



Name: Ali Khlefat

Rank: Instructor - Aviation Engineering

Personal Information

Nationality:	Jordanian
AU Joining Date:	03 Feb 2020
E-Mail Address:	a.khlefat@au.edu.kw

Professional Information

Education:	Sep 2016 to Jan 2020: M.Sc. in Mechanical Engineering, Jordan University of Science and Technology, Irbid, Jordan. Oct 2015: Caterpillar Certified Sales Professional, Caterpillar University / College of Marketing, Sharjah, UAE. Sep 2009 to Jun 2014: B.Sc. in Aeronautical Engineering, Jordan University of Science and Technology, Irbid, Jordan.
Specialization:	Aerodynamics, Fluid Mechanics, Heat Transfer, Computational Fluid Dynamics (CFD), Applied Mathematics, Aviation Law and Legislation, Aviation Security (AV Sec)
Current Academic Position:	Instructor - Aviation Engineering
Current Professional Positions:	• Leader - Curriculum Committee. • Leader - Bachelor of Aircraft Maintenance Engineering Program. • Member - Departmental Committee. • Member - Validation and Moderation Committee.
Previous Administrative Position Held:	Lab engineer – Aeronautics Lab. At the Jordan University of Science and Technology, Irbid, Jordan.
Previous Academic Positions Held:	Junior Trainer Teaching Assistant Research Assistant

	Instructor Lab engineer
Fellowships And Honors:	Honors list during bachelor level.
Teaching Experience:	- Feb. 2020 till present: Teaching Diploma and bachelor's level courses at the School of Aviation, Australian University, Kuwait. - Module 1 (Mathematics) - Module 2 (physics) - Module 3 (Electrical Fundamentals) - Module 8 (Basic Aerodynamics) - Module 9 (Human Factors) - Introduction to Aviation - Aviation Law - Mathematics for ATC - Calculus I - Aviation & Airport Security - Aerospace Materials - Fundamentals of Safety and Risk Management - Aviation Law and Legislation - Aero Gas Turbine Technology - Introduction to Reliability Engineering and Data Analysis. - Sep. 2016 till Jan. 2019: tutoring several Engineering courses and SAT subject test courses (M I, II, & Physics).
Industrial And Technical Experience:	Nov-Mar 2015/16: Sales engineer at Mohamad Abdul Rahman Al Bahar LLC (Caterpillar Dealer) - Doha, Qatar. Aug-Oct 2014: Trainee engineer at Jordan Airline Training and Simulation (JATS), attended -as a listener- Type Rating Course entitled "Airbus A319/A320/A321 (CFM56 5B & IAE V2500) T1/B1+T2/B2" - Amman, Jordan. Feb-Jun 2014: Trainee Eng. At the Aeronautics lab at the Jordan University of Science and Technology, during this period, I had the opportunity to contribute to designing two experiments that were added to the lab manual to be taught to students. May 2014: Participated with a group of my colleagues as Exhibitors to our graduation project at the Special Operations Forces Exhibition (SOFEX 2014). Sep-Jun 2009/14: Written more than 150 reports in various courses, from Strength of Materials to Aircraft Design. In addition to that, I have participated in research work about the Airframe of Mini Unmanned Aerial Vehicles at JUST.
Research Interest:	Computational Fluid Dynamics (CFD), Fluid Mechanics, Heat Transfer, Porous Material, Photovoltaic Thermal (PVT), Renewable Energy, Energy Efficiency,
Research Grants:	Design and Construction of an Airframe for (MUASV)-Graduation project-. An original design for the airframe, the project utilizes the gliding concept, in addition to utilizing composite materials to reduce energy consumption and

	structural strength. The project was sponsored and funded with a \$7000 grant by KADDB.
Research and Publications, including Journal and Books:	• Hussam, W., Salem, H., Redha, A., Khlefat, A.M. and Al-Khatib, F., 2021. Performance Evaluation of a Hybrid Solar Chimney-Photovoltaic System for Power Generation in Kuwait. Available at SSRN 3919712. • Hussam, W.K., Salem, H.J., Khanafer, K., Fadel, A.M., Khlefat, A.M. and Abdul-Razzak, H., 2021. Performance Evaluation of a Hybrid Solar Chimney-Photovoltaic Power Plant for Electricity Generation. In the ASTFE Digital Library. Begel House Inc. • Kiwan, S.M. and Khlefat, A.M., 2021. Thermal cooling of photovoltaic panels using porous material. Case Studies in Thermal Engineering, 24, p.100837. • Hussam, W. K., Khlefat, A. M., & Sheard, G. J. (2021). Energy saving and performance analysis of air-cooled photovoltaic panels. International Journal of Energy Research. • Forced Convection Heat Transfer from Porous Rectangular Fin - An Analytical Approach (Under review).
Paper Presentations at Professional Conferences:	Performance Evaluation of a Hybrid Solar Chimney-Photovoltaic Power Plant for Electricity Generation. In the ASTFE Digital Library.
College Service, including committee Membership:	• An active member of the Jordanian Engineers Association. • An active peer review member - Elsevier. • An active peer review member - PLOS ONE
National Service:	NA
College Committees:	Vice President of the Students' Union.