

CURRICULUM VITAE

Sayyad Zahid Qamar

PERSONAL INFORMATION

Name Sayyad Zahid Qamar
Date of Birth 10 December 1962
Specialization Mechanical Engineering
Contact Information Mechanical and Industrial Engineering Department
College of Engineering, Sultan Qaboos University
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EDUCATION AND EMPLOYMENT INFORMATION

EDUCATION

PhD 2004; Mechanical Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia
MS 1993; Institute for Innovation and Design in Engineering, Mechanical Engineering Department, Texas A&M University, College Station, Texas; and Stanford University, Palo Alto, California, USA
BE 1985; Mechanical Engineering Department, NED University of Engineering & Technology, Karachi, Pakistan

TEACHING/RESEARCH EXPERIENCE

Professor

June 2020 to date; Mechanical and Industrial Engineering Department (MIED), Sultan Qaboos University (SQU), Oman

Associate Professor

May 2012 to May 2020; Mechanical and Industrial Engineering Department, Sultan Qaboos University (SQU), Oman

Assistant Professor

January 2005 to April 2012; Mechanical and Industrial Engineering Department, Sultan Qaboos University (SQU), Oman

Visiting Consultant

September-December 2004; Mechanical and Industrial Engineering Department, SQU, Oman

Lecturer

August 1999 to June 2004; Mechanical Engineering Department, KFUPM, Dhahran, Saudi Arabia

Research Associate

August 1996 to July 1999; Faculty of Mechanical Engineering, Ghulam Ishaq Khan Institute of Engineering Science and Technology (GIKI), Topi, Pakistan

Research Assistant

August 1990 to January 1993; Institute for Innovation and Design in Engineering, Mechanical Engineering Department, Texas A&M University, College Station, Texas, USA

INDUSTRIAL EXPERIENCE

Manager, Research & Development

July 1994 to August 1996; General Engineering Division, Karachi Shipyard & Engineering Works Ltd (KSEW), Karachi, Pakistan

Environment: General heavy engineering, including design/R&D, manufacturing, and commissioning of complete sugar plants, complete cement plants, power plant structures, industrial boilers and heat exchangers, petroleum/oil storage facilities, etc

Deputy Manager, Engineering Design

January 1993 to July 1994; General Engineering Division, Karachi Shipyard & Engineering Works Ltd (KSEW), Karachi, Pakistan

Production Engineer

June 1987 to July 1988; Hidada Ltd, Jeddah, Saudi Arabia

Environment: Heavy structural fabrication (for airports, aircraft hangars, industrial plants, engineering workshops, bridges, electric transmission towers, etc) and galvanizing

Quality Control Engineer

May 1986 to June 1987; Hidada Ltd, Jeddah, Saudi Arabia

RESEARCH AREA AND PROFILE

Research Interests

Applied materials and manufacturing; Applied mechanics and design; Reliability engineering; Analytical, numerical, and stochastic modeling; Development of experimental facilities; Metalforming (extrusion) process, dies and tools, and product defects; Expandable and other specialty steels; Swelling elastomers and novel polymers for oil and gas industry; Sustainable engineering

Profiles and Citations

Sultan Qaboos University: <https://www.squ.edu.om/engineering/Faculty-and-Staff/Department-of-Mechanical-and-Industrial-Engineering>

Google Scholar: **h-index** 23, **i-10 index** 38

https://scholar.google.com/citations?hl=en&user=tlbjYLIAAAAJ&view_op=list_works

Research Gate: <https://www.researchgate.net/profile/Sayyad-Qamar>

Linked-in:

