

CURRICULUM VITAE

Mohammed Ali Almomani, Ph.D.
Full Professor of Materials and Industrial Engineering

Industrial Engineering Department
(ABET Accredited Program)
Faculty of Engineering
 Jordan University of Science and Technology,
 P.O. Box 3030,
 Irbid 22110,
Jordan

PERSONNEL INFORMATION

Full Name:	Mohammed Ali Almomani
Complete Postal Address:	Mohammed Ali Almomani, Ph.D. Professor of Materials and Industrial Engineering Industrial Engineering Department Faculty of Engineering Jordan University of Science and Technology, P.O. Box 3030, Irbid 22110, Jordan
Date of Birth:	17/11/1977
Nationality	Jordanian
Telephone Number (Mobile):	00962798984977
Email address:	maalmomani7@just.edu.jo
Researchgate	https://www.researchgate.net/profile/Mohammed_Almomani
Google Scholar	https://scholar.google.com/citations?user=PIC-x2QAAAAJ&hl=en
Scopus ID	55441586600
ORCID iD	0000-0003-1034-9022
Web of Science Research ID	F-8231-2018
Jordan Open Innovation Platform	100059.400.200.2028.0000-0003-1034-9022
Publons	https://publons.com/researcher/1326733/mohammed-almomani/

EDUCATION

Degree	Major	Year	University/College
Doctorate	Ph.D. in Engineering <ul style="list-style-type: none"> • GPA 3.97. • Dissertation: Perforated Pitting Prevention of 316L Stainless Steel Using Hafnium Dioxide -Aluminum Oxide Nanolaminate Films. 	2009	University of Wisconsin Milwaukee (UWM), Materials Engineering Department, Milwaukee, Wisconsin, USA
Masters	Master of Science in Industrial Engineering/ Manufacturing and Design <ul style="list-style-type: none"> • GPA 3.56. • Dissertation: Investigation of Machinability of ZAMAK 5 Alloy Produced by Powder Compaction. 	2004	University of Jordan, Industrial Engineering Department, Amman, Jordan.
Bachelor	Bachelor of Science in Mechanical Engineering / Industrial Production	2000	Jordan University of Science and Technology, Mechanical Engineering Department, Irbid 21110 Jordan.

AWARDS AND HONORS

No.	Awards o Honors
1	Chancellor Graduate Student Award, UWM, for the academic years 2005-2009.
2	AVS Dorothy M. and Earl S. Hoffman travel grant, October 2008.

SCHOLARSHIPS

Scholarships
Awarded Teaching Assistant Scholarship to pursue the Ph.D. degree (2005-2009) in University of Wisconsin Milwaukee.

ACADEMIC EXPERIENCE

EXPERIENCE	NO. OF YEARS
Jordan University of Science and Technology , College of Engineering Industrial Engineering Department Full Professor , May 2021 –Now	2.5 +
Acting Chairman of Industrial Engineering Department September 2018-September 2022 <ul style="list-style-type: none"> • In charge of all academic and administrative activities in the department. • Managing the file for renewing the ABET accreditation; 2020, 	4
Jordan University of Science and Technology, College of Engineering	
Assistant of Engineering Dean September 2016-August 2018 Main Tasks; includes: <ul style="list-style-type: none"> • Head of ABET and quality assurance committee, academic year (2016-2017). • Responsible of courses equivalency for the newly admitted students switching their programs or coming from other institutions. • Preparing college annual report, academic year (2015-2016). • Preparing college budget, Financial year 2018. • Approving college procurement and purchasing orders. • Reviewing and updating the contents of the official webpage of the college, academic year (2017-2018). 	2
Jordan University of Science and Technology, Industrial Engineering Department, Jordan	
Associate Professor , May 2016 - May 2021	5
Jordan University of Science and Technology, Industrial Engineering Department, Jordan	
Assistant Professor , February 2010-May 2016	6
Jordan University of Science and Technology, Industrial Engineering Department, Jordan	

