BILAL TAHER

1. Name and academic rank

Bilal Taher, Assistant professor, full time.

2. Education – degree, discipline, institution, year

2.1. Ph.D., Mechanical Engineering and design, Technology of Belfort-Montbeliard University (UTBM), Belfort, France, 2012.

2.2. M.Sc., General Mechanics (Energetic, Materials, Mecatronics), Lebanese university, Faculty of engineering, in partnership with University of Technology of Belfort Montbeliard, and in collaboration with the Universities of Technology of Compiegne and Troyes, 2003.

2.3. B.E., Mechanical Engineering, Lebanese University, Faculty of Engineering, Branch I, Tripoli, Lebanon 2002.

3. Academic and Professional experience

3.1. Academic experience

- Beirut Arab University, Assistant Professor, 2022- till present, full time.
- Lebanese French University and head of the mechanical & energetic engineering department, Associate Professor, 2013-2022, full time.
- Lebanese University faculty of sciences, Branch 3, Assistant Professor,2014-2022, part time.
- Supervision of more 20 final year projects for engineering students.

3.2. Non-academic experience

- Head of the municipality council of Hayzouk, Akkar, Lebanon,2019 - 2022
- From May 2009 to 2021: Manager of "engineering and maintenance" department in "Dar Al-Shifaa" hospital, Tripoli, Lebanon.
- From 2009 to 2021: Design, drawing and supervision engineer for mechanical construction of sanitary systems (water supply, drainage and Solar energy) and heating, ventilation and cooling systems (HVAC) of many buildings.
- From May 2004 to February 2008: Follow-up and supervision Engineer for the construction of “Dar Al-Shifaa” Hospital, Tripoli, Lebanon.

4. Professional credentials, certificates, or licensing

4.1. Authorization to practice engineering profession in Lebanon, since 2002

4.2. Order of Engineers and Architects – Tripoli, member since 2006

4.3. Member in American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

4.4. Member of the scientific committee in the order of engineers and architects, Tripoli, 2016 - 2018

5. Professional development activities

5.1. Trainer with the Arabic institute for petroleum, in Istanbul, Turkey, under the title "Maintenance of cooling and air conditioning systems, chiller",16-22 December 2013

5.2. Research collaboration between Beirut Arab University and Lebanese University.
5.3. Invited to the Lebanese University as member of jury for a master defense on the topic of renewable energy2022.

6. Contribution to the discipline

6.1. Service activities

- Member of the sport committee for the students' activities, BAU.
- Member of the labs committee in the BAU university.
- Administration: student advising, course offering BAU.
- Consulting in Mechanical Services for the Buildings.

6.2. Publications

6.2.1. Journal publications

- "Recent optimization methods and techniques in residential home energy management systems" Riad El Abed, Ali Hammoud, Mohamed El-Gohary and Bilal Taher, Results in Engineering, Volume 29, March 2026, 108974
- "Numerical investigation of heat transfer and aero-acoustic response in deep cavity flows using URANS simulations," A. H. Jabado, A. Hammoud, B. El Zohbi, B. Taher, and H. Assoum, BAU Journal-Science and Technology, vol. 7, no. 1, p. 5, 2025.
- B. Taher, L. Soufi, S. Thamine, " Methanisation and Bio-Hydrogen based Hybrid Systems for Fuel Cell Electricity Production from Solidwaste", IJTRD, December 2018.
- B. Taher, S. Abboudi, R. Younes, " A Study of the Thermo-Elastic Damage in the Cylinder of an Engine ", "Heat and Technology journal", April 2010.
- B. Taher, S. Abboudi, R. Younes, "Analysis of the Thermal Damage on the Homogenous Materials Under Thermo-Mechanical Behavior", WSEAS, January 2010.

6.2.2. Conference Proceedings

- "Flow dynamics, acoustic generation and heat transfer of a rectangular jet impinging on a heated plate," M. Matar, B. E. Zohbi, K. Abed-Meraim, B. Taher, H. Assoum, and A. Sakout, AIP Conference Proceedings, vol. 3486, no. 1, p. 410001, 2026
- B. Taher, A. Khalil, A. Hassan, R. Nafeh, "Optimization of Small Hybrid Waste Water Treatment Plant (WWTP) for Hayzouk Municipality", 2nd National Seminar On Municipal Waste Water Treatment & Reuse in Lebanon, February 2021.
- B. Taher, S. Abboudi, R. Younes, "Numerical Analysis of Thermo-Elastic Damage of a Cylindrical Body: Application to Engine System", NASCA conference, Numerical Analysis and Scientific Computing with Applications, Agadir, Morocco, Octobre 2009.
- B. Taher, S. Abboudi, R. Younes, "Effect of frequency and shape of thermal cycling on the damage of multimaterial under thermo-elasto-plastic behaviour", PVP2009 conference, 2009 ASME Pressure Vessels and Piping Division Conference, Prague, Czech Republic, July 2009.

- B. Taher, S. Abboudi, R. Younes, "Damage of thermo-elasto-plastic multi-material under thermal cycling conditions using the homogenous method", IMECE 2008, International ASME Mechanical Engineering Congress and Exposition, Boston, Massachusetts, USA, ASME digital store IMECE2008-68815, November 2008.
- B. Taher, S. Abboudi, R. Younes, "Study of homogenization technique in a tow-layer cylindrical material", IMECE 2007, ASME International Mechanical Engineering Congress and Exposition, Seattle, Washington, USA, ASME digital store IMECE2007-44084, Novembre 2007.
- B. Taher, R. Younes, S. Abboudi, "Numerical analysis of thermo-mechanical behaviour of a multi-material under thermal cycling conditions", PVP2006-ICPVT-11-2006, ASME pressure vessels and piping division, Vancouver, BC, CANADA, ASME digital store PVP2006-ICPVT-11-93495, Juillet 2006.
- B. Taher, S. Abboudi, R. Younes, "Thermo-mechanical analysis of a multi-material under thermal cycling conditions Conference on Simulation and Multidisciplinary Design Optimization (ASMDO), Belfort, France, Mai 2006.