جامعة المجمعة
Majmaah University
كلية الهندسة

CURRICULUM VITAE

كلية الهندسة
College of Engineering

1- Personal Details

Name : Dr. Yasser Mahmoud Abdelrhman
Designation : Assistant Professor
Date of Birth : January 07, 1984, Assiut, Egypt.
Nationality : Egyptian
Telephone : 2548
Mobile : +966-561428267
Email : yasser.abdelrhman@mu.edu.sa
yasser.abdelrhman@aun.edu.eg

2- Area of specialization:

Major	Mechanical Design and Production Engineering
Minor	Materials Science and Engineering

3- Education & Qualifications

Date	Degree	University name	Country	Title of the Dissertation
2016	Ph.D.	E-JUST	Egypt	Design and characterization of new low-cost titanium alloys for biomedical applications
2013	Master	Assiut University	Egypt	Slurry Erosion of Carburized and Boronized Low alloy Steel AISI 5117
2006	Bachelor	Assiut University	Egypt	Design, manufacturing, and studying the Performance of Vertical Centrifugal Casting Machine.

4- Professional Activities:

Job Title	Place	Country	From	To
Assistant professor	College of Engineering, Majmaah University	Saudi Arabia	8.2024	Now
Head of the technological mechanical department	Egyptian-German College of technology, Misr International Technological University (MITU)	Egypt	9.2022	8.2024
Associate professor	Faculty of Engineering, Assiut University	Egypt	1.2023	8.2024
Assistant professor	Faculty of Engineering, Assiut University	Egypt	10.2016	1.2023
Demonstrator (TA & RA) and Lecturer assistant	Faculty of Engineering, Assiut University & Egypt-Japan University of Science and Technology (E-JUST)	Egypt	1.2007	10.2016

5- Teaching Experiences

#	Teaching Experiences	University	From	To
1	Engineering Drawing	Assiut University	2007	2024

2.	Mechanics of Materials	Assiut University	2007	2023
3.	Machine Construction	Assiut University	2007	2024
4.	Theory of Machine (I)	Assiut University	2007	2024
5.	Tribology	Assiut University	2007	2010
6.	Theory of Machine (II)	Assiut University	2007	2024
7.	Material Science and Engineering	Assiut University	2007	2010
8.	Robotics and Automation	Assiut University	2018	2020
9.	Machine Design (I)	Assiut University	2007	2024
10.	Machine Design (II)	Assiut University	2007	2024
11.	Mechanical Vibration	Assiut University	2007	2024
12.	Metrology	Assiut University	2021	2022
13.	CNC (Computer Numerical Control)	Assiut University	2022	2023
14.	Machine Tool Design	Assiut University	2016	2020
15.	Mechanical Design Laboratories	Assiut University	2007	2017
16.	Heat Treatments (Graduate course).	Assiut University	2017	2023
17.	Composite materials (Graduate course)	Assiut University	2023	2024
18.	Modeling and simulation of mechanical engineering applications using FEA, ANSYS (Graduate course)	Assiut University	2022	2024

6- Areas of Specialization

#	Areas of Specialization
1	Additive manufacturing (FDM & SLM)
2	Tribology (Wear – Friction – Lubrication).
3.	Corrosion/Electrochemistry Characterizations.
4	Coatings (electroplating).
5	Materials Processing.
6	Mechanical properties characterizations.
7	Heat treatments and metallurgical investigations.
8	Design and Modeling using CAD and CAE Softwares.
9	Light alloys (Ti, Al, Mg) for aerospace and biomedical applications.
10	Bio-implants (Biomaterials), alloy design, production, and characterizations.
11	Cell Viability.
12	TiO_2 Nanotubes.