<https://www.linkedin.com/in/sayyad-zahid-qamar-b84b9110/?originalSubdomain=om>

Academia: <https://squ.academia.edu/ZahidQamar>

Publons: <https://publons.com/researcher/1402895/sayyad-zahid-qamar/>

AWARDS AND RECOGNITION

AWARDS/ACHIEVEMENTS

1. Certificate of Appreciation by the Ambassador of Pakistan to Muscat, recognizing Pakistani Luminaries in Education/Professions, for outstanding and meritorious services in the development of Pakistani/Omani societies
2. Certificate of Appreciation by the Ambassador of Pakistan to Muscat, recognizing Pakistani Luminaries in Education/Professions, for inspiring and unprecedented turnaround in Pakistan School Systems
3. Award for Incredible Researcher of the World, Incredible Academicians and Researchers of the World-22, Record Owner, Dec 2022
4. Award for Academic and Research Excellence, Intech Open Publishers, December 2021
5. Award for Scientific and Research Excellence, Sultan Qaboos University, May 2020
6. Award for Best Professor in Applied Materials and Manufacturing, GCC Education Leadership Awards, Abu Dhabi, March 2019
7. Award for Academic Excellence, presented by the Foreign Minister of Pakistan and the Ambassador of Pakistan to Oman, Muscat, January 2019
8. Award for Academic Excellence, presented by the Ambassador of Pakistan to Oman, Muscat, January 2018
9. Distinguished Researcher Award, College of Engineering, Sultan Qaboos University, May 2017
10. Outstanding Presentation Award for the paper “Extrusion Shape Complexity: A Research/Industry Review,” *International Conference on Mechanical Engineering and Advanced Materials* (ICME-AM 2015), 3-4 December, 2015, Kota Kinabalu, Sabah, Malaysia
11. Distinguished Researcher Award, College of Engineering, Sultan Qaboos University, May 2011
12. 2-Year merit scholarship: Board of Intermediate Education, Karachi for outstanding academic performance; 1978
13. First prize in All-Pakistan *Science Writing Competition*; 1974
14. Numerous first prizes in All-Karachi, All-Sindh, and All-Pakistan English-language Debates and Declamation Contests; 1975-1984
15. Numerous first prizes in All-Karachi, All-Sindh, and All-Pakistan Urdu-language Debates and Declamation Contests; 1975-1984
16. Best English-language Debater at university, college, and school levels; 1974-1984 12. Best Urdu-language Debater at university, college, and school levels; 1974-1984

PLENARY/KEYNOTE/INVITED SPEAKER

1. Plenary Speaker: “Renewability, Sustainability, and Environmental Protection – A Closer Look,” *the Energy Summit 2025*, 17-19 Feb 2025, Boston, MA, USA; Online
2. Keynote Speaker: “Numerical Simulation of Swelling Behavior of Elastomers in Oil and Gas Wells,” *Global Energy Meet* (GEM-2024), 04-06 March 2024, Los Angeles, CA, USA; Online
3. Plenary Speaker: “How to Make Future Engineers Critical Thinkers?” 14th *Annual International Conference on Industrial Engineering and Operations Management* (IEOM), 12-14 February 2024, Dubai, UAE

4. Plenary Speaker: “Past, Present, and Future of Renewability and Sustainability,” *World Congress on Geology and Earth Science* (Geo-Earth 2023), 04-06 Sep 2023, Rome, Italy + Online
5. International Expert: “How to Teach Critical Thinking with Examples from Materials and Manufacturing Courses,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 06 July 2023
6. International Expert: “Expandable Steels in Petroleum Drilling and Development: Testing and Analysis,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 04 July 2023
7. Keynote Speaker: “In-Situ Testing of Swell Packers in Saline Water and Crude Oil,” *Global Energy Meet* (GEM-2023), 06-09 March 2023, Boston, MA, USA + Online
8. Keynote Speaker and Conference Chair: “Using Viscosity and Diffusion for Assessment of Elastomer Swelling,” *Catalysis, Chemical Engineering and Technology Virtual*, 16-17 June 2023, Virtual
9. Keynote Speaker: “PVC Pipes for Thermal Wells — Structural Integrity under Various Loading Conditions,” 2nd International Conference on Material Science, Engineering, and Smart Materials, 17-18 Nov 2022, Dubai, UAE
10. International Expert: “Performance Analysis of Swelling Elastomers in Petroleum Applications,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 08 July 2022
11. International Expert: “Modeling and Analysis of Extrusion Process, Product and Tooling: Estimation and Prediction of Die Life,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 06 July 2022
12. Plenary Speaker: “Longevity Assessment of Swell Packers in Oil and Gas Fields,” World Congress on Petrochemistry and Chemical Engineering (Petrochemistry 2022), 15-16 April 2022, Edinburgh, Scotland + Online
13. Keynote Speaker: “Effect of Shape Complexity on Extrusion Pressure — Experimental and Numerical Investigation,” 12th World Conference on Petroleum Chemistry, 22-23 November 2021, Dubai, UAE
14. Keynote Speaker: “Swell Packers and Expandable Tubulars in Petroleum Drilling — Finite Element Simulation,” 6th International Conference on Oil, Gas, and Petrochemistry (Petrochem-2021), 03 November 2021, Dubai + Online
15. Keynote Speaker: “Mechanics of Swelling — A Diffusion Based Approach: Elastomer Research at Sultan Qaboos University,” 5th International Conference on Fossil and Renewable Energy (F&R 2021); 01-03 March 2021, Houston, Texas, USA + online
16. Keynote Speaker: “Material Enhancement of Expansion Mandrel for Oil and Gas Wells,” *International Conference on Petrochemical Engineering and Natural Resources*, 8-9 June 2020, Dubai, UAE + Online
17. Distinguished Speaker: “Engineering Education: Challenges, Opportunities, and Future Trends,” 16th IEOM Global Engineering Education: First GCC International Conference on Industrial Engineering and Operations Management (IEOM-2019), 26-28 Nov 2019, Riyadh, Saudi Arabia
18. Keynote Speaker: “Integrity Assessment of Polymer Pipes in Petroleum Drilling Applications,” 2nd International Conference and Expo on Oil & Gas, 2-3 December 2019, Dubai, UAE
19. Keynote Speaker: “Correctable Die Defects in Aluminum Extrusion,” 2nd World Congress on Mechanical and Mechatronics Engineering (WCMME-2019), 15-17 April 2019, Dubai, UAE