Instructor , August 2008 to May2009 <ul style="list-style-type: none"> • Taught Engineering Material class. • Taught Topics in Material class, "Scanning Electron Microscope". 	1
University of Wisconsin Milwaukee, Materials Engineering Department, Milwaukee, WI, USA	
Manager Laboratory , August 2006 to January2009 <ul style="list-style-type: none"> • Setting up the labs for Materials Engineering and Materials Manufacturing and Processing classes, including: doing lab procurements, and following up sample preparation with the machine shop. • Training and assisting students to use Scanning Electron Microscope (SEM) and Energy Dispersive Spectroscopy (EDS). • Advising and assisting the students to use different lab equipment in their class projects. 	3
University of Wisconsin Milwaukee, Materials Engineering Department, Milwaukee, WI, USA	
Teaching Assistant , August 2005 to January 2009 <ul style="list-style-type: none"> • Taught 2 weekly sections of Materials Engineering Lab • Taught 1 weekly section of Materials Manufacturing and Processing Lab • Graded undergraduate level courses 	4
University of Wisconsin Milwaukee, Materials Engineering Department, Milwaukee, WI, USA	
Research Assistant, Summer 2007, and Summer 2008. <ul style="list-style-type: none"> • Created and designed artificial coatings to increase protection against perforated pitting of 316L SS in physiological salt solution. • Combined electrochemical data (cyclic polarization) with SEM/EDS data to model perforated pitting protection of uncoated 316L SS and 316L SS coated with a single layer Al₂O₃, a single layer HfO₂ and HfO₂-Al₂O₃nanolaminate) and studied their corrosion protection against pitting. 	0.5
University of Wisconsin Milwaukee, Materials Engineering Department, Milwaukee, WI, USA	
Engineering Internship , Summer 2006 <ul style="list-style-type: none"> • Examined the as-grown structure of TiO₂-Al₂O₃nanolaminates. • Examined the crystallization and phase formation behavior upon annealing at high temperature. 	0.25
University of Wisconsin Milwaukee, Materials Engineering Department, Milwaukee, WI, USA	

WORK EXPERIENCE

EXPERIENCE	IN	NO. OF YEARS
Mechanical Design Engineer , September 2000 to September 2005	King Abdullah II Design and Development Bureau (KADDB), Amman, Jordan	5

RESEARCH INTERESTS

- **Materials Engineering**
 - Additive Manufacturing
 - Nanomaterials- Nanocomposites
 - Coatings and Thin Films
 - Material Characterization
 - Electrochemistry and Corrosion
 - Metal Matrix Composites
 - Friction Stir Welding
- **Engineering Management**
 - Lean Manufacturing.
 - Group Technology
 - Maintenance Engineering
 - Design of Experiment and Statistical Analysis
 - Machine Learning

TEACHING EXPERIENCE**Undergraduate Courses**

- **Materials and Manufacturing Engineering**
 - IE 363 Materials Engineering.
 - IE 367 Materials Engineering Laboratory
 - IE 366 Manufacturing Process I
 - IE 466 Manufacturing Process II
 - IE 331 Metrology
 - IE 218 Dynamics and Vibrations
 - IE 591 Graduation Project I.
 - IE 592 Graduation Project II.
- **Engineering Management**
 - IE 551 Lean Production Systems
 - IE 574 Reliability and Maintenance Engineering
 - IE 347 Applied Statistics

Graduate Courses

- **Materials and Manufacturing Engineering**
IE 760 Advanced Engineering Materials
- **Engineering Management**
IE 747 Lean and Agile Production Systems

PROFESSIONAL GROWTH ACTIVITIES AND TRAINING-ATTENDED WORKSHOPS

No.	Title	Period
1	How to Design your Online Course , Center of E-Learning and Open Educational Resources, Jordan University of Science and Technology	June 2023
2	Online Learning Design , Academic Development Center, Jordan University of Science and Technology	July 2018
3	Statistical Data Analysis Using Minitab , Academic Development Center, Jordan University of Science and Technology	Jan 2018
4	Statistical Package for Social Sciences , Academic Development Center, Jordan University of Science and Technology.	Jan 2011.
5	Modern University Instructional Methods , Academic Development Center, Jordan University of Science and Technology.	May 2010.
6	Testing and Evaluation , Academic Development Center, Jordan University of Science and Technology.	April 2010.
7	Strictly Business: Dale Carnegie Immersion Seminar , Dale Carnegie Training, West Allis, WI.	Aug-Sep 2009
8	General Topics in Forensic Engineering , National Academy of Forensic Engineers, St. Louis, MO.	July 2009
9	Basic Fire Investigations Course , Stevens Point, WI.	June, 2009
10	Surface Analysis, Interface and Thin Film Analysis: The Major Methods , The AVS National Short Course Programs, Boston, MA.	Oct 2008.
11	Sputter Deposition , The AVS National Short Course Programs, Boston, MA.	Oct 2008.
12	The Eight Forms of Corrosion , NACE International Wisconsin Section, Milwaukee, WI.	January 2008.

13	Fast Track to PRO/Engineer, Wildfire 2.0, INFOCAD S.A.	August 2005
14	EJADA-Management of Innovation Training Workshop, Amman, Jordan.	Dec 2004.
15	Project Management Using Ms Project, Center for Consultation, Technical Services & Studies at Hashemite University, Amman, Jordan.	July 2004.
16	Training Session "ISO 9001:2000 Awareness Training", King Abdullah II Design and Development Bureau.	April 2004.
17	Design & Analysis of Engineering System Workshop, King Abdullah II Design and Development Bureau.	August 2003.
18	AutoDesk Certificate of Inventor 6.0, Omnix International L.L.C., Amman, Jordan.	June 2003.
19	Training Course on Bending Machines, Tejero model H-36-CNC, Zaragoza-Spain.	April 2003.
20	MATLAB Preliminary Course, Center for Consultation, Technical Services & Studies at University of Jordan	April 2001.
21	Mobility Standard Course, Land Mobility Technology, Amman, Jordan.	April 2001.
22	AutoDesk Certificate of Mechanical Desktop, Beads Training Services, Amman, Jordan.	Sep 2000.
23	Programmable Logic Controller, Engineering Training Center, Amman, Jordan.	August 1999.