7- Current membership in professional organizations

#	Membership	ID
1	Member of the Engineers Syndicate	

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

#	Publications / Presentations	Journal (Conference)	Publishing Year (Conference Date)
[1]	*R. Alham, K. Mostafa, and Y. Abdelrhman, "The Role of Machine Learning in Enhancing 3D-Printed Prosthetic Ankle," in 2024 14th International Conference on Electrical Engineering (ICEENG), IEEE, 2024, pp. 125–130.*	Conference	2024
[2]	*Y. Abdelrhman et al., "Mechanical properties and damping characteristics of Egyptian granite-epoxy composite material," Mater Res Express, vol. 11, no. 6, p. 066501, 2024.*	Journal	2024
[3]	*M. Helal, M. Tawfik, A. R. Abdel Aziz, I. HassabAllah, and Y. Abdelrhman, "Improving the extraction efficiency of sugar cane mills using perforated rollers with longitudinal channels," Egyptian Sugar Journal, vol. 21, 2024.*	Journal	2024

[4]	*A. Ali, M. Soliman, Y. Abdelrhman, and I. Hasab-allah, "Investigation of AL/CU Bimetallic Tube Cladding Process by Severe Plastic Deformation," JES. Journal of Engineering Sciences, vol. 51, no. 1, pp. 1–15, 2023.*	Journal	2023
[5]	*M. Heshmat, I. Maher, and Y. Abdelrhman, "Surface roughness prediction of polylactic acid (PLA) products manufactured by 3D printing and post processed using a slurry impact technique: ANFIS-based modeling," Progress in Additive Manufacturing, vol. 8, no. 2, pp. 87–98, 2023.*	Journal	2023
[6]	*M. A. Al-Bukhaiti, A. Abouel-Kasem, Y. Abdelrhman, M. Heshmat, and S. M. Ahmed, "Image processing approach for estimating the degree of surface eroded by slurry at different impact velocities," J Tribol, vol. 144, no. 10, p. 101707, 2022.*	Journal	2022
[7]	*R. Naveen Kumar, B. Saleh, Y. Abdelrhman, A. Afzal, and R. J. Punith Gowda, "Soret and Dufour effects on Oldroyd-B fluid flow under the influences of convective boundary condition with Stefan blowing effect," Indian Journal of Physics, vol. 96, no. 13, pp. 3881–3888, 2022.*	Journal	2022
[8]	*B. Saleh et al., "The combined effect of Al2O3 nanofluid and coiled wire inserts in a flat-plate solar collector on heat transfer, thermal efficiency and environmental CO2 characteristics," Arab J Sci Eng, vol. 47, no. 7, pp. 9187–9214, 2022.*	Journal	2022
[9]	*H. Hussam, Y. Abdelrhman, M.-E. S. Soliman, and I. M. Hassab-Allah, "Effects of a new filling technique on the mechanical properties of ABS specimens manufactured by fused deposition modeling," The International Journal of Advanced Manufacturing Technology, vol. 121, no. 3, pp. 1639–1650, 2022.*	Journal	2022
[10]	*M. A. Gepreel, Y. Abdelrhman, Y. E. Saleh, and N. K. Allam, "Surface functionalization of new Ti-alloys for biomedical applications".*	Conference	2022
[11]	*R. Dhairiyasamy, B. Saleh, M. Govindasamy, A. A. Aly, A. Afzal, and Y. Abdelrhman, "Effect of particle size on thermophysical and heat transfer properties of Ag nanofluid in a radiator–an experimental investigation," Inorganic and Nano-Metal Chemistry, vol. 53, no. 1, pp. 78–92, 2023.*	Journal	2023
[12]	*M. Omar, Y. Abdelrhman, I. M Hassab, and M. Khierldeen, "Experimental study on compressive strength and flexural rigidity of epoxy granite composite material," JES. Journal of Engineering Sciences, vol. 49, no. 2, pp. 198–214, 2021.*	Journal	2021
[13]	*M. Heshmat and Y. Abdelrhman, "Improving surface roughness of polylactic acid (PLA) products manufactured by 3D printing using a novel slurry impact technique," Rapid Prototyp J, vol. 27, no. 10, pp. 1791–1800, 2021.*	Journal	2021
[14]	*M. Amin Elsheemy, I. H Abdel Daiam, R. Omar, and Y. Abdelrhman, "THE EFFECT OF ADDING CALCINED ALUMINA ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF ALUMINUM FOAM," JES. Journal of Engineering Sciences, vol. 49, no. 5, pp. 551–576, 2021.*	Journal	2021
[15]	*M. Helal, H. Mustafa, Y. Abdelrhman, and I. HassabAllah, "Improving the Efficiency of Extraction of Sugar Cane Mills Using Rollers with Compound Triple Pitch," Egyptian sugar journal, vol. 14, pp. 119–132, 2020.*	Journal	2020
[16]	*Y. Abdelrhman, S. Kobayashi, S. Okano, T. Okamoto, and M. A. Gepreel, "Biocompatibility of Anodized Low-Cost Ti-4.7 Mo-4.5 Fe Alloy," in Materials Science Forum, Trans Tech Publications Ltd, 2021, pp. 458–464.*	Conference	2021
[17]	*B. Saleh, I. Maher, Y. Abdelrhman, M. Heshmat, and O. Abdelaal, "Adaptive neuro-fuzzy inference system for modelling the effect of slurry impacts on PLA material processed by FDM," Polymers (Basel), vol. 13, no. 1, p. 118, 2020.*	Journal	2020
[18]	*R. Omar, E. Oraby, Y. Abdelrhman, and M. Aboraia, "Effect of glycine as a complex agent on the surface and corrosion properties of Ni-P and Ni-P/Al2O3 electroless coating," Anti-Corrosion Methods and Materials, vol. 67, no. 6, pp. 593–603, 2020.*	Journal	2020
[19]	*M. HESHMAT and Y. ABDELRHMAN, "ANOVA AND REGRESSION MODEL OF SLURRY EROSION PARAMETERS*	Conference	2019

