

Curriculum Vitae
For
Prof. Dr. Osama A. Terfas
Department of Mechanical and Industrial Engineering
University of Tripoli

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Nationality: Libyan

1. Specialization: Mechanical Engineering

2. Qualifications: PhD in Mechanical Engineering, University of Glasgow, UK, 2010.

3. Work Experience

1. Current work: Professor at the Department of Mechanical and Industrial Engineering, Faculty of Engineering - University of Tripoli, Libya.
BSc Courses taught: Machine Design.
 2. Academic staff member at the Department of Marine and Offshore Engineering (April 2012-March 2022), Faculty of Engineering - University of Tripoli, Libya.
BSc Courses taught: Machine design, Strength of materials, Offshore structures engineering, Corrosion engineering.
MSc courses taught: Structural Integrity of Marine Structures.
 3. Strategic plan committee member at the Faculty of Engineering, University of Tripoli, 2020-2021.
 4. Research and consultations committee member at the Faculty of Engineering, University of Tripoli, 2020-2021.
 5. Scientific committee member of the IEEE 1st International Maghreb Conference on Science and Techniques of Automatic Control, Tripoli, 2021.
 6. E-learning committee member at the Faculty of Engineering, University of Tripoli, 2020.
 7. Academic program committee member at the Faculty of Engineering/University of Tripoli, 2019-2020.
 8. Head of Marine and Offshore Engineering Department from Aug. 2016 to May 2017.
 9. Teaching graduate students at Faculty of Engineering, University of Tripoli, 2014-2016.
 10. Teaching graduate students at The Libyan Academy for Graduate Studies, Libya, 2014-2016.
 11. Quality committee member at the Faculty of Engineering, University of Tripoli, 2012-2015.
 12. Teaching undergraduate students at Faculty of Engineering, University of Zawia, 2012-2013.
 13. Teaching undergraduate students at Marine Studies Academy, Libya, 2013.
 14. Graduate teaching assistant in The Department of Mechanical Engineering, University of Glasgow, UK in the period 2007-2010.
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4. Research Interests

Structural integrity, fracture mechanics and failure analysis, strength of materials, mechanical design, corrosion damage and control, mechanics of deformation in metals & polymers, and material testing.

5. Skills

Computer: Proficiency in Finite element analysis Code Abaqus, and Microsoft Office (Word, Excel, PowerPoint).

Standards: Experience with ASME, ASTM and BS.

6. Languages

1. Arabic (mother language).
 2. English: I speak English fluently (speaking, reading and writing).
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7. Awards and honors

- 1- ASME-PVP award for PhD students' paper competition, 2009, Prague, Czech Rep.
 - 2- Excellence Engineering Award (2003) for MSc program, Faculty of Engineering, University of Tripoli.
 - 3- ASME membership (Pressure vessels and piping division), 2009-2014.
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8. Training

- 1- Higher education program, curriculum and course specifications according to ABET, Mar 23-26, 2013. Tripoli. Libya.
 - 2- University performance evaluation according to ABET, Mar 27-28, 2013. Tripoli. Libya.
 - 3- Technical training on materials testing machines, theory of machines apparatus, and mechanical instrumentations. Mar 4-8, 2013, Hamburg, Germany.
 - 4- Mathematical modelling and computational methods in solid mechanics. 26th Aug.-1st Sep. 2007, Glasgow. UK.
 - 5-Central air conditioning design and control systems. Sep. 2003, Dubai. UAE.
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9. Publications

1. Mahmoud Abid, Mohamed Salem, **Osama Terfas**, Mohamed Hamouda, *Microstructure Changes related Mechanical Properties of Welded HSLA Steel Plates*. Journal of Alasmarya University: Basic and Applied Sciences, V (7), 1, 2022.
2. **Osama Terfas**, Rayan Tarek, *Mechanisms of Corrosion related Sulphate-Reducing-Bacteria and its Impact on Steel Structure*, Scientific Research Journal for Metal Engineering and Technologies, V (2), 2021.
3. **Osama Terfas**, Nadia Nuseir, Ahmed Maher, *Strategies towards the Implementation of Blended Learning in Engineering Education*, Proceeding of IEEE 1st International Maghreb Conference on Sciences and Techniques of Automatic Control and Computer Engineering, 2021.
4. Rida B. Arieby, **Osama A. Terfas** and Rachid Rahouadj, *Effects of Loading History on The Mechanical Behavior of Semi-Crystalline Polymer*, Journal of Engineering Research issued by Faculty of Engineering, University of Tripoli, Libya, Issue (29) March 2020.

