PERSONAL INFORMATION:



Name: Dr. Ibrahim M. Alarifi

Qualification: PhD in Mechanical Engineering Science

Specialization: Material science.

Area of Interest: Materials, Structural Health Monitoring, Composite Carbon Fibers, Energy Systems, Thermal Analysis of Materials, Biomaterials, Recycling materials and Nanomaterials

Designation: Assistant Professor, MIE Head of Dept. and Vic-dean for Academic Affairs of Common First Year at Majmaah University.

KEY DIMENSIONS:

Effective and encouraging of a team. Develop and Monitors Project Strategies. Demonstrate Aptitude in Various Areas. Interface and Progression of the Project.

Professional Engineering Interest.

Participates in Research and Seminar project

EDUCATION:

2013 – 2017 Wichita State University (WSU)

GPA: 3.90/4.0

PhD in in Mechanical Engineering

Major or Concentration Area: Materials and Mechanical Engineering Sciences

2015 – 2016 Southern Methodist University (SMU)

GPA: 3.46/4.0

Master's of Science in Mechanical Engineering

Major or Concentration Area: Materials and Mechanical Engineering Sciences

2008 – 2009 Eastern Michigan University (EMU)

GPA: 3.90/4.0

Master's of Science in Engineering

Major or Concentration Area: Project Management.

2005 – 2008 University of Toledo (UT)

GPA: 3.40/4.0

Bachelor's of Science in Mechanical Engineering.

Graduation project: Electronic Waiters.

GPA: 2.80/4.0 1998 – 2001

High School Diploma in Electromechanical

Graduation project: Submarine.

EMPLOYMENT HISTORY:

2018 - Current MAJMAAH UNIVERSITY

Working at Majmaah University in Common First Year as Vic-dean for Academic Affairs of Common First Year at Majmaah University.

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2017- Current MAJMAAH UNIVERSITY

Working at Majmaah University in Engineering College as **Department Head** of ME Department at Majmaah University.

2017 - Current MAJMAAH UNIVERSITY

Working at Majmaah University in Mechanical and Industrial Engineering Dept. as **Assistant Professor** and **teaching** (AutoCAD, Materials Science and Engineering, Technical Drawing and Design Machine). Also, working with Project Dept. as Project Manager.

2011 - 2013 MAJMAAH UNIVERSITY

Worked as Project Manager and Lecturer at Majmaah University and supervision the projects such Ramah Colleges Building with budget 67 million, project supervision of Engineering College buildings with budget 100 million, and consulting Engineering college buildings design with budget 1 million.

2011 - 2013 CONSULTING ENGINEERING COMPANY

Owned and running Consulting Engineering Company with field of Project Supervision, Architectural Works, Mechanical Works, and Civil Works with equity capital around 5 million.

2010 – 2011 KING ABDULAZIZ CITY SCIENCE & TECHNOLOGY KACST

Worked at King Abdul-Aziz City for Science and Technology (KACST) as Researcher in Applied Energy Science Center.

2001 – 2006 SHARQ COMPANY - SABIC

Worked at SHARQ Petrochemical Company in the Maintenance Department as a Foreman Engineer for 5 years.

Job Role:

 Perform shutdown maintenance repair and overhauling on rotating/ stationary Equipment.

- Perform and Participate in the preventive, corrective and troubleshooting maintenance on the plant.
- o Work on (TAM) Total Around Maintenance as Foreman.
- Appreciation Letter for been hard worker and excellence.
- Idea Proposal has been approved by SHARQ Company.

2001 – 3Ms EMET COOP WORK EXPERIENCE - SABIC

Worked at ARAZI Company in the Mechanical Department as a Trainee Engineer for 3 months.

Job Role:

- o Attended technical trainings through Mechanical Dept.
- o Learning technical skill by Expert Supervisors.
- Writing a technical report to my Academic Advisory weekly.
- o Work on my graduate final report and submitted to college.