	OF A POLYMERIC SPRAY- PAINT FILMS," in 16th International Conference on Tribology, SERBIATRIB 19:, 2019, pp. 252–258.		
[20]	*S. A. Aldahash, O. Abdelaal, and Y. Abdelrhman, "Slurry Erosion–Corrosion Characteristics of As-Built Ti-6Al-4V Manufactured by Selective Laser Melting," Materials, vol. 13, no. 18, p. 3967, 2020.*	Journal	2020
[21]	*O. Abdelaal, M. Heshmat, and Y. Abdelrhman, "Experimental investigation on the effect of water-silica slurry impacts on 3D-Printed polylactic acid," Tribol Int, vol. 151, p. 106410, 2020.*	Journal	2020
[22]	*Y. Abdelrhman, M. Gepreel, and S. Kobayashi, "Biocompatibility of Self-organized TiO2 nanotubes with different topographies," in The International Conference on Materials Science and Engineering: Recent Advances and Challenges (The ICMSE-RAC 2018), 2018.*	Conference	2018
[23]	*Y. Abdelrhman, M. A.-H. Gepreel, S. Kobayashi, S. Okano, and T. Okamoto, "Biocompatibility of new low-cost (α+ β)-type Ti-Mo-Fe alloys for long-term implantation," Materials Science and Engineering: C, vol. 99, pp. 552–562, 2019.*	Journal	2019
[24]	*Y. Abdelrhman, A. Abouel-Kasem, K. Emara, and S. Ahmed, "The effect of boronizing heat treatment on the slurry erosion of AISI 5117," Industrial Lubrication and Tribology, vol. 70, no. 7, pp. 1176–1186, 2018.*	Journal	2018

9- MAJOR RESEARCH PROJECTS

#	Research Project	Status (Now/Finished)	Funded by
1.	Optimization of Printing Parameters for Improving Surface and Mechanical Properties of Dual-Extruder 3d Printer Products.	Finished	Academy of Scientific Research and Technology (ASTR-Egypt), 2022.