Shafique Khan, Ph.D.

http://orcid.org/0000-0001-6374-3504
https://www.linkedin.com/in/accomplisherkhan

PROFESSIONAL PROFILE

- Highly organized with excellent analytical skills
- Accomplished researcher
- Sustained record of securing extramural research funds and publishing
- Peer reviewer for various scientific journals and research funding agencies
- Enthusiastic educator and caring mentor focused to help students realize and utilize their true potential
- Over 13 years of college teaching experience, both undergraduate and graduate and in several institutions
- Strong knowledge of US model of higher education and academic processes
- Unwavering commitment to academic integrity at all levels
- Expertise in BS-ME program assessment and ABET accreditation
- Experience with course and program development
- Experience with multi-section course coordination
- Experience in mentoring senior design projects and directing graduate students' research
- Significant international experience crucial for addressing diversity and inclusivity issues

EDUCATION

PhD Washington State University, Pullman, WA, USA
Mechanical Engineering (December 2003)

MS King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia
Mechanical Engineering (December 1999)

BS University of Engineering and Technology, Lahore, Pakistan
Mechanical Engineering (August 1996)

PROFESSIONAL EXPERIENCE

Assistant Professor — Aug 2017 – present
Department of Mechanical Engineering
West Virginia University, Institute of Technology, Beckley, WV, USA

Adjunct Faculty — Jan 2017 – May 2017
Department of Mechanical Engineering
University of Maryland, College Park, MD, USA

Adjunct Professor — Sep 2016 – Aug 2017
Science, Engineering, and Technology Department
Montgomery College, MD, USA

Associate Professor — May 2012 – Aug 2016

Coordinator: Materials and Manufacturing Group — Apr 2012 – Aug 2015

Assistant Professor — Sep 2006 – Apr 2012
Department of Mechanical Engineering
King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

Guest Researcher (Post Doctoral Research Fellow) — Jan 2004 – Aug 2006
Materials Performance Group, Metallurgy Division
Materials Science and Engineering Laboratory
National Institute of Standards and Technology, Gaithersburg, MD, USA

Instructor — June 2002 – Dec 2003

Research Assistant — Jan 2000 – May 2002
Washington State University, Pullman, WA, USA

Graduate Assistant — Sep 1997 – Dec 1999
King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

Mechanical Engineer (Design) — Sep 1996 – July 1997
Petrosin Products Pakistan Pvt. Ltd., Pakistan

RESEARCH INTERESTS

- Multi-scale modeling of material behavior
- Computational mechanics/modeling, Finite element analysis
- Nanocomposites, Advanced materials, Nervous materials
- Dislocation theory, Discrete dislocation dynamics, Dislocation boundaries
- Fracture mechanics (Crack initiation, Crack tip plasticity)
- Crystal plasticity and defects
- Continuum modeling of dislocation microstructure

HONORS & AWARDS

Outstanding Department Service Award 2008-2009 College of Engineering Sciences, KFUPM	June 2009
Outstanding Teaching Assistant Award 2002-2003 College of Engineering and Architecture, WSU	April 2003
Teaching Assistant Excellence Award 2002-2003 Graduate and Professional Student Association (GPSA), WSU	April 2003
Research Excellence Award 2002-2003	April 2003
Outstanding Teaching Assistant Award 2002-2003 School of Mechanical and Materials Engineering, WSU	April 2003
MRS Best Poster Award Materials Research Society, Spring Meeting 2001	April 2001
Research Excellence Award 2000-2001 School of Mechanical and Materials Engineering, WSU	March 2001

PROFESSIONAL AFFILIATIONS

American Society of Mechanical Engineers	Aug 2000 – present
Materials Research Society	May 2001 – present
WSU Alumni Association	June 2006 – present
Standards Alumni Association (NIST)	July 2006 – present
The Minerals, Metals & Materials Society	Nov 2015 – present
Saudi Society of Mechanical Engineers	Mar 2013 – present
Pakistan Engineering Council	Life member; since 1996