2006 – 2017 UNITED STATES EXPERIENCE:

- Attended a conference concerning issues surrounding Oil & Gas Technology in Houston, TX.
- Practice on EMCI and PMP certificates and thus completed these requirements of the Masters of Science in Project Management degree.
- Named to the Dean's list in the Engineering Department at (UT); I also maintained Perfect Academic Attendance.
- Excellent Graduated Student at Wichita State University.
- Active ASME member and participate in several ASME conferences.

PUBLICATIONS:

Journal Papers:

1. **Alarifi, I.M.**, 2019. Investigation the conductivity of carbon fiber composites focusing on measurement techniques under dynamic and static loads. *Journal of Materials Research and Technology*. (**IF** = **3.327**, **R** = **Q1**).

- 2. Tlili, I., Osman, M., Alarifi, I., Belmabrouk, H., Shafee, A. and Li, Z., 2019. Performance enhancement of a multi-effect desalination plant: A thermodynamic investigation. *Physica A: Statistical Mechanics and its Applications*, p.122535. (**IF** = **2.5**, **R** = **Q2**).
- 3. Mahanthesh, B., Animasaun, I.L., Rahimi-Gorji, M. and **Alarifi, I.M.**, 2019. Quadratic convective transport of dusty Casson and dusty Carreau fluids past a stretched surface with nonlinear thermal radiation, convective condition and non-uniform heat source/sink. *Physica A: Statistical Mechanics and its Applications*, p.122471. (**IF** = **2.5**, **R** = **Q2**).
- 4. **Alarifi, I.M.**, Movva, V., Rahimi-Gorji, M. and Asmatulu, R., 2019. Performance analysis of impact-damaged laminate composite structures for quality assurance. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 41(8), p.345. (**IF** = **1.74**, **R** = **Q3**).
- 5. Kumar, K.G., Avinash, B.S., Rahimi-Gorji, M. and **Alarifi, I.M.**, 2019. Optical and electrical properties of Ti1-XSnXO2 nanoparticles. *Journal of Molecular Liquids*, p.111556. (**IF** = **4.56**, **R** = **Q1**).
- 6. Adesanya, S.O., Onanaye, A.S., Adeyemi, O.G., Rahimi-Gorji, M. and **Alarifi, I.M.**, 2019. Evaluation of heat irreversibility in couple stress falling liquid films along heated inclined substrate. *Journal of Cleaner Production*, p.117608. (**IF** = **6.39**, **R** = **Q1**)
- 7. Uddin, S., Mohamad, M., Rahimi-Gorji, M., Roslan, R. and **Alarifi, I.M.**, Fractional electromagneto transport of blood modeled with magnetic particles in cylindrical tube without singular kernel. *Microsystem Technologies*, pp.1-10. (**IF** = **1.51**, **R** = **Q3**).
- 8. Kumar, K.G., Rahimi-Gorji, M., Reddy, M.G., Chamkha, A.J. and **Alarifi, I.M.**, Enhancement of heat transfer in a convergent/divergent channel by using carbon nanotubes in the presence of a Darcy–Forchheimer medium. *Microsystem Technologies*, pp.1-10. (**IF** = **1.51**, **R** = **Q3**).
- 9. Hajizadeh, A., Shah, N.A., Shah, S.I.A., Animasaun, I.L., Rahimi-Gorji, M. and **Alarifi, I.M.**, 2019. Free convection flow of nanofluids between two vertical plates with damped thermal flux. *Journal of Molecular Liquids*, p.110964. (**IF** = **4.56**, **R** = **Q1**).
- 10. Kasaragadda, S., **Alarifi, I.M.**, Rahimi-Gorji, M. and Asmatulu, R., 2019. Investigating the effects of surface superhydrophobicity on moisture ingression of nanofiber-reinforced biocomposite structures. *Microsystem Technologies*, pp.1-13. (**IF** = **1.51**, **R** = **Q3**).
- 11. Asadi, A., **Alarifi, I.M.**, Ali, V. and Nguyen, H.M., 2019. An Experimental Investigation on the Effects of Ultrasonication Time on Stability and Thermal Conductivity of MWCNT-water Nanofluid: Finding the Optimum Ultrasonication Time. *Ultrasonics Sonochemistry*, p.104639. (**IF** = **7.27**, **R** = **Q1**).
- 12. Souayeh, B., Reddy, M.G., Sreenivasulu, P., Poornima, T., Rahimi-Gorji, M. and **Alarifi, I.M.**, 2019. Comparative analysis on non-linear radiative heat transfer on MHD Casson nanofluid past a thin needle. *Journal of Molecular Liquids*, 284, pp.163-174. (**IF** = **4.56**, **R** = **O1**).
- 13. Chinni, G., **Alarifi, I.M.**, Rahimi-Gorji, M. and Asmatulu, R., 2019. Investigating the effects of process parameters on microalgae growth, lipid extraction, and stable nanoemulsion productions. *Journal of Molecular Liquids*, p.111308. (**IF** = **4.56**, **R** = **Q1**).
- 14. EL-Bagory, T.M., **Alarifi, I.M**. and Younan, M.Y., Prediction of Mechanical Properties for Curved Dumbbell Shaped Specimen at Different Orientation Angles of Ring Hoop Tension Test. *Advanced Engineering Materials*. (**IF** = **2.90**, **R** = **Q2**).
- 15. **Alarifi, I.M.**, Alkouh, A.B., Ali, V., Nguyen, H.M. and Asadi, A., 2019. On the rheological properties of MWCNT-TiO2/oil hybrid nanofluid: An experimental investigation on the