RELEVANT ACADEMIC COURSE WORK

No.	Area	Courses
1	Material Structure and Properties	Advanced Mechanical Behavior of Materials, Advanced Thermodynamics of Materials, Properties of Solids, Physical Metallurgy, Kinetics Processes in Materials, Transport Phenomena in Material Processing, and Material Selection.
2	Materials, Special Applications	Corrosion Engineering, Electronic Materials, and Thin Films.
3	Materials, Special Applications (Auditing)	Metal Casting, and Welding Engineering.
4	Manufacturing Processes	Advanced Manufacturing, Cutting Tool Design, Computer Aided Design and Manufacturing, and Computer Numerical Control.
5	Manufacturing Systems	Analysis and Design of Production System, Advanced Production Planning and Control, and Computer Integrated Manufacturing.
6	Quality Control and Statistics	Quality Control and Design of Experiments, Engineering Reliability, and Engineering Statistics.

RESEARCH FUNDED PROJECTS

No.	Project Title	Year	Granted by: (Amount)
1	Synthesis and Characterization of Epoxy-Based Composites Reinforced with Domestic Natural Fibers Produced by Vacuum Bagging Process	2021	Jordan University of Science and Technology, Deanship of Research. (Amount: 12400 \$)
2	Experimental Research on the Use of Some Green Jordanian Natural Eco-friendly Agro Wastes as Corrosion Inhibitors for Mild Steel in Hydrochloric Acidic Solution	2019	Jordan University of Science and Technology, Deanship of Research. (Amount: 13300 \$)
3	Experimental Evaluation of Newly Synthesized Organic Compounds as Inhibitors for Mild Steel Corrosion in Hydrochloric Acidic Solution: Ongoing	2018	Jordan University of Science and Technology, Deanship of Research. (Amount: 13500 \$)
4	Processing and Characterization of ZA-27 alloys Reinforced with Nano-Sized Ceramic Particles Using Ultrasonic Cavitation Based Compocasting: Ongoing	2016	Jordan University of Science and Technology, Deanship of Research. (Amount: 21000 \$)
5	Toward Expanding the Use of Stainless Steel AISI 316L in Orthopedic Implants: Corrosion Behavior Evaluation of steel Spin Coated with Forsterite Biomaterial in a Simulated Body Fluid	2016	Jordan University of Science and Technology, Deanship of Research. (Amount: 15000 \$)
6	Using Artificial Neural Network Model to Predict the Corrosion Rate of Heat Treated and Tempered Medium Carbon Steel	2015	Jordan University of Science and Technology, Deanship of Research. (Amount: \$4500)
7	Tribological and Corrosion Investigation of Zamak Alloys Reinforced with Alumina and Fly Ash	2014	Jordan University of Science and Technology, Deanship of Research. (Amount: \$6500)
8	In Vitro Investigation of Squeaking of Ceramic on Ceramic Hip Joint Coated with Polymeric Coatings	2014	Jordan University of Science and Technology, Deanship of Research. (Amount: \$9000)

9	Ultrasonic Cavitation Based Compocasting Processing and Characterization of Aluminum Copper Reinforced with Nano-Sized SiC Particles.	2011	Jordan University of Science and Technology, Deanship of Research. (Amount: \$10000)
10	A comparative Study for the Localized Corrosion Resistance of Uncoated Mild Steel, Plasma Coated Mild Steel, and 304 Stainless Steel in Simulated Electrolytes for the Food Processing Equipment Washdown Processes.	2011	Jordan University of Science and Technology, Deanship of Research. (Amount: \$21000)

GRADUATION PROJECTS ADVISEMENT (SELECTED)

No.	Project Title
1	The Effect of Silicon Carbide Content on the Properties of Copper Matrix Produced by Powder Metallurgy.
2	Effect of Sintering Time and Compaction Pressure on Properties of Copper Matrix Composites Reinforced with 1 wt.% Silicon Carbide Produced by Powder Metallurgy.
3	Effect of Sintering Temperature and Compaction Pressure on Properties of Copper Matrix Reinforced with 1 wt. % Silicon Carbide Produced by Powder Metallurgy.
4	The Effect of Reinforcement Percentage and Type of Lubricant on Density and Porosity of Compacted Copper.
5	An Investigation of Machinability and Wear of Zamak 5 Alloy Reinforced by Alumina, Graphite, and Alumina- Graphite Particles.
6	An Investigation of Machinability and Wear of Zamak 5 Alloy Reinforced by Fly Ash, Graphite, and Fly Ash - Graphite Particles.
7	The Effect of Carbon Weight Percentages on Selected Properties of Steel.
8	The Effect of Cold Working Percentage on Corrosion, Wear, and Microstructure of Brass.
9	The Effect of Heat Treatment on the Dry Sliding Wear Behavior of Brass.
10	The Effect of Galvanized Layer Thickness on Corrosion Behavior of Steel.
11	Effect of Electroplating Time on the Corrosion Behavior of Mild Steel.
12	Corrosion Behavior of Stainless Steel 304 in Various Corrosive Environments.