FUNDED PROJECTS

Project Title	Sponsor	PI, Co-PI	Budget
Exploring concepts and manufacturing routes for a new approach of materials: 'nervous' materials	NSTIP	S. Mekid S. Khan S. Nouari K. Qureshi	**US$ 478,000** Mar 2014 – Feb 2016
Development of model for predicting fatigue based on crystal structure	KAP	J. Albinmousa N. Merah S. Khan	**US$ 257,800** Feb 2015 – Jan 2017
Enhancement of mechanical damage resistance of composite pipes under impact loading	KAP	A. Arif Z. Khan S. Khan Y. Al-Nassar	**US$ 280,000** April 2013 – Dec 2015
Thixoforming of nanoparticles-reinforced aluminum alloys	NSTIP	N. AbuDheir S. Khan A. Shuaib	**US$ 530,000** Nov 2010 – Oct 2013
Investigating dislocation structures during nano-indentation	DSR	S. Khan	**US$ 12,500** June 2010 – July 2011
Microforming setup development	DSR	N. AbuDheir S. Khan A. Shuaib	**US$ 84,000** Oct 2010 – Mar 2013
Investigating dislocation content of experimentally observed geometrically necessary boundaries	DSR	S. Khan	**US$ 11,000** May 2009 – Oct 2010

Exploring the effect of thickness on the crack tip	DSR	S. Khan N. Merah	**US$ 23,000** Sep 2008 – June 2010
Investigation of quality and metallurgical aspects of laser cutting of aluminum alloy	DSR	B. Yilbas S. Khan M. Raza	**US$ 20,000** Apr 2008 – Mar 2009
Surface improvement of cemented carbide cutting tool: Method of laser treatment	DSR	B. Yilbas S. Shuja S. Khan A. Jabbar	**US$ 18,000** Sep 2007 – Aug 2008
Optimization of repair sleeve design	SAR	A. Arif A. Elieche Y. Al-Nassar S. Khan	**US$ 390,000** Jan 2007 – Dec 2008
Junior faculty development grant	DAD	S. Khan	Summer 2007

Abbreviations used for sponsors' names:

King AbdulAziz City for Science & Technology-National Science, Technology and Innovation Plan (NSTIP)
King AbdulAziz City for Science & Technology-Annual Program (KAP)
Saudi Aramco (SAR)
Deanship of Scientific Research, KFUPM (DSR)
Deanship of Academic Development, KFUPM (DAD)

PUBLICATIONS

Refereed Journal Papers: **(with citation record: excluding self-citations of ALL authors)**

1. **Khan, S. M. A.**, "*Interaction of extrinsic dislocations with geometrically necessary dislocation boundaries using multiscale modeling*", under preparation.
2. Zafar, H., **Khan, S. M. A.** and Levine, L. E., "*Dislocation structure evolution during nano-indentation using multi-scale discrete dislocation plasticity analysis*", under preparation.
3. Al-Omari, A. S., Arif, A., **Khan, S. M. A.** and Al-Sulaiman, F. "*Experimental study and damage characterization using thermography of low velocity impact on carbon, glass and mixed fiber composite plates*", submitted.
4. Abubakar, A., **Khan, S. M. A.** and Mekid, S., "*On the modeling of fibers embedding in aluminum using ultrasonic consolidation*", ASME J. Eng. Mat. Tech., vol. 139, pp. 031003-1, 2017.
5. Mekid, S., Saheb, N., **Khan, S. M. A.** and Qureshi, K., "*Towards sensor array materials: can failure be delayed?*", Sci. Technol. Adv. Mater., vol. 16, pp. 034607, 2015.
6. Al-Shahrani, R. F., Merah, N., **Khan, S. M. A.** and Al-Nassar, Y. "*On the Impact-induced damage in glass fiber reinforced epoxy pipes*", Int. J. Impact Eng., vol. 97, pp. 57-65, 2016.
7. Neteche, T., Hadj Meliani, M., **Khan, S. M. A.**, Matvienko, Y. G., Merah, N. and Pluvinage, G., "*Residual harmfulness of a defect after repairing by a composite patch*", Eng. Failure Anal., vol. 48, pp. 166-173, 2015.
8. Yilbas, B. S., Karatas, C., Karakoc, H., AbdulAleem, B. J., **Khan, S. M. A.** and Al-Aqeeli, N., "*Laser surface treatment of aluminum based composite mixed with B_4C particles*", Opt. Laser Tech., vol. 66, pp. 129-137, 2015. **(cited by 1)**
9. **Khan, S. M. A.**, "*Multi-scale modeling of dislocation boundaries: Understanding interaction and effect of rotation angle* ", Comp. Mat. Sci., vol. 95, pp. 435-439, 2014.
10. Toor, I. and **Khan, S. M. A.**, "*Optical and structural properties of metal chalcogenide semiconductor nanostructures*", Book chapter. In: Metal Chalcogenide Nanostructures for Renewable Energy Applications, Edited by: Ahsanulhaq Qurashi, Wiley-Scrivener Publishing, 2014.
11. **Khan, S. M. A.**, Merah, N. and Adinoyi, M. J., "*3D effects on crack front core regions, stress intensity factors and crack initiation angles*", Int. J. Solids & Struct., vol. 50(9), pp. 1449-1459, 2013. **(cited by 3)**
12. **Khan, S. M. A.**, "*Effect of the thickness on the mixed mode crack front fields*", Struct. Eng. Mech., vol. 42, pp. 701-713, 2012. **(cited by 2)**
13. Arif, A. F. M., Al-Nassar, Y. N., Al-Qahtani, H., **Khan, S. M. A.**, Anis, M., Eleiche, A. M., Inam, M., Al-Nasri, N. and Al-Muslim, H. M., "*Optimization of Pipe Repair Sleeve Design*", ASME J. Pressure Vessel Technology, vol. 134(5) 051702, 2012. **(cited by 1)**