20. Keynote Speaker: “Finite Element Simulation of Elastomer Swelling in Petroleum Drilling Applications,” *3rd International Conference on Gas, Oil and Petroleum Engineering* (GOPE 2019), 18-20 Feb 2019, San Francisco, USA
21. Keynote Speaker: “Use of Swelling Elastomers in Drilling and Development of Oil and Gas Wells; Elastomer Research at Sultan Qaboos University,” *2nd International Oil and Gas Conference*, 3-5 Dec 2018, Dubai, UAE
22. Keynote Speaker: “Engineering Education: Skill Levels and Outcome-Based Approach,” *ISERD International Conference on Education and E-Learning* (ICEEL), 7-8 August 2018, Istanbul, Turkey
23. Keynote Speaker: “Swelling Elastomers in Petroleum Drilling Operations: Comparison of Material Models,” *International Conference on Materials Science and Graphene Technology*, 9-11 April 2018 Dubai, UAE
24. Keynote Speaker: “Tool and Die Steels in Aluminum Extrusion and Tubular Expansion Applications,” *3rd Euro Congress on Iron, Steel and Construction Engineering*, 16-17 November 2017, London, UK
25. Keynote Speaker: “Mitigation of Major Product Defects in Aluminum Extrusion,” *14th International Conference and Exhibition on Materials Science and Engineering*, 13-15 November 2017, Las Vegas, Nevada, USA
26. Keynote Speaker: “Solid Expandable Tubulars; Full-Scale Testing and Analysis,” *International Conference on Geology and Geoscience*, April 27-28, 2017, Dubai, UAE
27. Keynote Speaker: “Performance Evaluation, of Swell Packers under Actual Field Conditions,” Keynote Address, *International Conference on Oil, Gas and Petrochemistry*, April 3-5, 2017, Dubai, UAE
28. Keynote Speaker: “Product Defects in Commercial Aluminum Extrusion: Review and Analysis,” *International Conference on Advances in Materials and Processing Technologies* (AMPT 2016), 8-11 November 2016, Kuala Lumpur, Malaysia
29. Invited Speaker: “Modeling and Analysis of Extrusion Process, Product and Tooling: Estimation and Prediction of Die Life,” *17th International Conference on Applied Mechanics and Mechanical Engineering* (AMME-2016), 19-21 April, Military Technical College, Cairo, Egypt
30. Keynote Speaker: “Performance Analysis of Swelling Elastomers in Petroleum Applications: Elastomer Testing and Characterization at Sultan Qaboos University,” *8th International Conference on Materials Science and Engineering* (IMS 8), 2-4 Feb 2016, American University of Sharjah, Sharjah, UAE
31. Invited Paper and Outstanding Presentation Award: “Extrusion Shape Complexity: A Research/Industry Review,” *International Conference on Mechanical Engineering and Advanced Materials* (ICME-AM 2015), 3-4 December, 2015, Kota Kinabalu, Sabah, Malaysia

AWARDS FOR SUPERVISED THESIS/SENIOR DESIGN PROJECTS

1. 2nd prize in Graduate Paper Competition; Al Niyadi A, Qamar SZ, Al Maharbi M, Al Jahwari F (2024) “Investigation of Clad Failures in Aluminum Smelters,” 2nd GCC International Conference on Industrial Engineering and Operations Management (IEOM), 1-3 Dec 2024, Muscat
2. Student project funded by the Research Council Oman (TRC) under their FURAP program: “Design and Construction of Fatigue Test Facility for Petroleum Casings and Connections”; Fall 2014-Spring 2015; Supervisor

