

## DR. USAMA KHASHABA

Professor, Department of Mechanical Engineering, King Abdulaziz University

### Education

<i>Degree</i>	<i>Field of Study</i>	<i>Institution</i>	<i>Year</i>
PhD	Mechanical Engineering	Zagazig University, Egypt	1993
MS	Mechanical Engineering	Zagazig University, Egypt	1989
BS	Mechanical Engineering	Zagazig University, Egypt	1985

### Academic Experience

<i>From</i>	<i>To</i>	<i>Institution</i>	<i>Rank</i>	<i>Title</i> <i>(Chair, Full or</i> <i>Coordinator, etc.)</i>	<i>Part Time</i>
1985	1990	Zagazig University	Teaching assistant		Full Time
1990	1993	Zagazig University	Lecturer		Full Time
1993	1999	Zagazig University	Assistant Professor		Full Time
1999	2004	Zagazig University	Associate Professor		Full Time
2004	2006	Zagazig University	Professor		Full Time
2006	2010	Albaha University	Professor		Full Time
2010	Date	King Abdulaziz Univ.	Professor		Full Time

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

#### VISITING PROFESSOR TO USA UNIVERSITIES

1. Visiting Professor to Northern Illinois University, Dekalb, IL, USA for working on the US-Egypt project entitled: "Microcracking and Damage Evaluation by Laser Speckle Shearing Interferometry", 2001.
2. Visiting Professor to Northern Illinois University, Dekalb, IL, USA for working on the US-Egypt project entitled: "Microcracking and Damage Evaluation by Laser Speckle Shearing Interferometry", 2002.
3. Visiting Professor to Alabama Agricultural and Mechanical University, Huntsville, USA for working on the US-Egypt project entitled: "'Effect of Machining Parameters on the strength and fatigue behavior of Bolted Joints in GFRP Composites", 2004.
4. Visiting Professor to Alabama Agricultural and Mechanical University, Huntsville, USA for working on the US-Egypt project entitled: "'Effect of Machining Parameters on the strength and fatigue behavior of Bolted Joints in GFRP Composites", 2006.

### Funded Research Projects and Patents from the Past Five Years

1. King Abdulaziz City for Science and Technology, "*Design, Manufacturing, and Analysis of Composite Bolted Joints with Embedded Nano Particles/Fibers*",(2009), 2 year, SR 1,604,650.
2. King Abdulaziz City for Science and Technology, "*Developing Composite Materials Filled with Nanofillers for Bonded Joints/Repairs in Fiber-Reinforced Polymers*",(2012), 2 year, SR 864,000

### Principal Publications/Presentations from the Past Five Years

## **I- International Journals with Impact Factors (ISI)**

1. **Khashaba UA**. Development and Characterization of High Performance Nano-Hybrid GFRE Composites for Structural Applications. **Accepted for publication**, Composite structures (2014). **Elsevier**.
2. Khashaba UA, Aljinaidi AA, Hamed MA. Nanofillers modification of Epocast 50-A1/946 epoxy for bonded joints. In-Press, Chinese Journal of Aeronautics, (2014).
3. **Khashaba UA**, Sebaey TA, Mahmoud FF, Selmy AI, Hamouda RM, Experimental and numerical analysis of pinned-joints composite laminates: Effects of stacking sequences. J. Composite Materials, 47(2013) 3353–3366.
4. **Khashaba UA**, Sebaey TA, Alnefaie KA. Failure and reliability analysis of pinned-joints composite laminates: Effects of stacking sequences. Composites: Part B 45 (2013) 1694–1703. **Elsevier**.
5. **Khashaba UA**, Sebaey TA, Alnefaie KA. Failure and reliability analysis of pinned-joints composite laminates: Effects of pin-hole clearance. J. Composite Materials, 47 (2013) 2287–2298
6. Alnefaie KA, Aldousari SA, **Khashaba UA**. New Development of Self-Damping MWCNT Composites. Composites: Part A 52 (2013) 1-11. **Elsevier**.
7. **Khashaba UA**. Drilling of polymer matrix composites: A Review. J. Composite Materials, **47 (2013)** 1817–1832. **Sage Publication**.
8. **Khashaba UA**, El-Sonbaty IA, Selmy AI, Megahed AA. Drilling analysis of woven glass fiber-reinforced/epoxy composites. J. Composite Materials, 47 (2012) 191–205, **Sage Publication**.
9. Khashaba, U.A., Aldousari, S.M., Najjar, I.M.R., “Behavior of [0]<sub>8</sub> Woven Composites under Combined Bending and Tension Loading: Part - I Experimental and Analytical”, J. Composite Materials, **46 (2012) 1345–1355**, **Sage Publication**.
10. **Khashaba, U. A.**, El-Sonbaty, I. A., Selmy, A. I., Megahed, A. A., “Machinability Analysis in Drilling Woven GFR/Epoxy Composites: Part I- Effect of Machining Parameters”, Composites: Part A, 41 (2010) 391-400, **Elsevier**.
11. **Khashaba, U. A.**, El-Sonbaty, I. A., Selmy, A. I., Megahed, A. A., “Machinability Analysis in Drilling Woven GFR/Epoxy Composites: Part II- Effect of Drill Wear”, Composites: Part A, 41, pp. 1130-1137, (2010), **Elsevier**.
12. Khoshbakht, M., Chowdhury, S.J., Seif, M.A., and **Khashaba, U.A.**, “Failure of Woven Composites under Combined Tension-Bending Loading”, J. Composite Structures, Vol. 90, pp. 279-286, (2009), **Elsevier**.