14. Albinmousa, J., Merah, N. and **Khan, S. M. A.**, "*A model for calculating geometry factors for a mixed-mode I-II single edge notched tension specimen*", Technical Note, Eng. Fracture Mech., vol. 78, pp. 3300-3307, 2011. **(cited by 4)**
15. **Khan, S. M. A.**, "*Stress distributions in a horizontal pressure vessel and the saddle supports*", Int. J. Pressure Vessels & Piping, vol. 87, pp. 239-244, 2010. **(cited by 5)**
16. Yilbas, B. S., **Khan, S. M. A.**, Raza, K., Keles, O., Ubeyli, M., Demir, T. and Karakas, M. S., "*Laser cutting of 7050 Al alloy reinforced with Al_2O_3 and B_4C composites*", Int. J. Adv. Manuf. Tech., vol. 50, pp. 185-193, 2010. **(cited by 8)**
17. **Khan, S. M. A.** and Khraisheh, M. K., "*The anisotropic R-criterion for crack initiation*", Eng. Fracture Mech., vol. 75, pp. 4257-4278, 2008. **(cited by 8)**
18. Yilbas, B. S., Shuja, S. Z., **Khan, S. M. A.** and Aleem, A., "*Laser melting of carbide tool surface: Model and experimental studies*" Applied Surface Sci., vol. 255, pp. 9396-9403, 2009. **(cited by 6)**
19. **Khan, S. M. A.**, Zbib, H. M. and Hughes, D. A., "*Modeling planar dislocations boundaries using multi-scale dislocation dynamics plasticity*", Int. J. Plasticity, vol. 20, pp. 1059-1092, 2004. **(cited by 23)**
20. **Khan, S. M. A.** and Khraisheh, M. K., "*A new criterion for mixed mode fracture initiation based on the crack tip plastic core region*", Int. J. Plasticity, vol. 20, pp. 55-84, 2004. **(cited by 40)**
21. Zbib, H. M., Shehadeh, M., **Khan, S. M. A.** and Karami, G., "*Multiscale dislocation dynamics plasticity*", Int. J. Multiscale Comp. Eng., vol. 1(1), pp. 73-89, 2003.
22. Hughes, D. A., **Khan, S. M. A.**, Godfrey, A. and Zbib, H. M., "*Internal structures of deformation induced planar dislocation boundaries*", Materials Science and Engineering A, vol. 309-310, pp.220-226, 2001. **(cited by 11)**
23. **Khan, S. M. A.** and Khraisheh, M. K., "*Analysis of mixed mode crack initiation angles under various loading conditions*", Eng. Fracture Mech., vol. 67, pp. 397-419, 2000. **(cited by 54)**
24. Yilbas, B. S., Shuja, S. Z. and **Khan, S. M. A.**, "*Laser repetitive pulse heating of tool surface*" Optics Laser Tech., vol. 43, pp. 754-761, 2011. **(cited by 8)**
25. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Laser consecutive pulse heating in relation to melting: Influence of duty cycle on melting*" Heat & Mass Transfer, vol. 45, pp. 793-803, 2009. **(cited by 9)**
26. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Laser consecutive pulse heating and phase change: Influence of spatial distribution of laser pulse intensity on melting*" Int. J. Thermal Sciences, vol. 48, pp. 1960-1966, 2009. **(cited by 10)**
27. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Flow emerging from annular-conical nozzle combinations and impinging onto a cylindrical cavity*" Int. J. Thermal Sciences, vol. 48, pp. 975-984, 2009. **(cited by 2)**
28. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Jet impingement onto a conical cavity: Effects of annular nozzle outer angle and jet velocity on heat transfer and skin friction*" Int. J. Thermal Sciences, vol. 48, pp. 985-997, 2009. **(cited by 11)**
29. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Jet impingement onto a tapered hole: influence of jet velocity and hole wall velocities on heat transfer and skin friction*" Int. J. Numerical Methods in Fluids, vol. 60, pp. 972-991, 2009. **(cited by 7)**
30. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Flow over solid blocks in open ended cavity: Effects of block's orientations and aspect ratios on the heat transfer rates*" Int. J. Numerical Methods Heat & Fluid Flow, vol. 19, pp. 633-649, 2009. **(cited by 4)**
31. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Jet emerging from an annular nozzle and impinging onto cylindrical cavity: Effect of jet velocity on flow structure and heat transfer rates*", Proc. Inst. Mech. Engrs. Part C: J. Mechanical Eng. Sci., vol. 222, pp. 1021-1031, 2008. **(cited by 3)**
32. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Flow subjected to porous blocks in the cavity: Consideration of block aspect ratio and porosity*", Chemical Engrg J., vol. 139, pp. 84-92, 2008. **(cited by 4)**
33. Shuja, S. Z., Yilbas, B. S. and **Khan, S. M. A.**, "*Laser heating of semi-infinite solid with consecutive pulses: Influence of material properties on temperature field*" Optics Laser Tech., vol. 40, pp. 472-480, 2008. **(cited by 9)**