3. 4th position in Design Competition supported by MIE Department Industrial Advisory Board, 2015. Award given to BEng student team for their Senior Design Project “Design and Construction of Fatigue Test Facility for Petroleum Casings and Connections”; Supervisor
4. 1st position (Regional) and 1st position (National) Society of Petroleum Engineers Postgraduate Category Award, 2011. Award given to MSc student Omar S. Al-Abri for research conducted on “Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular”. (Selected for international competition held during 31 October - 02 November 2011 in Colorado, USA); Co-supervisor
5. 2nd position (International), 1st position (Regional) and 1st position (National) Society of Petroleum Engineers Undergraduate Category Award, 2010. Award given to BEng student team for their Senior Design Project “Design of Cone and Launcher System for SET Applications in Well Drilling”, which I co-supervised.
6. 1st position at the Design Project Competition in 1st GCC Engineering Students Gathering, 2004. Award given to BEng student team for their Senior Design Project “2nd Generation SQU Solar Car”, which I co-supervised.
7. 1st position in Design Competition supported by MIE Department Industrial Advisory Board, 2007. Award given to BEng student team for their Senior Design Project “SQU 3rd Generation Solar Car: Body Design”, which I co-supervised.
8. 2nd position in Design Competition supported by MIE Department Industrial Advisory Board, 2009. Award given to BEng student team for their Senior Design Project “Design of Cone and Launcher System for SET Applications in Well Drilling”, which I co-supervised.
9. 3rd position in Design Competition supported by MIE Department Industrial Advisory Board, 2008. Award given to BEng student team for their Senior Design Project “Designing an Effective Elastomer Seal for SET using Finite Element Method”, which I co-supervised.
10. Senior Design Project under my co-supervision “Design and Fabrication of Human Powered Submarine” was granted financial support by SQU, Qalhat LNG, and other agencies, and successfully participated in International Submarine Race; 2011

RECOGNITION/APPRECIATION

1. Appreciation letter from the Dean, College of Engineering, SQU for efforts and contributions as Chairman of the College Risk Management Committee from 2020-2024.
2. Letter of Appreciation from the Asst Dean for Postgraduate Studies and Research, Sultan Qaboos University for review of internal grant proposal; Aug 2022
3. Letter of Appreciation from the Asst Dean for Postgraduate Studies and Research, Sultan Qaboos University for review of internal grant proposal; Sept 2021
4. Letter of Appreciation from the project focal point at PDO (Mr Arjan Vos) for successful completion of the 5-year long “Swellable Elastomer Longevity Test Rig” project; March 2017
5. Letter of Appreciation from the Head of New Technology Implementation at PDO (Mr Dawood al-Qassabi) for successful completion of the project “Investigation of Swelling Elastomers for Yibal Field” (January 2016)
6. Letter of Appreciation from the project focal point at Composite Pipe Industries CPI (Mr Prakash Kumar) for successful completion of the project “Experimental and Finite Element Analysis of GRE Pipes” (March 2015)

7. Letter of Appreciation from the Vice Chancellor of Sultan Qaboos University for efforts in the role of Coordinator of College Accreditation Committee toward ABET accreditation of all eight Engineering Programs; Dec 2014
8. Letter of Appreciation from the project focal point at PDO (Mr Saif al-Aufi) for successful completion of the project “Evaluation of Water-Swelling and Oil-Swelling Elastomers” (November 2014)
9. Letter of Appreciation from the project focal point at PDO (Mr Arjan Vos) for fabrication and commissioning of the “Swellable Elastomer Longevity Test Rig” at SQU; February 2014
10. Letter of Appreciation from the project focal point at PDO (Mr Mark van de Velden) for design and construction of the “Swellable Elastomer Longevity Test Rig” at SQU; July 2010
11. Letter of Appreciation from the project focal point at PDO (Mr Mark van de Velden) for success of the first commercial “8½-inch Pass-through Mono-diameter Expandable Clad Design and Construction,” based on the qualification tests done at SQU’s Expandable Tubular Test-Rig; June 2010
12. Letter of Appreciation from the project focal point at PDO (Mr Mark van de Velden) for design, construction, and commissioning of the Pull Test (Cone-on-Stick approach) for solid expandable tubular; April 2010
13. Letter of Appreciation from the Vice Chancellor of Sultan Qaboos University for the efforts and contributions extended toward ABET Accreditation of Engineering Programs; March 2010
14. Invited Member, Expandable Technology Forum, in recognition of research work done on Solid Expandable Tubular; 2008 - Present
15. SQU test facilities for Expandable Tubular Test-rig and Elastomer Characterization included in the video “PDO Insight 3 – Technology Edition” for worldwide distribution to oil companies; 2008