13	The Effect of Different Types of Green Inhibitors on Corrosion of Carbon Steel in Saline Environment.
14	The Effect of Processing Parameters on Tensile Shear Strength of Spot Welded Steel.
15	The Effect of Processing Parameters on Mechanical Properties of Friction Stir Welded Lab Joints.
16	A Comparative Study of Tensile Properties of Mild Steel Welding Joints by Oxyacetylene and Metal Gas Arc Welding Methods.
17	Design and Manufacturing of Hip Joint Simulator.
18	Design and Manufacturing of a Mechanism for Solid State Welding.
19	Facility Planning at the National Cable & Wire Company: Case Study.
20	Implementing Some Lean Tools at King Abdullah University Hospital.
21	Applying Lean Tools at Al-Hikma Pharmaceutical Company.
22	Using Simulation to Reduce Patient Waiting Time in the Jordanian Association for Family Planning and Protection.
23	A Novel Approach for Groundwater Wells Allocation: Integrated Decision Making with Geographic Information System.

MS.C DISSERTATIONS (THESES)

No.	Thesis Title
1	Machine Learning-Assisted Prediction of Bandgaps in Fuel Cell Oxide Compounds, 2024
2	Machine learning-driven prediction of selected mechanical properties of polylactic acid products made by the fused deposition modeling process, 2024
3	Predicting the Thermal Conductivity of Ytria Stabilized Zirconia Thermal Barrier Coatings using Machine Learning, 2024
4	Toward a Rapid and Sustainable Recovery in Jordanian Tourism Industry by Applying Lean Manufacturing Principles, 2023
5	Development of Artificial Intelligence (AI) Models to Analyze and Predict Engineering Students' Performance, 2022

6	The Optimal Setup and Parameters for Electrochemical Production of Reactive Oxidizing Species using Boron-Doped Diamond Electrodes, 2020
7	A Study on Jordanian Green Natural Agro Wastes as Potential Inhibitors of Mild Steel Corrosion in Hydraulic Acid Solution, 2020
8	An Analytic Hierarchy Process Model for Selecting Adsorbent for Heavy Metal Ions Removal from Wastewater, 2018
9	Experimental Evaluation of Newly Synthesized Organic Compounds as Inhibitors for Mild Steel Corrosion in Hydrochloric Acidic Solution, 2018 .
10	Evaluation of Mechanical and Wear Resistance Properties of Powder Compact Hybrid Green Aluminum Matrix Composites, 2018 .
11	Evaluation of the Corrosion Resistance of Spin Coated AISI 304 Stainless Steel with Hybrid Sol Gel, 2018 .
12	Synthesis and Characterization of a New High Performance Thermal Barrier Coating for High Temperature Applications Using Atmospheric Plasma Spray, 2017 .
13	Mechanical and Wear Characterization of ZA-27 Alloy Based Nanocomposites Reinforced with SiC Particles, 2018 .
14	Surface Modification of Stainless Steel Implants using Nanostructured Forsterite (Mg_2SiO_4) Coating for Biomaterial Applications, 2017 .
15	Mechanical and Corrosion Characterization of ZA-27 Alloy Based Nanocomposites Reinforced with Al_2O_3 Particles, 2017 .
16	Measuring and Improving the Performance of Material Handling System in Manufacturing Facilities using The Balanced Scorecard Approach, 2015 .
17	Using Artificial Neural Network Model to Predict the Corrosion Rate of Heat Treated and Tempered Medium Carbon Steel, 2015 .
18	Tribological and Corrosion Characteristics of Zamak Hybrid Composite Reinforced with Alumina and Fly ash, 2014 .
19	Experimental Investigation of the Effect of Polymeric Coating Materials on the Squeaking of Ceramic on Ceramic Hip Joints, 2014 .
20	An Investigation of Corrosion and Wear Resistance of Cartridge Bass Matrix SiC-Graphite Hybrid Composites produced by Powder Metallurgy, 2013 .

PUBLICATIONS (BOOKS)

No.	Title
1	Co-author of " Emergency Plan and Response " course handout for the students of Al-Balqa Applied University, Jordan (2015).