Refereed Conference Papers:

1. Al-Omari, A. S., Arif, A. F. M., **Khan, S. M. A.**, Al-Sulaiman, F. A. and Malik, M. H., "*An experimental study of low velocity impact on carbon, glass and mixed fiber composite plates*", 20th International Conference on Composite Materials, 2015.
2. Arif, A. F. M., Al-Nassar, Y. N., Al-Qahtani, H., **Khan, S. M. A.**, Anis, M., Eleiche, A. M., Inam, M., Al-Nasri, N. I. and Al-Muslim, H. M., "*Optimization of pipe repair sleeve design*", ASME PVP, Design & Analysis of Piping & Piping Components II, 2011.
3. **Khan, S. M. A.**, "*Initial investigation into optimizing design of a pressure vessel saddle*", ASME PVP, Design & Analysis of Pressure Vessels, Heat Exchangers and Components, 2008.
4. **Khan, S. M. A.** and Levine, L. E., "*Multi-scale discrete dislocation plasticity analysis: Application to nano-indentation*", NSTI-Nanotech, vol. 1, pp. 649-652, 2006.
5. **Khan, S. M. A.** and Khraisheh, M. K., "*Predicting mixed mode crack initiation angles in anisotropic materials using the shape of the crack tip core region*", ASME PVP Fatigue, Fracture, and Damage Analysis, vol. 443(2), pp. 105-113, 2002.
6. **Khan, S. M. A.**, Zbib, H. M. and Hughes, D. A., "*Stress patterns of deformation Induced planar dislocation boundaries*", Mat. Res. Soc. Symp. Proc. Vol. 683E.
7. **Khan, S. M. A.** and Khraisheh, M. K., "*The effect of the crack tip core region on the crack initiation angles under mixed mode loading*", ASME PVP Fatigue, Fracture, and Damage Analysis, vol. 404, pp. 45-54, 2000.

Short Papers/Communications:

1. **Khan, S. M. A.**, "*Interaction of extrinsic dislocations with a geometrically necessary dislocation boundry* ", The 17th International Symposium on Plasticity, pp. 178-180, 2011.
2. Khraisheh, M. K. and **Khan, S. M. A.**, "*Maximum stress triaxiality ratio criterion for mixed mode crack initiation in anisotropic materials*", Int. J. Fracture, vol. 104, pp. L11-L16, 2000. **(cited by 1)**