RESEARCH/SCHOLARLY ACHIEVEMENTS

EDITORIAL EXPERIENCE; REFEREED JOURNALS

1. Member, Editorial Board, *Arabian Journal for Science and Engineering* (Q1, IF 3.367), Jan-2023 to Dec-2024
2. Member, Editorial Board, *Journal of Elastomers and Plastics* (Q3, IF 1.7), 2015-to date
3. Member, Editorial Board, *Materials and Manufacturing Processes* (Q1, IF 4.8), 2016 to 2020
4. Associate Editor, *The Journal of Engineering Research*, SQU, 2012 to 2021
5. Honorable Editor, *Aeronautics and Aerospace Open Access Journal*, Jun-2023 to date
6. Member, Editorial Board, *International Journal of Business Engineering and Management Systems*, Jun-2016 to date
7. Member, Editorial Board, *American Journal of Mechanical and Industrial Engineering*, Jan-2016 to date
8. Member, Editorial Board, *Indian Journal of Engineering*, Jan-2017 to date
9. Member, Editorial Board, *Petroleum and Petrochemical Engineering*, Mar-2018 to date

10. Guest Editor, Special Issue on “Applied Mechanics and Industrial Systems,” *Materials and Manufacturing Processes*, 2017-2018
11. Guest Editor, Special Issue on “Expandable Tubulars, Elastomers and Associated Technologies,” *The Journal of Engineering Research*, SQU, 2012
12. Guest Editor, Special Issue on “Applied Mechanics, Materials, and Manufacturing,” *Materials and Manufacturing Processes*, **27** (7), 2012
13. Guest Editor, ICAMMM-2012 Special Issue, *The Journal of Engineering Research*, SQU, **8** (2), June 2011

EDITORIAL EXPERIENCE: BOOKS AND ENCYCLOPEDIA

1. Editor: Quality Control and Quality Assurance - Techniques and Applications, IntechOpen; published May 2024; <http://dx.doi.org/10.5772/intechopen.111297>
2. Editor of volume on Thermal Engineering of Steel Alloy Systems; in 13-volume series: Comprehensive Materials Processing, 2nd edition; Elsevier; published online May 2024
3. Editor of Vol-5: Renewability of Synthetic Materials; in S. Hashmi, I.A. Choudhury (editors in-chief) Reference Module in Materials Science and Materials Engineering: Encyclopedia of Renewable and Sustainable Materials, Elsevier, 2020, ISBN 9780128131961, <https://doi.org/10.1016/B978-0-12-803581-8.11574-7>
4. Editor: Extrusion of Metals, Polymers, and Food Products, INTECH Open Science, ISBN 978-953-51-3838-9, Print ISBN 978-953-51-3837-2, February 28, 2018; DOI: 10.5772/65577
5. Editor: Applied Mechanics, Materials and Manufacturing; Vol-2 Materials and Manufacturing, December 2010, Sultan Qaboos University Press, Muscat, Oman
6. Editor: Applied Mechanics, Materials and Manufacturing; Vol-1 Applied Mechanics, December 2010, Sultan Qaboos University Press, Muscat, Oman

BOOKS AND CHAPTERS IN BOOKS

Books

1. **Qamar SZ**, Nasr Al-Hinai (editors); Quality Control and Quality Assurance - Techniques and Applications, IntechOpen; published May 2024; <http://dx.doi.org/10.5772/intechopen.111297>
2. **Qamar SZ** (volume editor): Thermal Engineering of Steel Alloy Systems; in 13-volume series: Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier; published online May 2024
3. **Qamar SZ**, Akhtar M, Pervez T (2021) Swelling Elastomers in Petroleum Drilling and Development — Applications, Performance Analysis, and Material Modeling. London: IntechOpen; 2021; <https://www.intechopen.com/books/10159> doi: 10.5772/intechopen.90221
4. **Qamar SZ** (section editor) Vol-5: Renewability of Synthetic Materials, in S. Hashmi, I.A. Choudhury (editors in-chief), Reference Module in Materials Science and Materials Engineering: Encyclopedia of Renewable and Sustainable Materials, Elsevier, 2020, ISBN 9780128131961, <https://doi.org/10.1016/B978-0-12-803581-8.11574-7>
5. **Qamar SZ** (editor) Extrusion of Metals, Polymers, and Food Products, (2018) INTECH Open Science, ISBN 978-953-51-3838-9, Print ISBN 978-953-51-3837-2, February 28, 2018
6. **Qamar SZ**, Sheikh AK, Arif AFM (2011) Modeling and Analysis of Aluminum Extrusion: Process, Tooling, and Defects, LAP Lambert Academic Publishing