- effects of shear rate, temperature, and solid concentration of nanoparticles. *Powder Technology*. (**IF** = 3.41, **R** = Q1).
- 16. Akermi, M., Jaballah, N., **Alarifi, I.M.**, Rahimi-Gorji, M., Chaabane, R.B., Ouada, H.B. and Majdoub, M., 2019. Synthesis and characterization of a novel hydride polymer P-DSBT/ZnO nano-composite for optoelectronic applications. *Journal of Molecular Liquids*, 287, p.110963. (**IF** = **4.56**, **R** = **Q1**).
- 17. **Alarifi, I.M.**, Abokhalil, A.G., Osman, M., Lund, L.A., Ayed, M.B., Belmabrouk, H. and Tlili, I., 2019. MHD Flow and Heat Transfer over Vertical Stretching Sheet with Heat Sink or Source Effect. *Symmetry*, *11*(3), p.297. (**IF** = **2.14**, **R** = **Q2**). 18.
- 19. Swarna, V.S., **Alarifi, I.M.**, Khan, W.A. and Asmatulu, R., 2019. Enhancing fire and mechanical strengths of epoxy nanocomposites for metal/metal bonding of aircraft aluminum alloys. *Polymer Composites*. (**IF** = **2.26**, **R** = **Q2**).
- 20. **Alarifi, I.M.**, Khan, W.S. and Asmatulu, R., 2018. Synthesis of electrospun polyacrylonitrile-derived carbon fibers and comparison of properties with bulk form. *PloS one*, *13*(8), p.e0201345. (**IF** = **2.77**, **R** = **Q1**).
- 21. **Alarifi, I.M.**, Alharbi Abdulaziz, R., Khan, M.N. and Waseem, S.K., 2018. Asmatulu Ramazan. Water treatment using electrospun PVC/PVP nanofibers as filter medium. *Int J Material Sci Res*, 1(2), pp.43-49.
- 22. Alharbi, A., **Alarifi, I.M.**, Khan, W.S., and Asmatulu, R. "Synthesis and Characterization of Electrospun Polyacrylonitrile/Graphene Nanofibers Embedded with SrTiO3 /NiO Nanoparticles for Water Splitting." *Journal of Nanoscience and Nanotechnology*, 2017, Vol. 17, pp.1–9. (**IF** = **1.09**, **R** = **Q4**).
- 23. **Alarifi, I.M.**, Khan, W.S., Rahman, A.K.M., Kostogorova-Beller, Y., and Asmatulu, R. "Synthesis, Analysis and Simulation of Carbonized Electrospun Nanofibers Infused Carbon Prepreg Composites for Improved Mechanical and Thermal Properties," *Fibers and Polymers*, 2016, Vol. 17, pp. 1449-1455. (**IF** = **1.44**, **R** = **Q1**).
- 24. Asmatulu, R., Shinde, M.A., Alharbi, A., and **Alarifi, I.M.** "Integrating Graphene and C60 into TiO2 Nanofibers via Electrospinning Process for the Enhanced Energy Conversion Efficiencies," *Macromolecular Symposia*, 2016, Vol. 365, pp. 128-139. (**IF** = **0.91**, **R** = **Q3**).
- 25. Alharbi, A., **Alarifi, I.M.**, Khan, W.S., and Asmatulu, R. "Highly Hydrophilic Electrospun Polyacrylonitrile / Polyvinypyrrolidone Nanofibers Incorporated with Gentamicin as Filter Medium for Dam Water and Wastewater Treatment," *Journal of Membrane and Separation Technology*, 2016, Vol. 5, pp. 38-56.
- 26. Alharbi, A., **Alarifi, I.M.**, Khan, W.S., and Asmatulu, R. "Synthesis and Analysis of Electrospun SrTiO3 Nanofibers with NiOX Nanoparticles Shells as Photocatalysts for Water Splitting," *Macromolecular Symposia*, 2016, Vol. 365, pp. 246-257. (**IF** = **0.91**, **R** = **Q3**).
- 27. **Alarifi, I.M.**, Alharbi, A., Alsaiari, O., and Asmatulu, R. "Training the Engineering Students on Nanofiber-based SHM Systems," Transactions on Techniques in STEM Education, 2016, Vol. 1, pp. 59-67.
- 28. Mahat, K.B., **Alarifi, I.M.**, Alharbi, A. and Asmatulu, R. "Effects of UV Light on Mechanical Properties of Carbon Fiber Reinforced PPS Thermoplastic Composites." *In Macromolecular Symposia*, 2016, Vol. 365, No. 1, pp. 157-168. (**IF = 0.91, R = Q3).**
- 29. **Alarifi, I.M.**, Alharbi, A., Khan, W.S., Rahman, A.K.M. and Asmatulu, R. "Mechanical and Thermal Properties of Carbonized PAN Nanofibers Cohesively Attached to Surface of Carbon