PUBLICATIONS (REFEREED JOURNALS)**Materials and Manufacturing Engineering**

No.	Title
1	Mohammed Almomani , Mohammed Hayajneh, Mohammad Al-Daraghmeh "Applying ANOVA to Study the Effect of Weight Fractions of the Nano-Hafnia Dispersed in Spin Coated Gelatin on the Corrosion Behaviour of AISI 316L Steel", Materials Research , Vol. 26 (2023). http://dx.doi.org/10.1590/1980-5373-MR-2023-0127 .
2	Mohammed Ali Almomani , Mohammed T. Hayajneh, Wala' M. AlSharman "Ceratonia Siliqua Pulp Extracts as a Green Corrosion Inhibitor for a Mild Carbon Steel in 1M HCl", International Journal of Corrosion and Scale Inhibition , Vol. 12, no. 2: 793-810 (2023). https://dx.doi.org/10.17675/2305-6894-2023-12-2-23 .
3	Mohammed T. Hayajneh, Mohammed A. Almomani , Wala' M. AlSharman "A Study On Jordanian Green Natural Agro-Wastes as Potential Inhibitors of Mild Steel Corrosion in HCl Solution", Green Materials , (2023). https://doi.org/10.1680/jgrma.21.00040
4	Ahmad A. Bany Abdelnabi, Nader Al Theeb, Mohammed A. Almomani , Hanadi Ghanem, Stefan M. Rosiwal, " Effect of Electrode Parameters in the Electro-production of Reactive Oxidizing Species via Boron-doped Diamond under Batch Mode", Water Environmental Research , Vol. 94, No. 12, e10830 (2022).
5	Esraa S Abdelall, Mohammed Hayajneh, Mohammed Almomani "Fabrication of Functionally Graded Injection Molds using Friction Stir Molding Process of AA5083/Brass-Laminated Composite", Progressive in Additive Manufacturing , (2022).
6	Mohammed A. Almomani , Mohammad M. Fares, Elham M. Almesidieen, "Toward Long-live Ceramic on Ceramic Hip Joints. <i>In-Vitro</i> Investigation of Squeaking of Coated Hip Joint with Layer-by-Layer Reinforced PVA Coatings", E-polymers , Vol. 22, No. 1, 522-535 (2022).

7	Mohammed A. Almomani , Amer M. Momani, Ruba Zqabieh, Mohammad S. Al-Batah, "Testing the Artificial Neural Network to Predict Medium Carbon Steel Corrosion at Different Tempering Conditions", Protection of Metals and Physical Chemistry of Surfaces , Vol. 58, No. 1, 414-421 (2022).
8	Mohammed T Hayajneh, Mohammed A Almomani , Audai A AL-Akailah, "Mechanical and Corrosion Characteristics of Grain Refined ZA-27 Alloy and ZA-27/Al ₂ O ₃ Nano-composite Produced by Ultrasonic Cavitation Technique", Kovove Mater , Vol. 59, 195-207 (2021).
9	Mohammed A Almomani , Mohammed T Hayajneh, Audai A AL-Akailah, "Mechanical Properties and Corrosion Behavior of Stir Casted Composites of ZA-27 Alloy Reinforced with Al ₂ O ₃ Nanoparticles" Protection of Metals and Physical Chemistry of Surfaces , Vol .57, No.5, 974-983 (2021).
10	Mohammed A. Almomani , Mousa Al-Noaimi, Mohammed T. Hayajneh, Hala H. AlShurafat , Ehab M. AlShamaileh," Experimental Evaluation of New Organic Compounds as Corrosion Inhibitors for Mild Steel in Hydrochloric Acidic". International Journal of Corrosion and Scale Inhibition , Vol. 10, No. 3, 1141-1156 (2021).
11	Mohammed T. Hayajneh, Mohammed A. Almomani , Mohammad Y. Al-Daraghmeh, "Development and Evaluation of a Thin Cerium Oxide-Gelatin Nanolaminate Coating for Corrosion Protection of AISI 316L Stainless Steel", Manufacturing Technology . Vol. 21, No. 3, 330-339 (2021).
12	Almomani, M. , Al-Widyan, M., Mohaidat, S., "Thermal Shock Resistance of Yttrium Aluminum Oxide Y ₃ Al ₅ O ₁₂ Thermal Barrier Coating for Titanium Alloy", Journal of Mechanical Engineering and Sciences , Vol. 14, No.1, 6514-6525 (2020).
13	Almomani, M. , Hayajneh, M., Al-Shrida, M.," Investigation of Mechanical and Tribological Properties of Hybrid Green Eggshells and Graphite-Reinforced Aluminum Composites", Journal of the Brazilian Society of Mechanical Sciences and Engineering , Vol. 42 (2020).
14	Hayajneh, M., Almomani, M. , Al-Daraghmeh, M.;"Enhancement the Corrosion Resistance of AISI 304 Stainless Steel by Nanocomposite Gelatin Titanium Dioxide Coatings", Manufacturing Technology , Vol. 19, No. 5, 759-766 (2019).
15	Al-Daraghmeh, M., Hayajneh, M., Almomani, M. ;" Corrosion Resistance of TiO ₂ -ZrO ₂ Nanocomposite Thin Films Spin Coated on AISI 304 Stainless Steel in 3.5 wt. % NaCl Solution", Materials Research , Vol. 22, No. 5, e20190014 (2019).
16	Hayajneh, M., Almomani, M. , Al-hmoud, H., "Corrosion Evaluation of Nanocomposite Gelatin-Forsterite Coating Applied on AISI 316L Stainless Steel", Materials Research Express , Vol. 6, No. 11, ab49c3 (2019).