7. **Qamar SZ**, Garbie I, Abdo J, Al-Rawahi N, Pervez T (Editors), Shikdar A (Managing Editor), Srivatsan TS (International Editor) Applied Mechanics, Materials and Manufacturing; Vol-2 Materials and Manufacturing, December 2010, Sultan Qaboos University Press, Muscat, Oman
8. Abdo J, Al-Rawahi N, Pervez T, **Qamar SZ**, Garbie I (Editors), Shikdar A (Managing Editor), Srivatsan TS (International Editor) Applied Mechanics, Materials and Manufacturing; Vol-1 Applied Mechanics, December 2010, Sultan Qaboos University Press, Muscat, Oman

Chapters in Books

1. **Qamar SZ** (2024) "Introduction to Thermal Engineering of Steel Alloy Systems," in Saleem Hashmi (ed), Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier, 2024, ISBN 9780128035818, <https://doi.org/10.1016/B978-0-323-96020-5.00287-9>
2. Khan R, Pervez T, **Qamar SZ**, Al Rasheedia NA, Al Abri O (2024) "Twinning and transformation induced plasticity in advanced steels: A thermodynamic modeling approach," in Saleem Hashmi (ed), Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier, 2024, ISBN 9780128035818, <https://doi.org/10.1016/B978-0-323-96020-5.00225-9>
3. Akhtar M, **Qamar SZ**, Khan R (2024) "Vacuum Heat Treatment: Process, Applications, and Parameters," in Saleem Hashmi (ed), Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier, 2024, ISBN 9780128035818, <https://doi.org/10.1016/B978-0-323-96020-5.00291-0>
4. Al-Abri OS, Pervez T, **Qamar SZ** (2024) "Classification and Mechanisms of Steel Transformation," in Saleem Hashmi (ed), Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier, 2024,
5. **Qamar SZ**, Al-Maharbi M, Pervez T (2024) "Thermal Material Enhancement of Metalforming Die Steel," in Saleem Hashmi (ed), Comprehensive Materials Processing, 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier, 2024, ISBN 9780128035818, <https://doi.org/10.1016/B978-0-323-96020-5.00290-9>
6. Chekotu JC, **Qamar SZ**, and Qamar SB (2021) "Numerical and Experimental Analysis of Profile Complexity in Aluminum Extrusion," In Fracture, Fatigue and Wear, pp 149-157; Lecture Notes in Mechanical Engineering book series, Springer, Singapore, 2021.
7. **Qamar SZ**, Al-Kindi M (2020) "Renewability and Sustainability: Current Status and Future Prospects," chapter in Editor(s): Saleem Hashmi, Imtiaz Ahmed Choudhury, Reference Module in Materials Science and Materials Engineering: Encyclopedia of Renewable and Sustainable Materials, Elsevier, 2020, Pages 717-730, ISBN 9780128131961, <https://doi.org/10.1016/B978-0-12-803581-8.11574-7>
8. Qamar SZ (2018) "Introduction to Extrusion; from Gear Manufacturing to Production of Cereals," chapter in book Extrusion of Metals, Polymers, and Food Products, INTECH Open Science, ISBN 978-953-51-3838-9, Print ISBN 978-95351-3837-2, Published: February 28, 2018
9. Pervez T, **Qamar SZ**, Al-Abri OSA, Khan R (2018) "Indirect Extrusion; A Multifaceted Approach of Subsurface Tubular Expansion," chapter in book Extrusion of Metals, Polymers, and Food Products, INTECH Open Science, ISBN 978-953-51-3838-9, Print ISBN 978-953-51-3837-2, Published: February 28, 2018

10. Arunachalam R, Kannan S, **Qamar SZ** (2017) “Techniques, Trends, and Advances in Conventional Machining Practices for Metals and Composite Materials,” chapter in book Manufacturing Techniques for Materials: Engineering and Engineered, Taylor and Francis
11. Qamar SZ, Sheikh AK, Pervez T, Arif AFM (2011) “Using Monte Carlo Simulation for Prediction of Tool Life,” chapter in book Applications of Monte Carlo Method in Science and Engineering, edited by S Mark and S Mordechai, INTECH International Publishers
12. Pervez T, Al-Hiddabi SA, **Qamar SZ** (2011) “Analytical and Computational Solution for Expandable Liner Hanger based on Nonlinear Mechanics,” chapter in book Materials for Energy Exploration, edited by Frank Columbus, NOVA Science Publishers