5. **Osama Terfas**, Reda Areibi, Abdulbaset Kraima, *Finite Element Analysis based Stress Intensity Factor Solutions for Surface Cracks*, The International Journal of Engineering and Information Technology (IJEIT), Vol.6, No.1,2019.
 6. M. EM. Abid, **Osama A. Terfas**, M. M. Zabti, M. A. Hamel, *Effects of sintering processing parameters and benchmarking on the orange peel texture of Polyamide PA3200 glass filled*, International Science and Technology Journal, 2019.
 7. **Osama A. Terfas**, Arwa M. Elmabrouk, Ahlam Y. Elrqiq. *Analysis of the Failure of Cylindrical Pressure Vessels*. Proceediing of first conference of engineering science and technology, Algarabouli-Libya, 25-27, 2018.
 8. **Osama A. Terfas** and Nouredin M. Amar, *Ductile Crack Growth Controlled By J-Integral and Stress Triaxiality*, Journal of Engineering Research and Applied Sciences (JERAS), 5th Edition, May 2018, Libya, ISSN 2414-6515.
 9. **Osama Terfas**, Reda Areibi, Abdulbaset Kraima, *Effects of Low Constraint Conditions on Fracture Toughness and Failure Assessment*. Scientific Research Journal for Metal Engineering and Technology. V(1), 2018.
 10. Rida Arieby, Kaïs Mrabet, **Osama Terfas**, Cédric Laurent and Rachid Rahouadj. *Anisotropic mechanical behavior of semicrystalline polymers: Characterization and modeling of non-monotonic loading including damage*, Journal of Applied Polymer Science, V(134), 2017.
 11. **Osama A. Terfas**, Rida B. Arieby, and Abdelhakim A. Hamed. *Finite Element Analysis and Experimental Investigation of Surface Cracks in Elastic-Perfectly Plastic Materials*. Proceedings of International Conference on Energy Systems, Istanbul, Yildiz Technical University. 23-25, Dec., 2015.
 12. **Osama A Terfas**, *Effect of Geometry on Hydrostatic Stress and J-integral in Surface Cracks in Bending*. Proceedings of International Journal Conference on Robotics, Mechanical and Manufacturing Engineering. Penang 2014, Malaysia.
 13. **Osama A. Terfas**, Abdulbast M. Kriama, *Out-of-plane Constraint Based Fracture Toughness*. Proceedings of the World Congress on Engineering 2013: International Conference on Mechanical Engineering. V.3, London, UK.
 14. **Terfas, A. O.**, and Abdasalam Alktiwi. *Ductile Crack Growth in Surface Cracked Pressure Vessels*. Proceedings of the International Conference on Automotive and Mechanical Engineering. 73, Zurich 2013, Switzerland.
 15. **Terfas, A. O.** *The Effect of Stress Biaxiality on Crack Shape Development*. Proceedings of the International Conference on Materials Science and Engineering. 68, Paris 2012, France.
 16. **Terfas, A. O.** *Crack tip constraint for a surface crack under fully plastic conditions*. Proceedings of the ASME 2009 Pressure Vessels and Piping Division Conference. PVP2009-77371. Prague, Czech Republic.
 17. **Terfas, A. O.**, and Bezensek, B. *The development of a surface crack in a thick vessel under ductile tearing*. Proceedings of the ASME 2009 Pressure Vessels and Piping Division Conference. PVP2009-77374. Prague, Czech Republic.
 18. **Terfas, A. O.**, and Bezensek, B. *The Influence of the specimen thickness on the CTOD fracture toughness*. Proceedings of the 7th EUROMECH Solid Mechanics Conference. ESMC2009-398. Lisbon, Portugal.
 19. **Terfas, A. O.**, and Z. Hatoush, *Development of Quality Control. Libyan Quality Conference 2004 "To Develop Quality Culture"* (Tripoli – Libya).
 20. **Terfas, A. O.**, and Z. Hatoush. *Using integrated Modelling IDEF to Control Production Processes*. Libyan Conference on Development of Industrial Quality (Benghazi - Libya - 2002).
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