

1- Personal Details

Name : Dr. Tarek Mohamed Ahmed Ali EL-Bagory
Designation : Assistant Professor
Date of Birth : 29/10/1972
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2- Area of specialization:

Major	Mechanical Design
Minor	Materials Science - Fracture Mechanics

3- Education & Qualifications

Date	Degree	University name	Country	Title of the Dissertation
2010	Ph.D.	Helwan University	Egypt	Failure Analysis of Polymeric Miter Pipe Bends under Combined Loading
2004	Master	Helwan University	Egypt	Experimental and Finite Element Analysis of Crack Growth in Pipes Made of Polymeric Materials
1997	Bachelor	Helwan University	Egypt	Interaction Between Two Parallel Jets

4- Professional Activities:

Job Title	Place	Country	From	To
Engineering Practice Coordinator	College of Engineering, Majmaah University	Saudi Arabia	2014	2024
Senior Design Coordinator	College of Engineering, Majmaah University	Saudi Arabia	2014	2024
Community Service Coordinator	College of Engineering, Majmaah University	Saudi Arabia	2018	2024
Inventions and Innovations Coordinator	College of Engineering, Majmaah University	Saudi Arabia	2011	2024

5- Teaching Experiences

#	Teaching Experiences	University	From	To
1.	Mechanical Design	Majmaah University	2011	2024
2.	Machine Dynamics	Majmaah University	2011	2024
3.	Mechanical Drawing, AutoCAD	Majmaah University	2011	2018
4.	Mechanics of Materials	Majmaah University	2011	2020
5.	Mechanical Vibration	Majmaah University	2012	2020
6.	Machine Element Design	Majmaah University	2012	2020
7.	Materials Selection in Design and Manufacturing	Majmaah University	2020	2024
8.	Machine Design LAB 1	Majmaah University	2021	2023
9.	Machine Design LAB 2	Majmaah University	2021	2023
10.	Senior Design Projects	Majmaah University	2018	2024

6- Areas of Specialization

#	Areas of Specialization
1	Materials Science
2	Fracture Mechanics
3.	Failure Analysis for Piping Systems

4.	Materials Recycle
5.	Fatigue and Creep of Polymeric and Composite Materials

7- Current membership in professional organizations

#	Membership	ID
1	Membership in American Society of Mechanical Engineers, ASME	100136043
2	Membership in Egyptian Engineers Syndicate, Cairo, Egypt.	36/05674
3	Membership in Innovation Center, Majmaah University, KSA.	7

8- Publications (Most important publications in the last 5 Years)

#	Publications / Presentations	Journal (Conference)	Publishing Year (Conference Date)
1	Investigation of Fatigue Crack Propagation in Steel Pipeline Repaired by Glass Fiber Reinforced Polymer	Composite Structures	April 07, 2020, Vol. 242,112189 , https://doi.org/10.1016/j.compstruct.2020.112189 , ISSN No. 0263-8223.
2	Fracture Behavior of Cracked Ring Specimen at Different Crack Positions	Journal of Pressure Vessel Technology	Oct 2020, Vol. 142, No. 5, Article Number: 051302, https://doi.org/10.1115/1.4046980 , ISSN No. 0094-9930.
3	Effect of Loading Rate and Pipe Wall Thickness on the Strength and Toughness of Welded and Unwelded Polyethylene Pipes	Journal of Pressure Vessel Technology	Feb 2021, Vol. 143, No. 1, pp. 011505-1-14, https://doi.org/10.1115/1.4047444 , ISSN No. 0094-9930.
4	Evaluation of the Infill Design on the Tensile Response of 3D Printed Polylactic Acid Polymer	Materials	2021, Vol. 14, No. 9, 2195; https://doi.org/10.3390/ma14092195 , ISSN No. 1996-1944.
5	Comparative Study of Mechanical Behavior of Low- and High-Density Polyethylene Based on UVB Sterilization for Medical Usage	Journal of Mechanical Science and Technology	2022, Vol. 36, pp.5977–5993; https://doi.org/10.1007/s12206-022-1114-6
6	Electrically Conductive Fibers Fabrication and Characterization Via in-Situ Polymerization of Aniline for the Protection Against EMI and Thermal Imaging Signals”,	Journal of Materials Research and Technology,	2023, Vol. 23, March–April, pp. 2399-2409.
7	Investigation of Tensile and Flexural Properties of Habesha Moringa-Bamboo Fiber Reinforced Epoxy Hybrid Composite	Polymer Composites	2023, Vol. 44, No. 7, pp. 4121-4133. https://doi.org/10.1002/pc.27384 , ISSN No.
8	Machine Learning-Based Prediction of Mechanical and Thermal Properties of Nickel/Nobalt/Ferrous and Dried Leaves Fiber-Reinforced Polymer Hybrid Composites”, ,	Polymer Composites	2023, https://doi.org/10.1002/pc.27793 , ISSN:1548-0569.
9	Predicting Physico-Mechanical and Thermal Properties of Loofa Cylindrica Fibers and Al2o3/Al-Sic Reinforced Polymer Hybrid Composites using Artificial Neural Network Techniques	Construction and Building Materials,	2023, 409, 133901. https://doi.org/10.1016/j.conbuildmat.2023.133901

10	Analysis and Modeling of Prepreg Carbon Fiber Reinforced Composites using Decision Tree Algorithm	International Conference on Eco-friendly Fibers and Polymeric Materials- EFPM (Hyper Mode),	Bangkok, Thailand, 19th-20th February 2024.
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9- MAJOR RESEARCH PROJECTS

#	Research Project	Status (Now/Finished)	Funded by
1.	An Implementation Method for Initiation and Measuring Crack Growth in Piping Systems	Finished	Deanship of Scientific Research, Majmaah University
2.	Failure Analysis of Tube Materials using Nano fluid	Finished	Deanship of Scientific Research, Majmaah University