REFEREED JOURNAL PAPERS

1. **Qamar SZ**, Al-Kindi M, Al-Hinai N (2024) “Sustainability and Renewability: Trends, Challenges, and Future Outlook,” under review, *Energy Sources Part A: Recovery, Utilization, and Environmental Effects*
2. **Qamar SZ**, Pervez T, Al-Jahwari F (2023) “Integrity Assessment of High-Performance PVC Pipes for Thermal Wells,” *Polymers* 2023, 15, 3593. <https://doi.org/10.3390/polym15173593>
3. Allamki A, Al-Maharbi M, **Qamar SZ**, Al-Jahwari F (2023) “Precipitation Hardening of the Electrical Conductor Aluminum Alloy 6201,” *Metals*, 13 (6), 2023, 1111. <https://doi.org/10.3390/met13061111>
4. Alam K, **Qamar SZ**, Iqbal M, Piya S, Al-Kindi M, Qureshi A, Silberschmidt VV (2023) “Effect of Drill Quality on Biological Damage in Bone Drilling,” *Scientific Reports*, 13, 6234 (2023). <https://doi.org/10.1038/s41598-023-33381-y>
5. Khan R, Pervez T, Alfozan A, **Qamar SZ**, Mohsin S (2022) “Numerical Modeling and Simulations of Twinning-Induced Plasticity Using Crystal Plasticity Finite Element Method,” *Crystals*, 2022; **12** (7): 930
6. Akhtar M, **Qamar SZ**, Mehdi M, Pervez T, Al-Kharusi M (2022) “Novel Method for Determination of Polymer-Solvent Interaction Parameter using Mechanical Properties,” *Arabian Journal for Science and Engineering*, **47**, 11887–11897 (2022)
7. **Qamar SZ** (2021) “Numerical Investigation of Tubular Expansion and Swelling Elastomers in Oil Wells,” *Journal of Polymer Engineering*, 2021, **41** (10): 883-892
8. Pervez T, **Qamar SZ**, Akhtar M, Al Kharusi M (2021) “Design and Construction of Test Facility for Evaluation of Swell Packers in Cased and Open Holes,” *Journal of Petroleum Exploration and Production Technology*, Sept 2021; **11** (11): 4063-4073
9. **Qamar SZ**, Pervez T, Akhtar M, Al Kharusi M (2021) “Long-Term Performance Assessment of Swell Packers under Different Oilfield Conditions,” *ASME Journal of Energy Resources Technology* (JERT), June 2021; **143** (6): 063006
10. Mehdi M, Akhtar M, Abro S, **Qamar SZ**, Nauman MM, Aziz S, Khan ZU, Sufiyan M, Waseem MB, Azraf A (2019) “Electrochemical Synthesis of AgNP and Mechanical Performance of AgNP-EG Coatings on a Soft Elastomer,” *Journal of Elastomers and Plastics*, **52** (7), p 609-619
11. Qamar SZ, Chekotu JC, Qamar SB (2019) “Effect of Shape Complexity on Ram Pressure and Metal Flow in Aluminum Extrusion,” *JOM, Journal of the Minerals Metals & Materials Society (TMS)*, 71 (12), Nov 2019, p 4378-4392

12. **Qamar SZ**, Chekotu JC, Al-Maharbi M, Alam K (2019) “Shape Complexity in Metal Extrusion — Definitions, Classification, and Applications,” *Arabian Journal for Science and Engineering*, (2019) **44**:7371-7384
13. **Qamar SZ** (2018) “Engineering Education: Skill Levels and Outcome-Based Approach,” *International Journal of Management and Applied Science*, **4** (12), Dec 2018, p 25-29
14. Akhtar M, **Qamar SZ**, Muzamil M, Nadeem A (2018) “Optimum Heat Treatment of Aluminum Alloy used in Manufacturing of Automotive Piston Components,” *Materials and Manufacturing Processes*, **33** (16), p 1874-1880
15. Qamar SZ, Pervez T, Chekotu JC (2018) “Die Defects and Die Corrections in Metal Extrusion,” *Metals*, 2018, **8** (6), 380
16. Akhtar M, **Qamar SZ**, Mehdi SM, Hussain A (2018) “Diffusion-Based Swelling in Elastomers under Low and High-Salinity Brine,” *Journal of Elastomers and Plastics*, **51** (1), p 75-84
17. Akhtar M, **Qamar SZ**, Pervez T (2018) “Some Downhole Applications of Swelling Elastomers in Oil and Gas Wells,” *International Journal of Petrochemical Science & Engineering*, 2018, **3** (3), p 75-78
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2. Pervez T, **Qamar SZ** (Feb 2020) "Pre-Final Report: Compressive and Collapse Evaluation of Sun-Degraded PVC Pipes along with PVC Material Properties," for Petroleum Development Oman (PDO)

