DR. RAMZI OTHMAN
Associate Professor, Department of Mechanical Engineering, King Abdulaziz University

## Education

| *Degree* | *Field of Study* | *Institution* | *Year* |
|---|---|---|---|
| Habilitation | Mechanics of Materials | University of Nantes (France) | 2010 |
| PhD | Mechanics of Materials | Ecole Polytechnique (France) | 2002 |
| MS | Mechanical Engineering | Ecole Centrale Paris (France) | 1999 |
| MS | Mechanical and Civil Engineering | Ecole Polytechnique de Tunisie (Tunisia) | 1998 |

## Academic Experience

| *From* | *To* | *Institution* | *Rank* | *Title (Chair, Coordinator, etc.)* | *Full or Part Time* |
|---|---|---|---|---|---|
| 02/2018 | Now | King Abdulaziz University | Prof. | | Full |
| 09/2012 | 02/2018 | King Abdulaziz University | Assoc. Prof. | | Full |
| 10/2005 | 08/2012 | Ecole Centrale de Nantes (France) | Assoc. Prof. | | Full |
| 09/2004 | 08/2005 | ISAT Nevers (France) | Assist. Prof. | | Full |
| 04/2004 | 08/2004 | ARMINES (France) | Eng. Researcher | Post-doc | Full |
| 10/2002 | 03/2004 | Centrale Recherche S.A. (France) | Researcher | Post-doc | Full |

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

1. **2017:** A fractional equation to approximate wave dispersion relation in elastic rods. (Deanship of Scientific Research, grant #135-1022-D1435).
2. **2014:** On the use of complex Young's modulus while processing polymeric Kolsky-Hopkinson bars' experiments (Deanship of Scientific Research, grant #135-031-D1434).

## Honours and Awards

1. **2019:** Award for scientific publication, Deanship of Scientific Research.
2. **2019:** Award for citations to publications, Deanship of Scientific Research.
3. **2018:** Award for scientific publication, Deanship of Scientific Research.
4. **2017:** Award for scientific publication, Deanship of Scientific Research.
5. **2016:** Award for scientific publication, Deanship of Scientific Research.
6. **2015:** Award for scientific publication, Deanship of Scientific Research.
7. **2014:** Award for scientific publication, Deanship of Scientific Research.
8. **2013:** Award for scientific publication, Deanship of Scientific Research.
9. **2003:** Award for one of the best Ph.D. theses defended at the Ecole Polytechnique [*Top 10% of Ph.D. theses defended between June 2002 and Mai 2003 all fields included*].
10. **1999:** A three-year scholarship from Ecole Polytechnique (France) to prepare a Ph.D.
11. **1998:** A one-year scholarship from Tunisian government to pursue master studies in a French university.

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

1. **2018:** Member of the committee of improvement of master and Ph.D. programs, Mechanical Engineering Department, College of Engineering (King Abdulaziz University).
2. **October 2005 – August 2012:** Scientific chief of the group “dynamics” in the team “Materials, Processes and Composite Technologies” in the Institute de Recherché en Génie Civil et Mécanique (GeM laboratory, Ecole Centrale de Nantes).

3. **September 2009** – **August 2012:** Head of the master "Applied Mechanical Sciences: Metallic and composites complex systems".

