

DR. KHALID, Mahmood*Professor, Aeronautical Engineering Dept., King Abdulaziz University***Education**

| <i>Degree</i> | <i>Field of Study</i> | <i>Institution</i> | <i>Year</i> |
|---------------|------------------------------|---------------------------|-------------|
| PhD | Aeronautics and Astronautics | University of Southampton | 1977 |
| BS | Aeronautics and Astronautics | University of Southampton | 1974 |

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> |
|-------------|-----------|--|-------------|---|--------------------------|
| 2010 | Date | King Abdulaziz University | Professor | | Full Time |
| 2009 | 2010 | Von-Karman Institute, Belgium | Professor | Head of Aeronautics | Full Time |
| 2003 | 2009 | Queens U Kingston Canada, Ecole Polytechnique Canada | Adj. Prof | Supervisor Research | Part Time |

Non Academic Industrial 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> |
|-------------|-----------|--|-------------------------|---|--------------------------|
| 1977 | 1979 | British Aerospace, Hatfield, England, UK | Senior Engineer | Missile Design, Missile performance studies | Full Time |
| 1979 | 1982 | Canadair Ltd (Now Bombardier,) | Senior Staff Specialist | Challenger design, WT testing, CFD | Full Time |
| 1982 | 2012 | National Research Council of Canada | Principal Scientist | Researched in Turbulence, Missiles, Helicopters, UAV's, CFD, Headed a Dept. | Full Time |

Funded Research Projects and Patents from the Past Five Years

1. Distinct Research Proposal (KAU) – Accepted Oct 2012
2. Low Reynolds Number UAV Design at NRC funded by Canadian Military- 2006-2012
3. Advanced Missile Design studies for Canadian Military- 2008-2012

Certifications and Professional Registrations

Editor of Two International journals.

Current Membership in Professional Societies and Organizations

| <i>Society/organization</i> | <i>Rank</i> | <i>Member Since</i> |
|--|------------------|---------------------|
| 1. American Institute of Aeronautics and Astronautics (AIAA) | Associate Fellow | 1990 |
| 2. Canadian Aeronautics and Space Institute (CASI) | Fellow | 1985 |

Honors and Awards

1. Professional Award for Contributions to Engineering ASME “as deep appreciation of his valued services for advancing the engineering profession”, 2003.
2. IAR Award for Achievement over an Extended Period, 2005.
3. IAR Award to the VLOT Team, 2003.
4. NATO AWARD for Excellence 2011
5. Achievement over an Extended period of time
6. Team Outstanding Singular Achievement
7. Outstanding Services to CFD Society

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

1. President of the CFD Society of Canada 2004-2007
2. Member of Technical Committee on Aircraft Performance and Stability Control AVT/RTO panel
3. Invited by VKI (AVT-RTO) to organize a course on UAV's and deliver lectures (Only second Canadian to have made this contribution)
4. Canadian lead on TTCP project on non-conventional missiles
5. Chairman of AVT/082 TG-023 Turbulence Modeling
6. Chair of AVT Innovative Missiles (Sep. 2003 - May 2006)
7. Chair CFD 2004 Conference
8. Chair CASI Aerodynamics Conference 2004 and 2005
9. Chair Aerodynamics Panel (CASI)
10. Chair of Hypersonic (Aerodynamics & Thermodynamic) TTCP AER 5 Panel
11. Member of AVT/RTO Group W-011 on CFD Feasibility Studies (1998-2000)
12. National Leader TTCP Fixed Wing
13. Member of the CASI Council
14. Invited as UNDP Consultant (1983, 1994, 1996) to advise the Government of Pakistan on Aerospace Industry
15. Invited Speaker to Morphing Vehicle European Conference Lisbon, Portugal (Oct 2008)

Principal Publications/Presentations from the Past Five Years

1. Khalid, M., Al-Qadi, I. and Salah, H., ‘Aerodynamic Performance Studies with a Trailing Edge Jet Flap’, Accepted Canadian Aeronautics and Space Journal.
2. Harasani, Wail, Khalid, M, Initial Conceptual Design and Wing Aerodynamic Analysis of a Solar Power Based UAV’, Accepted for Publication the Aeronautical Journal, 2014.
3. Khalid, M and Khalid Al Juhany, ‘Dynamic Stability of Blunt Slender Elliptic Wings in Hypersonic Flow, Accepted for publication in the Aeronautical Journal, June 2014.
4. Harasani, W and Khalid, M, ‘Conceptual Design Methodology of Day Flight Solar UAV’, Canadian Aeronautics and Space Journal’, submitted 2014.
5. B. Dahdi, M. Mamou and M. Khalid, ‘Investigation of Skin Porosity Damping Effects on Free Stream Disturbance Induced Unsteady Airfoil Loads, The Aeronautical Journal -Publication date Oct 2012.
6. Yuan, W. and Khalid, M. “Insect sized flapping wing UAV's”, International Journal of Micro Vehicles, March 2010
7. Yuan, W., Xu, H., and Khalid, M. , "Large-Eddy Simulation of Curved Geometry Flows using Contravariant Components of Velocity", International Journal of Computational Fluid Dynamics Fwb. 2009.

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. “ABET Accreditation for Better Teaching and Learning” ASU Newcomers Workshop, Faculty of Engineering, King Abdulaziz University, Jeddah, Saudi Arabia, Oct. 2011