ali M. Al-Bahi and Abdelfattah Y. Soliman, "Sustainability SMART Indicators of Engineering Education for Sustainable Development," 2018 IEEE Global Engineering Education Conference (EDUCON), Tenerife, Canary Islands, Spain, April 18-20, 2018.
- Ali M. Al-Bahi and Abdelfattah Y. Soliman, "A Six-Sigma Approach to Improve the Acquisition of Engineering Competencies," 2018 IEEE Global Engineering Education Conference (EDUCON), Tenerife, Canary Islands, Spain, April 18-20, 2018.
- Abdelfattah Y. Soliman_and <u>Ali M. Al-Bahi</u>, "A Win-Win Strategy to Integrate Sustainability Objectives in Product Design

 An Educational Approach," Int. J. of Engineering Pedagogy, Accepted for publication, Vol. 8, No. 5, May 2018,

 https://doi.org/10.3991/ijep.v8i5.8461.
- 11. Soliman A.Y., <u>Al-Bahi A.M.</u> (2019) Enhancing Lifelong Learning Skills Through Academic Advising. In: Auer M., Tsiatsos T. (eds) The Challenges of the Digital Transformation in Education. ICL 2018. Advances in Intelligent Systems and Computing, vol 917. Springer, Cham, Switzerland, https://doi.org/10.1007/978-3-030-11935-5_48.
- 12. Abdelfattah Y. Soliman, Alya A. Badawi, Manal M. Elkordy, and <u>Ali M. Al-Bahi</u>, "A Framework for Constructing and Assessing Knowledge Management Systems for Engineering Institutes," Accepted for presentation in 2019 IEEE Global Engineering Education Conference (EDUCON), Dubai, UAE, April 9-11, 2019.

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

- 1. ABET Program Assessment Workshop, Ashley Ater Kranov, Managing Director, ABET Professional Services, King Abdulaziz University, Jeddah, Saudi Arabia, Feb. 2012.
- 2. Engineering Learning Outcomes Workshop, National project for assessing the higher education learning outcomes, Quias Centre, Ministry of Higher Education, Riyadh, Saudi Arabia, Sept. 2012.
- 3 ABET Institute for the Development of Excellence in Assessment Leadership (IDEAL) Workshop, Gloria Rogers, ABET Foundation, King Abdulaziz University, Jeddah, Saudi Arabia, Sept. 2013.