## Principal Publications/Presentations from the Past Five Years

1. U.A. Khashaba, R. Othman, I.M.R. Najjar. Experimental analysis of composite scarf adhesive joints modified with multiwalled carbon nanotubes under bending and thermomechanical impact loads. Proc. Inst. Mech., Part L, J. Mater. Des. Appl. 2019, in press.
2. U.A. Khashaba, R. Othman, I.M.R. Najjar. Development and characterization of structural adhesives for aerospace industry with alumina nanoparticles under shear and thermo-mechanical impact loads. Proc. Inst. Mech., Part G, J. Aeros. Eng. 2019, in press.
3. R. Othman. Wave dispersion in Kolsky-Hopkinson bar machine. In "The Kolsky-Hopkinson bar machine: special topics" Ed. R. Othman, Springer, 2018, pp. 157-181.
4. R. Othman. Wave separation techniques. In "The Kolsky-Hopkinson bar machine: special topics" Ed. R. Othman, Springer, 2018, pp. 183-203.
5. T. Heuze, X. Guo, R. Othman. Very high strain rate range. In "The Kolsky-Hopkinson bar machine: special topics" Ed. R. Othman, Springer, 2018, pp. 249-272.
6. M.O. Gafar, K.H. Almitani, R. Othman. Analytical model for the harmonic response of dissimilar single-lap joints. Proc. Inst. Mech., Part K, J. Multi-Body Dyn. 2018; 232:457-472.
7. R. Othman. Analytical modelling of dynamic and impact loads. In "Strength prediction of adhesively-bonded joints" Ed. R. Campilho, CRC Press, 2017:71-96.
8. U.A. Khashaba, R. Othman. Low-velocity impact of woven CFRE composites under different temperature levels. Int. J. Impact Eng. 2017; 108:191-204.
9. R. Othman. A fractional equation to approximate wave dispersion relation in elastic rods. Strain 2017; 53: Article no. e12228.
10. Z. El-Qoubaa, R. Othman. Temperature, strain rate and pressure sensitivity of the Polyetheretherketone's yield stress. Int. J. Appl. Mech. 2017; 9: Article no. 1750099.
11. Z. El-Qoubaa, R. Othman. Strain rate sensitivity of polyetheretherketone's compressive yield stress at low and high temperatures. Mech. Mater. 2016; 95:15-27.
12. R. Hazimeh, R. Othman, K. Khalil, G. Challita. Influence of plies' orientations on the stress distribution in adhesively bonded laminate composite joints subjected to impact loadings. Compos. Struct. 2016; 152: 654-664.
13. K.H. Almitani, R. Othman. Analytical solution of the harmonic response of visco-elastic adhesively bonded single-lap and double-lap joints. Int. J. Adhes. Adhes. 2016; 71: 55-65.
14. G. Challita, R. Othman, K. Khalil. Compression and shear behavior of Epoxy SA 80 bulk adhesive over wide ranges of strain rate. J. Polym. Eng. 2016; 36: 165-171.
15. A. A. Al-Juaid, R. Othman. Modeling of the strain rate dependency of polycarbonate's yield stress: evaluation of four constitutive equations. J. Eng. 2016; Article ID 6315421, 9 pages.
16. A. A. Al Salahi, R. Othman. Constitutive equations of yield stress sensitivity to strain rate of metals: a comparative study. J. Eng. 2016, Article ID 3279047, 7 pages.
17. Z. El-Qoubaa, R. Othman. Characterization and modeling of the strain rate sensitivity of polyetheretherketone's compressive yield stress. Mater. Des. A 2015; 66: 336-345.

18. R. Hazimeh, G. Challita, K. Khalil, R. Othman. Experimental investigation of the influence of substrates' fibers orientations on the impact response of composite double-lap joints. Compos. Struct. 2015, 134: 82-89.

19. R. Hazimeh, K. Khalil, G. Challita, R. Othman. Analytical model of double-lap bonded joints subjected to impact loads. Int. J. Adhes. Adhes. 2015; 57: 1-8.

20. R. Hazimeh, G. Challita, K. Khalil, R. Othman. Finite element analysis of adhesively bonded composite joints subjected to impact loadings. Int. J. Adhes. Adhes. 2015; 56: 24-31.

21. Z. El-Qoubaa, R. Othman. Tensile behavior of polyetheretherketone (PEEK) over a wide range of strain rates. Int. J. Polym. Sci. 2015, Article ID 275937, 9 pages.

22. R. Othman. A modified-Eyring equation for modeling yield and flow stresses of metals at strain rates from 10-5 to 5 104 s-1. Adv. Mater. Sci. Eng., Article ID 539625, 7 pages.

23. M. Baselem, R. Othman, A. Chamekh. Numerical simulation of the temperature rise in intermediate and high strain rate experiments. J. Mech. Sci. Technol. 2015, 29: 4179-4187.

24. A. Martin, R. Othman, P. Rozycki. Experimental investigation of the quasi-static and intermediate strain rate behavior of a polypropylene-glass fiber (PPGF) woven composite. Plast. Rubber Compos. Macromol. Eng. 2015; 44: 1-10.

25. R. Hazimeh, G. Challita, K. Khalil, R. Othman. Influence of adherends dissimilarity on the stress distribution of adhesively bonded composite joints subjected to impact loadings. Mech. Compos. Mater. 2015; 50: 717-724.