- Fiber Reinforced Composites." In Macromolecular Symposia, 2016, Vol. 365, No. 1, pp. 140-150. (IF = 0.91, R = Q3).
- 30. **Alarifi, I**.M., Alharbi, A., Khan, W.S., and Asmatulu, R. "Carbonized Electrospun PAN Nanofibers as Highly Sensitive Sensors in SHM of Composite Structures," *Journal of Applied Polymer Sciences*, 2015, DOI: 10.1002/app.43235. (**IF** = **2.18**, **R** = **Q2**).
- 31. **Alarifi, I.M.**, Alharbi, A., Khan, W.S, Swindle, A. and Asmatulu, R. "Thermal, Electrical and Surface Properties of Electrospun Polyacrylonitrile Nanofibers for Structural Health Monitoring," *Materials*, 2015, Vol. 8, pp. 7017-7031. (**IF** = **2.97**, **R** = **Q1**).

Conference Papers:

- 1. El-Bagory, T.M., Younan, M.Y. and **Alarifi, I.M.**, 2018, July. Failure Analysis of Ring Hoop Tension Test (RHTT) Specimen under Different Loading Conditions. In *ASME 2018 Pressure Vessels and Piping Conference* (pp. V03AT03A024-V03AT03A024). American Society of Mechanical Engineers.
- 2. **Alarifi, I.M.**, 2017. Fabrication and characterization of electrospun polyacrylonitrile carbonized fibers as strain gauges in composites for structural health monitoring applications (Doctoral dissertation, Wichita State University).
- 3. **Alarifi, I.M.**, Alharbi, A., and Asmatulu, R. "Fabrication and Characterization of Carbonized Polyacrylonitrile Nanofibers for Composite Aircraft and Wind Turbine manufacturing," 12th GRASP Symposium, Wichita State University, Wichita, KS, April 29, 2016 (extended abstract published).
- 4. Asmatulu, R., Yeoh, J., **Alarifi, I.M.**, and Alharbi, A. "Effects of Edge Grinding and Sealing on Mechanical Properties of Machine Damaged Laminate Composites," SPIE Smart Structures/Non-destructive Evaluation Conference, Las Vegas, NV, March 20-24, 2016, 10 pages.
- 5. Alharbi, A., **Alarifi, I.M**., Khan, W.S., and Asmatulu, R. "Comparative Studies on Different Nanofiber Photocatalysts for Water Splitting," SPIE Smart Structures/Nondestructive Evaluation Conference, Las Vegas, NV, March 20-24, 2016, 10 pages.
- 6. Seewoogolam, V., **Alarifi, I.M.**, and Asmatulu, R. "Highly Robust Electrospun Nanofiber Films for Design of MAV Wings," CAMX Conference, Anaheim, CA, September 26-29, 2016, 11 pages.