17	Almomani, M. , Hayajneh, M., Alelaumi, S.;"Applying Taguchi Method to Study the Wear Behaviour of ZA-27 Alloy-based Composites Reinforced with SiC Nanoparticles", International Journal of Cast Metal Research , Vol. 32, No. 4, 229-241 (2019).
18	Hayajneh, M., Almomani, M. , Al-Shrida, M., "Effects of Waste Eggshells Addition on Microstructures, Mechanical and Tribological Properties of Green Metal Matrix Composite", Science and Engineering of Composites Materials , Vol. 26, 423-434 (2019).
19	Almomani, M. , Hayajneh, M., Al-Daraghmeh, M.;"The Corrosion Behavior of AISI 304 Stainless Steel Spin Coated with ZrO ₂ -Gelatin Nanocomposites", Materials Research Express , Vol. 6, No. 9, 0965c4 (2019).
20	Alu'datt, M.,Gammoh, S., Rababah, T. , Almomani, M. , Alhamad, M.; Ereifej, K., Almajwal, A., Tahat, A.,Hussein, N., Nasser, S., "Preparation, Characterization, Nanostructures and Bio Functional Analysis of Sonicated Protein Co-precipitates from Brewers' Spent Grain and Soybean Flour", Food Chemistry , Vol. 240, pp: 784-798 (2018).
21	Bataineh, O., Almomani, M. , "Applying ANOVA and DOE to Study the Effect of Manganese on the Hardness and Wear Rate of Artificially Aged Al-4.5wt%Cu Alloys", International Journal of Cast Metals Research , Vol. 31, No. 1, 56-63 (2017).
22	Almomani, M. , Tyfour, W., Nemrat, M., "Effect of Silicon Carbide Addition on the Corrosion Behavior of Powder Metallurgy Cu-30Zn Brass in a 3.5 wt.% NaCl Solution", Journal of Alloys and Compounds , Vol. 697, 104-114 (2016).
23	Almomani, M. , Hayajneh, M., Draidi, M.,"Corrosion Investigation of Zinc Aluminum Alloy Matrix (ZA-27) Reinforced with Alumina (Al ₂ O ₃) and Fly Ash", Particulate Science and Technology , Vol. 35, No.4, 439-447 (2016).
24	Almomani, M. , Tayfour, W., Nemrat, M., "Influence of Graphite Content on Corrosion Behavior of Brass in a 3.5 wt. % NaCl Solution", International Journal of Electrochemical Science , Vol. 11, No.5, 3436-3447(2016).
25	Almomani, M. , Hayajneh, M., Draidi, M., "Tribological Investigation of Zamak Alloys Reinforced with Alumina (Al ₂ O ₃) and Fly Ash," Particulate Science and Technology , Vol. 34, No. 3, 317-323 (2016).
26	Almomani, M. , Hassan, A., Qasim, T, Ghaithan, A., "Effect of Process Parameters on Corrosion Rate of Friction Stir Welded Aluminium SiC–Gr Hybrid Composites”, Corrosion Engineering Science and Technology ; Vol. 48, No.5, 364-353 (2013).
27	Hassan, A., Almomani, M. , Qasim, T., Ghaithan, A., "Processing Parameters Effect on Friction Stir Welded Aluminum Matrix Composites Wear Behavior", Materials and Manufacturing Process ; Vol. 27, No. 12, 1419-1423 (2012).

28	Hassan, A., Almomani, M. , Qasim, T.,Ghaithan, A., "Statistical Analysis of Some Mechanical Properties of Friction Stir Welded Aluminium Matrix Composite", Int. J. Experimental Design and Process Optimisation ; Vol. 3, No. 1, 91-109 (2012).
29	Almomani, M. , C. R. Aita, "Pitting Corrosion Protection of Stainless Steel by Sputter Deposited Hafnia, Alumina, and Hafnia-Alumina Nanolaminate Films", Journal of Vacuum Science and Technology A ; Vol. 27, 449 (2009).