TECHNICAL PRESENTATIONS

1. *Interaction Behavior of Deformation Induced Dislocation Boundaries & Extrinsic Dislocations*, National Institute of Standards and Technology, Gaithersburg, MD, USA, June 2012.
2. *Interaction of Extrinsic Dislocations with a Geometrically Necessary Dislocation Boundary*, Plasticity 2011, Puerto Vallarta, Mexico, January 2011. ***Invited talk***
3. *Stress Distributions in a Horizontal Pressure Vessel and the Saddle Supports*, ASME PVP 2008, Chicago, IL, July 2008. ***Paper presentation***
4. *Development of the R-Criterion for Crack Initiation*, Mechanical Engineering Department Seminar, KFUPM, Saudi Arabia, March 2008.
5. *Modeling Geometrically Necessary Dislocation Boundaries*, Mechanical Engineering Department Seminar, KFUPM, Saudi Arabia, March 2007.
6. *Multi-scale Discrete Dislocation Plasticity Analysis: Theory and Applications*, Mechanical Engineering Department Seminar, KFUPM, Saudi Arabia, October 2006.
7. *Multi-scale Discrete Dislocation Plasticity Analysis: Application to Nano-indentation,* NSTI Nanotechnology Conference and Trade Show 2006, Boston, MA, May 2006. ***Poster presentation***
8. *Dislocation Structure Evolution during Nano-indentation using Multi-scale Discrete Dislocation Plasticity Analysis*, MRS Fall Meeting 2004, Boston, MA, Dec 2004. ***Paper presentation***
9. *Multi-scale Discrete Dislocation Plasticity Analysis of Geometrically Necessary Dislocation Boundaries*, Physics Department Colloquium, The Catholic University of America, Washington DC, February 2004. ***Invited talk***
10. *Stress Patterns of Deformation Induced Planar Dislocation Boundaries*, MRS Spring Meeting 2001, San Francisco, CA, April 2001. ***Poster presentation***
11. *The Effect of the Crack Tip Core Region on the Crack Initiation Angles under Mixed Mode Loading*, ASME PVP 2000, Seattle, WA, July 2000. ***Paper presentation***

PROFESSIONAL SERVICE

Technical Reviewer

Computational Condensed Matter	Since Sep 2015
International Journal of Damage Mechanics	Since Aug 2015
Journal of Composite Materials	Since June 2015
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science	Since May 2014
Ocean Engineering	Since Feb 2014
Journal of Materials Science & Chemical Engineering (Editorial Board Member)	Oct 2013-Sep 2014
Structural Engineering and Mechanics	Since July 2013
Engineering Fracture Mechanics	Since Nov 2012
Applied Mathematical Modelling	Since Sep 2012
International Journal of Theoretical and Applied Multiscale Mechanics	Since Feb 2012
International Journal of Solids and Structures	Since Jan 2012
World Journal of Mechanics	Since Aug 2011
American Institute of Aeronautics and Astronautics (AIAA) Journal	Since Apr 2010
ASME Journal of Engineering Materials & Technology	Since July 2008
Arabian Journal of Science and Engineering	Since Sep 2006

External Examiner

PhD Dissertation, University of Wollongong, Australia	Feb 2015

Proposal Reviewer

National Science Foundation Served as a Panelist for ENG/CMS Proposals Review	May 2005
Center of Excellence for Research in Engineering Materials King Saud University, Saudi Arabia	Since Apr 2009
University Research Board American University of Beirut, Lebanon	Since Feb 2011

Miscellaneous

Co-Organizer, ME Technical Workshop Equipment and Methods for Mechanical Testing of Materials, ME, KFUPM & Tinius Olsen, USA	June 2009
Christopher Columbus Awards' Volunteer Judge The Christopher Columbus Fellowship & The National Science Foundations	2004–2005 & 2005–2006
Assisted in New International Student Orientation International Programs Office, WSU	Aug 2001

UNIVERSITY SERVICE

First Annual Research Day Organizing Committee Dean-Scientific Research appointed committee, KFUPM	2009-2010
Program Development Committee (MS-Materials Science & Engineering) Chair-ME appointed committee, KFUPM	Jan 2008-Dec 2010
ME Seminar Coordinator Department of Mechanical Engineering, KFUPM	Sep 2007-Aug 2013

ME Department Committees

Graduate/Doctoral Committee	2007-2009, 2011-2012 & 2014-2016
Program Assessment Committee (ABET Accreditation)	Sep 2008-Sep 2010
Academic Affairs and Curriculum Committee	2006-2007, 2009-2010 & 2012-2013
Student Affairs Committee	2013-2014
Teaching Assignment Committee	2010-2011
Open Access Initiative Committee	Spring 2008 & Spring 2009
Teaching Excellence Awards Committee	2007-2009
Large Lecture Format Planning Committee	Spring 2011