- 7. Swarna, V.S., **Alarifi, I.M.**, Patlolla, V.R., and Asmatulu, R. "Improving the Strengths of Metal-metal Bonding via Inclusion of Graphene Nanoflakes into Adhesive Joints," CAMX Conference, Anaheim, CA, September 26-29, 2016, 11 pages.
- 8. Shagor, R.M.R., **Alarifi, I.M.**, and Asmatulu, R. "Effects of Silanized Graphene Nanoflakes on Mechanical Properties of Carbon Fiber Reinforced Laminate Composites," CAMX Conference, Anaheim, CA, September 26-29, 2016, 10 pages.
- 9. **Alarifi, I.M.**, Alharbi, A., Khan, W.S., and Asmatulu, R. "Electrospun Nanofibers for Improved Electrical Conductivity of Fiber Reinforced Composites," SPIE Smart Structures/Non-destructive Evaluation Conference, San Diego, CA, March 8-12, 2015, 8 pages.
- 10. Shinde, M.A., **Alarifi, I.M.**, Alharbi, A., and Asmatulu, R. "Electrospun TiO2 Nanofibers Incorporated with Graphene Nanoflakes for Energy Conversion," SPIE Smart Structures/Non-destructive Evaluation Conference, San Diego, CA, March 8-12, 2015, 7 pages.

- 11. Alharbi, A., **Alarifi, I.M.**, Khan, W.S., and Asmatulu, R. "Electrospun Strontium Titanata Incorporated with Nickel Oxide Nanoparticles for Improved Photocatalytic Activities," SPIE Smart Structures/Non-destructive Evaluation Conference, San Diego, CA, March 8-12, 2015, 8 pages.
- 12. **Alarifi, I.M.**, Alharbi, A., Alsaiari, O., and Asmatulu, R. "Training the Engineering Students on Nanofiber-based SHM Systems," The 2015 ASEE Zone III Conference, Springfield, MO, September 23-25, 2015, 10 pages.
- 13. Alharbi, A., **Alarifi, I.M**, Khan, W.S., and Asmatulu, R. "Co-Axial Electrospinning of Strontium Titanata Nanofibers Associated with Nickel Oxide Nanoparticles for Water Splitting," CAMX Conference, Dallas, TX October 27-29, 2015, 13 pages.
- 14. **Alarifi, I.M.**, Alharbi, A., Khan, W.S., and Asmatulu, R. "Thermal and Electrical Properties of Carbonized PAN Nanofibers for Improved Surface Conductivity of Carbon Fiber Composites," CAMX Conference, Dallas, TX October 27-29, 2015, 13 pages.
- 15. Faisal, M.S.S., Njoku, U., **Alarifi, I.M.,** and Asmatulu, R. "Nanocomposite Sealants for the Edge and Hole Treatment of Aircraft Carbon Fiber Composites," CAMX Conference, Dallas, TX October 27-29, 2015, 13 pages.