Engineering Management

No.	Title
1	Mohammed A Almomani , Nedal Al-Ababneh, Khairedin Abdalla, Nadim I Shbeeb, John-Paris Pantouvakis, Nikos D Lagaros, "Selecting the Best 3D Concrete Printing Technology for Refugee Camp's Shelter Construction Using Analytical Hierarchy Process: The Case of Syrian Refugees in Jordan", Buildings , Vol.13, no. 7: 1813 (2023). https://doi.org/10.3390/buildings13071813
2	Mohammed A. Almomani , Ala'a H. Alrejjal, Aseel F. Khanfar, "Groundwater Artesian Wells Allocation: Proposing the Use of a Geographical Information System and a Dual Analytical Hierarchal Process", Scottish Geographic Journal , (2023). https://doi.org/10.1080/14702541.2023.2224287
3	Bashar Al-Shalabi, Mohammed Almomani , Mariam Abu-Awwad, Musa Al-Ajlouni, "Selecting the Best Material for Hydrogen Storage Using the Analytical Hierarchical Process," Jordan Journal of Mechanical and Industrial Engineering , Vol. 17, no. 2: 309-317 (2023).
4	Almomani, Mohammed A. , Eman M. Alshatnawi, and Abdelhakim N. Abdelhadi. "Toward a Rapid and Sustainable Recovery in the Tourism Industry Using Lean Manufacturing Principals" Applied Sciences , Vol. 13, no. 4: 2529 (2023). https://doi.org/10.3390/app13042529
5	Shereen Ababneh, Omar Al-Araidah, Mohammed Almomani , "An Analytic Hierarchy Process Model for Selecting Adsorbent for Heavy Metal Ion Removal from Wastewater", Water SA , Vol. 46, No. 3, 493-499 (2020).
6	Almomani,M. , Abdelhadi, A., Mumani, A., Momani, A., Aladeemy, M., "A Proposed Integrated Model of Lean Assessment and Analytical Hierarchy Process for a Dynamic Road Map of Lean Implementation", International Journal of Advanced Manufacturing Technology ; Vol. 72, 161-172 (2014).

7	Almomani, M. , Aladeemy, M., Abdelhadi, A., Mumani, A., "A Proposed Approach for Setup Time Reduction through Integrating Conventional SMED Method with Multiple Criteria Decision-Making Techniques", Computers & Industrial Engineering ; Vol. 66, No .2, 461-469 (2013).
8	Almomani, M. , Abdelhadi, A., Seifoddini, H., Xiaohang, Y., "Preventive Maintenance Planning using Group Technology", Journal of Quality in Maintenance Engineering ; Vol. 18, No. 4, 472-480 (2012).

PUBLICATIONS (CONFERENCE PAPERS)

No.	Title
1	Almomani, M. , Melhem, B., "Review on the Effect of Reinforcement Particle Type, Shape, and Volume Fraction on the Porosity Content of Metal Matrix Composite", 6th International Conference on Computational and Experimental Science and Engineering (ICCESEN-2022), Antalya, Turkey; December, 2022.
2	Almomani, M. , Bany Abdelnabi, A., " Utilizing Analytical Hierarchal Process to Select The Best Polymeric Material for Food Packaging Applications", ISER -564th International Conference on Nanoscience, Nanotechnology and Advanced Materials (IC2NAM), Budapest, Hungary; April 10-11, 2019.
3	Hayajneh, M., Almomani, M. , Al-Daraghme, M., "Effect of Spin Coating Speed on Corrosion Properties of Hybrid TiO ₂ -ZrO ₂ Nanocomposites Coatings Spin-Coated on AISI 304 Steel", ISER -564th International Conference on Nanoscience, Nanotechnology and Advanced Materials (IC2NAM), Budapest, Hungary; April 10-11, 2019.
4	Almomani, M. , El-Khalil, H., "The Use of Analytical Hierarchal Process to Select the Material for Heatsink Devices Used in Microelectronic", Proceedings of the 136th The IRES International Conference, Antalya, Turkey; August 7-8, 2018.
5	Almomani, M. , Qawasmi, Y., "A Proposed Automated System for Quality Assurance Sustainability of Engineering Education", Coordinating Engineering For Sustainability and Resilience "CESARE'17", Jordan, Dead Sea; May 03-08, 2017.
6	Almomani, M. , Aladeemy, M., Zaqeba, R., Rabbaa, T., "Lean Based Approach for Identifying Risks and Improving Safety of Healthcare Delivery Systems: A Novel Application of FMEA and FTA in Blood Transfusion Unit at a Local Public Hospital in Jordan", Proceedings of the International Conference on Industrial Engineering and Operations Management 2017 (IEOM 2017); Pages 1103-1112; Rabat; Morocco; April 11-13, 2017.

7	Almomani, M. , Al-Qudah, D., "Material Selection for Footwear Insole Using Analytical Hierarchal Process", 18th International Conference on Biobased Materials and Composites (ICBM 2016), France. Paris; April 25-26, 2016.
8	Almomani, M. , Shatnawi, A., Alrashdan, M., "Effect of Sintering Time on the Density, Porosity Content and Microstructure of Copper – 1 wt. % Silicon Carbide Composites", 2nd International Conference on Advances in Materials Science and Engineering (AMSE 2014), U.A.E. Dubai; Oct 1-2, 2014
9	Abdelhadi; A., Seifoddini; H., Almomani, M. , "Part and Inventory Control Analysis Using Plan of Every Part Concept," 3rd International Conference on Industrial Engineering and Operations Management (IEOM 2012), Turkey. Istanbul; Jul 2012.
10	Hoppe, E., Almomani, M. , Aita, C., "Structure and Optical Behavior of Sputter Deposited Hafnia-alumina Nanolaminate Films", AVS 55th International Symposium & Exhibition, Electronic Materials and Processing Poster Session, Boston, MA, 19-24 Oct. 2008.
11	Al-Kilani ; A., Almomani, M. , "Machinability of Zinc-Aluminum Alloy ,ZAMAK 5 Alloy, Produced by Powder Metallurgy", 10th International Symposium on Advanced Materials, 2007.