TECHNICAL WORKSHOPS ATTENDED

23rd Annual Innovations in Teaching and Learning Conference *UMD, College Park*	May 2017
Designing Better Classroom Examinations *By:* Prof. Thomas Erwin, James Madison University, USA	April 2013
Hands-on Experience in Project-Centric Engineering Design Education *By:* Prof. David Wallace, MIT, USA	Mar 2010
Assessment of Program Educational Objectives and Learning Outcomes *By:* Prof. Mahesh Aggarwal, Gannon University, USA	May 2008
Feedback to Promote Learning Workshop *By:* Prof. Sergio J. Piccinin, University of Ottawa, Canada	May 2008
Research Management Training Workshop *By:* Stanford Research Institute (SRI) International	Dec 2007

TEACHING

Courses

Washington State University

ME 212	Dynamics

King Fahd University of Petroleum and Minerals

ME 201	Dynamics
ME 205	Materials Science
ME 216	Materials Science and Engineering
ME 217	Materials Science and Engineering Laboratory
ME 309	Mechanics of Machines
ME 322	Manufacturing Processes
ME 599/699	Graduate Seminar (Developed and successfully implemented a program to enhance graduate students' learning)
MSE 501	Materials Structures and Defects (A new graduate course at KFUPM offered first time in the Spring semester 2009; formerly ME 597)
ME 554	Elasticity

Montgomery College

PSCI 101	Physical Science I (with Recitation and Laboratory)
ENES 100	Introduction to Engineering Design
ENES 102	Statics
ENES 221	Dynamics

University of Maryland, College Park

ENME 272	Introduction to Computer Aided Design

West Virginia University, Institute of Technology

DRET 120	Drafting I
MAE 342	Dynamics of Machines
MAE 454	Machine Design and Manufacturing
MAE 333	Mechanical Measurements
MAE 340	Vibrations
MAE 456	CAD/Finite Element Analysis

STUDENTS SUPERVISED

Graduate

1. Zafar, H., "*Investigating dislocation structure evolution during nano-indentation*", MS, Thesis Advisor, Spring 2014.
2. Abdul Azeem, M., "*Thixoforging of aluminum nanocomposites synthesized by ultrasonic stir casting*", MS, Thesis Co-Advisor, Fall 2013.
3. AlShahrani, R., "*Finite element modeling of glass fiber reinforced plastic pipes under impact loading*", MS, Thesis Committee Member, Spring 2013.

Senior Design Project

1. Papadopoulos, G., Hiskins, D., Combs, A., Lathwell, N., and Sheldon, G., "*Design of a water tank hoist for Boeing 787 Dreamliner*", 2019.
2. Johnson, T., "*Redesign of Molten Aluminum Refractory for Longevity*", 2018.
3. Stone, S., Foster, T., Alpeter, C., and Hill, D., "*Design of an efficient continuous salt crystal separator*", 2018.
4. Al-Khuzayem, S., Al-Mudaifer, A., and Al-Ghazal, A., "*Design a chair for use by disabled/special needs people during muslim congregational prayers*", 2014.
5. Al-Dakheel, H., Al-Omran, A., Al-Sahhaf, A., and Al-Mumen, A., "*Optimize design and construct a wind turbine*", 2013.
6. Muleh, H., Al-Taiyeb, A., and Al-Rashid, A., "*Develop a mechanically-based walk-assist machine*", 2012.
7. Al-Sadoon, T., and Al-Shehri, H., "*Design and construction of an automatic rocking chair*", 2011. ***Received Best Senior Design Project in the ME Department during Fall 2010***.
8. Al-Obaidan, A., Al-Matrood, M., and Abdrabalnabi, M., "*Design and construction of an H-rotor wind turbine for small applications in an urban setting*", 2010.
9. Al-Maslami, A., Al-Garni, B., Al-Zahrani, A., and Al-Zahrani, M., "*Design an H-rotor wind turbine and construct a scaled down prototype*", 2009.
10. Al-Khubrani, A., Marzooq, M., and Jambi, E., "*Design of a continuous swinging baby crib*", 2009.
11. Al-AbdulAziz, A., and Al-Mazmoumi, M., "*Design of a wind turbine*", 2008.
12. Al-Amri, S., and Al-Amri, O., "*Design and optimization of pressure vessel support*", 2007.