Book Chapters:

- 1. Alarifi, I.M., Khan, W.S., Rahman, M.M. and Asmatulu, R., 2017. Mitigation of lightning strikes on composite aircraft via micro and nanoscale materials. *THE ROYAL SOCIETY*. *Advances in Nanotechnology*, 2, p.17.
- 2. Alharbi, A., **Alarifi, I.M.**, Khan, W., and Asmatulu, R. "Semiconductor Nanofibers for Water Splitting and Energy Conversion," *in Advances in Materials Science Research*, Nova Science Publishers, Inc., Editor M. C. Wythers, 2015, Vol. 21, pp. 133-156.
- 3. **Alarifi, I.M.**, Alharbi, A., Khan, W., and Asmatulu, R. "Structural Health Monitoring of Composite Aircraft," *in Advances in Materials Science Research*, Nova Science Publishers, Inc., Editor M. C. Wythers, 2015, Vol. 21, pp. 111-132.

TECHNICAL AWARDS:

Conference s and Trainings: Event	Name of Activity	Institute	Location	Date
Training	Heat Exchanger Design Performance & Operation	ISCOSA	Dammam	Sept, 2005
Training	Advanced Tech. Report Writing	Al-Tawail	Jubail	Feb,2006
Training	Pumps	Saudi Electricity Com.	Dammam	Oct,2001
Conference	Oil & Gas Technology	SME	Houston, TX	Feb, 2009
Training	Basic Supervision	SABIC	Jubail	Feb, 2005
Training	Effective Communication	Al-Tawail	Jubail	Feb, 2006

Training	SAP Training (PM - MM Module)	SHARQ COM.	Jubail	Sept, 2005
Training	Machinery Failure Analysis & Prevention	Jubail Industrial College	Jubail	Nov, 2005
Training	Safety For Employees	SHARQ COM.	Jubail	May, 2005
Training	Microsoft Office (Excel, PowerPoint and Words)	New Horizon	Jubail	April,2004
Training	Time Management	Expert Rating Global	Ann Arbor, MI	Aug, 2009
Certificate	Excellent & Hard Professional support	SHARQ COM.	Jubail	Dec, 2001
Certificate	Ideal Proposal	SHARQ COM.	Jubail	Dec, 2003
Certificate	Perfect Attendance	University of Toledo	Toledo, USA	Summer & Fall Term, 2006
Certificate	Dean's List Recognition	University of Toledo	Toledo, USA	Spring Term, 2007
Certificate	Al-Riyadh Project Program Information System	Riyadh (ADA)	Riyadh	Nov, 2012

QUALIFACTION SUMMARY:

- Award for Scientific Research Excellence 2019 at Majmaah University.
- Active member as Reviewer International Journal of Heat and Mass Transfer (Elsevier)
- Active member as Reviewer Journal of Energy Storage (Elsevier)
- Active member as Editor in International Journal of Material Science and Research https://madridge.org/journal-material-science-research/editors.php
- Active member of Saudi Club at Toledo, OH, the Society of Mechanical Engineers (ASME 2019), (PMI) & The Fifth Discipline Professional Lounge.
- Active member as Reviewer in ASME at IMECE2019 conference.
- Active member as Reviewer in Elsevier Journal.
- Active member as Reviewer in Journal of Composite Materials (SAGE).
- Active member as Reviewer in Advanced Engineering Materials Journal.
- Quality Coordinator at ME Department 2017/2018 and Project Planning.
- Curriculum Updating at ME Department 2017/2018.
- Problem Solving and Project Management.

SOFTWARE TECHNICAL SKILLS:

- Proficient in MATLAB, Minitab, Microsoft Project 2007, Visual Basic and Microsoft office, Mathematica and ANSYS
- Teaching AutoCAD 2012.

PERSONAL SKILLS:

- Languages Spoken: Arabic and English.
 - Interests: Assembly, Programming, and Troubleshooting.