UNDER REVIEW

No.	Title
1	Mohammed A. Almomani , Ahmad A. Bany Abdelnabi, Amer M. Momani, Ruba Zqabieh; "A Comparison between Different Machine Learning Classifiers for Predicting the Corrosion Rate of Medium Carbon Steel", Under Review
2	Mohammed A Almomani , Qasem M. Mahafd, Abdallah Almomani, Omar Bataineh; "Selecting the Best Thermal Barrier Coating Material for Hot Sections in Gas Turbine Using AHP and TOPSIS Multi-Criteria Decision Making Techniques", Submitted.
3	Mohammed A. Almomani , Jenan A. Hamdan: "Predicting the Thermal Conductivity of Yttria Stabilized Zirconia Thermal Barrier Coatings Using Machine Learning" Submitted.
4	Mohammed T. Hayajenh, Mohammed A. Almomani , Wala' M. AlSharman: "Portulaca Oleracea Leaf Extract As A Green Corrosion Inhibitor For Mild Carbon Steel In 1M HCl".

ACTIVITIES AND COMMUNITY SERVICE

- **Head of the Engineering College Committee** for preparing curriculum and study plan for the new proposed program “**Product Development and Engineering Technology**”.
- Served as a **member of the Editorial board of Jordan Journal of Mechanical and Industrial Engineering**, May 2022-Now.
- Served as a **member** of several **examination committees for master students** at Jordan University of Science and Technology, University of Jordan, and Hashemite University.
- **Collaborate** with Materials Science and Engineering for Metals from Friedrich-Alexander-University of Erlangen-Nürnberg through **Erasmus Program** and exchange graduate students.
- Providing **consulting** to the **local industries** to assist them in overcoming technical difficulties and implement processes to improve profitability, productivity and quality.
- Member of Jordanian Association of Engineers.
- At the Industrial Engineering Department:
 - **Acting chairman**, in charge of all academic and administrative activities in the department, and preparing department self-study report (SSR) for both ABET and local accreditations for the academic years 2018-2022.
 - **Department representative** at the college of engineering council for the academic year 2015-2016.
 - Member of department **graduate committee** for the academic years 2012-2013, and 2014-2015.
 - Member of department **research committee** for the academic year 2014-2015.
 - Head of department **safety and laboratory** committee for the academic year 2011-2012.
 - Member of department **social committee** for the academic year 2011-2012.
 - **Department's Secretary General** for the academic year 2010-2011.
- Founder of “**Corrosion and Electrochemistry Laboratory**”, JUST
- Founder of “**Metal Matrix Nanocomposite Laboratory**”, JUST

ACTIVE REVIEWER FOR LARGE NUMBER OF JOURNALS:

- Jordan Journal of Industrial and Mechanical Engineering
- Journal of Alloys and Compounds
- Journal of Electrochemical Society
- International Journal of Materials Research
- Particulate Science and Technology
- Materials Research Express
- Materials Research
- Computers and Industrial Engineering
- Journal of Manufacturing Systems
- Production Planning and Control
- Journal of Quality in Maintenance Engineering
- Journal of Industrial Textile

REFERENCES

1. Prof. Mohammed T. Hayajneh, **Professor of Mechanical and Industrial Engineering**, Industrial Engineering Department, Faculty of Engineering, Jordan University of Science and Technology, Irbid 22110 Jordan. Email: hayajneh@just.edu.jo , Tel- Mobile: 00962 795 678692.
2. Prof. Omar M. Al-Araidah, **Professor of Industrial Engineering**, Industrial Engineering Department, Faculty of Engineering, Jordan University of Science and Technology, Irbid 22110 Jordan. Email: alarao@just.edu.jo , Tel- Mobile: 00962 790 974197.
3. Prof. Mohammad D. Altahat, **Professor of Industrial Engineering**, Industrial Engineering Department, Faculty of Engineering and Technology, University of Jordan, Amman 11942 Jordan. Email: altahat@ju.edu.jo, Tel-Mobile: 00962 777635219.
4. Prof. Sameer M. Al-Asheh, **Professor of Chemical Engineering**, American University of Sharjah, Former Dean of Engineering, Jordan University of Science and Technology. Email: sslashch@aus.edu, Tel-Mobile: 00962 799095799