## **II- Peer-Reviewed Journals and International Conferences**

13. **Khashaba UA**, Aljinaidi AA, Hamed MA. Development of CFRE Composite Joints using MWCNT/E Adhesives. The 16<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-16), May 27-29, 2014, Cairo, Egypt.
14. **Khashaba UA**, Aljinaidi AA, Hamed MA. Developing nanophase epocast 50-a1/946 epoxy for bonded joints. The 5<sup>th</sup> International Conference on Structural Analysis of Advanced Materials, 23 - 26 September 2013, Kipriotis Village Resort, Island of Kos, Greece.
15. **Khashaba UA**, Alnefaie KA, Aldousari SM. Damping Properties of Nano-Hybrid GFRE Composites. 15<sup>th</sup> International Conference on Aerospace Sciences & Aviation Technology,

Military Technical College, Cairo, Egypt, (2013) 199-MS.

16. Aldousari, S.M., Najjar, I.M.R., **Khashaba, U.A.**, “Behavior of  $[0]_8$  Woven Composites under Combined Bending and Tension Loading”, MEATIP5, Fifth Int. Conf., Assiut University, Egypt, March 28-30, pp.173-186, (2011).
17. Megahed, M.A., Megahed, A.A, Sallam, H.E.M., **Khashaba, U.A.**, Seif, M.A., Abd-Elhamid, M., “Nano-Reinforcement Effects on Tensile Properties of Epoxy Resin”, MEATIP5, Fifth Int. Conf., Assiut University, Egypt, March 28-30, pp.123-135, (2011).
18. Fahad A. Al-Zahrani, Hassan M. Mustafa, Ayoub Al-Hamadi, **U. A. Khashaba**, “Modeling of Computer-Assisted Learning using Artificial Neural Networks”, in: Seoyun J.Kwon (Ed.), New Developments in Artificial Neural Networks Research, Ch32, ISBN: 978-1-61761-553-5, ***Nova Science Publishers, Inc.***, (2011) 41-57.
19. **Khashaba, U. A.**, El-Sonbaty, I. A., Selmy, A. I., Megahed, A. A., “Prediction of Hole Quality in Drilling GFRE Composites using Artificial Neural Networks”, in: Seoyun J. Kwon (Ed.), Artificial Neural Networks, Ch33, ISBN: 978-1-61761-553-5, ***Nova Science Publishers, Inc.***, (2011) 59-76.
20. Sallam, H.E.M., **Khashaba, U.A.** Seif, M.A., Abd-Elhamid, M. Megahed, A.A., Megahed, M.A., “Ultrasonic mixing of nanoparticles in epoxy resin”, Int. Conf. on Nano-Technology for Green and Sustainable Construction 14-17 March, Cairo, Egypt (2010), Edited by G. Yakovlev, Izhevsk Publishing House of ISTU.
21. **Khashaba, U.A.**, “Behavior of  $[0]_8$  Woven Composites under Monotonic and Combined Loading”, Second Egyptians Engineers Association Conference, Riyadh, KSA, May 20-21, (2010).
22. **Khashaba UA.** Delamination in drilling polymeric composites: a review. In: Paulo Davim J., Editor. Drilling of composite materials. Nova Science Publishers, Inc.; (2009) 57-81.
23. **Khashaba, U.A.**, “State-Of-The-Art In: Impact Of Advanced Materials On Current And Future Machine Development”, First Egyptians Engineers Association Conference, Riyadh, KSA, May 14-15, (2009).
24. **Khashaba, U.**, “Delamination In Drilling Composite Laminates: A Review”, Egyptians Engineers Association Conference, Riyadh, KSA, May 14-15, (2009).
25. Selmy, A.I., **Khashaba, U.A.**, El-Sonbaty, I.A., and Megahed, A.A., “Experimental Evaluation of Delamination in Drilling of Fiber Reinforced Polymeric Composite Materials”, EJEST, Faculty of Engineering, Zagazig University, (2009).
26. Selmy, A.I., El-Sonbaty, I.A., **Khashaba, U.A.**, and Megahed, A.A., “Prediction of Delamination Size in Drilling FRP Composite Materials Using Artificial Neural Networks”, EJEST, Faculty of Engineering, Zagazig University (2009).
27. Selmy, A.I., **Khashaba, U.A.**, Sebaey, T.A., “An Experimental Study on the Bolted Joint Connections in GFRE  $[0/90]_2s$  Laminates”, Engineering Research Journal-Menoufia University, Vol.32, 2009.
28. Al-Zahrani, F.A., Al-Masmoom, A.A., **Khashaba, U.A.**, “Impact of Polymers and Polymeric Composites on the Development of New Designs in Mechanical, Electrical, and Civil Engineering: A Review”, MASAUM Journal of Reviews and Surveys (MJRS) Volume 1, Issue 2, pp.184-195, (2009).