3. **Qamar SZ**, Pervez T (May 2018) “Final Report-2: Tensile-Compressive and Collapse Evaluation of PVC Pipes — *Tension Testing*,” for Petroleum Development Oman (PDO)
4. **Qamar SZ**, Pervez T (Mar 2018) “Final Report-1: Tensile-Compressive and Collapse Evaluation of PVC Pipes — *Compression Testing*,” for Petroleum Development Oman (PDO)
5. Pervez T, **Qamar SZ**, (Dec 2017) “Interim Report-2: Tensile-Compressive and Collapse Evaluation of PVC Pipes — *Collapse Testing*,” for Petroleum Development Oman (PDO)
6. **Qamar SZ**, Pervez T (Sep 2017) “Interim Report-1: Tensile-Compressive and Collapse Evaluation of PVC Pipes — *Background, Pre-Test Setup, Initial Design*,” for Petroleum Development Oman (PDO)
7. **Qamar SZ**, Pervez T (Aug 2016) “Final Report: Longevity Test Rig for Swellable Elastomers: Design, Fabrication, Commissioning, and 5-Year Testing,” for Petroleum Development Oman (PDO)
8. **Qamar SZ**, Pervez T (Dec 2015) “Investigation of Swelling Elastomers for Yibal Field,” for Petroleum Development Oman (PDO)
9. **Qamar SZ**, Pervez T (Feb 2015) “Final Report: Axial Tensile and Hoop Testing of GRE Pipes,” for Composite Pipe Industries (CPI) and Industrial Innovation Center (IIC)
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13. Al-Kindi M, **Qamar SZ**, Pervez T (June 2014) “Probabilistic Approach for UWD Budget Incorporating Risk Analysis – Phase 1,” for Petroleum Development Oman (PDO)
14. **Qamar SZ**, Pervez T (March 2013) “Axial Tensile and Hoop Testing of GRE Pipes,” for Composite Pipe Industries (CPI) and Industrial Innovation Center (IIC)
15. **Qamar SZ**, Pervez T, Trautwein SE (December 2011) “Longevity Test Rig for Swellable Elastomers: Design, Fabrication, and Initial Testing,” for Petroleum Development Oman (PDO)
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 22. **Qamar SZ**, Pervez T, Hiddabi SA (February 2009) “Characterization of Swelling Elastomers: Short-Term Test #2,” for Petroleum Development Oman (PDO)
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 35. Arif AFM, Sheikh AK, **Qamar SZ** (2004) “A Die Life Enhancement Strategy for Hot Extrusion of Aluminum Alloys,” Fast Track Research Grants Program, KFUPM
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GRANT AND CONTRACT SUPPORT

PI: Principal Investigator; CPI: Co-Principal Investigator; I: Investigator

Research Contracts (Externally Funded Projects)

No.	Investigators	Funding Agency	Status	Amount (OMR/ USD)	Title
1	M Al-Maharbi (PI), SZ Qamar (Co-PI), F Al-Jahwari (I), Abdul Shakoor QU (PI)	SQU-QU	Started 2021	30,000/78,060	Sustainable and low-cost development of Aluminum nanocomposites through a novel stir casting approach
2	T Pervez (PI), SZ Qamar (co-PI)	PDO	Completed; 2019-2020	29,100/ 75,000	Compressive and Collapse Evaluation of Sun-Degraded PVC Pipes along with PVC Material Properties
3	SZ Qamar (PI), T Pervez (co-PI)	PDO	Completed; 2016-2018	40,310/ 104,000	Tensile-Compressive and Collapse Evaluation of PVC Pipes
4	SZ Qamar (PI), T Pervez (co-PI)	PDO	Started and Completed 2015	7,752/ 20,000	Investigation of Swelling Elastomers for Yibal Field
5	SZ Qamar (PI), T Pervez (co-PI)	PDO	Started and Completed 2014	25,194/ 65,000	Evaluation of Water-Swelling and Oil-Swelling Elastomers
6	M Al-Kindi, (PI), SZ Qamar (Co-PI), T Pervez (co-I)	PDO	Completed 2012-2015	50,200/ 130,500	Probabilistic approach for UWD Budget incorporating Risk Analysis
7	SZ Qamar (PI), Pervez T (Co-PI), Abri OS	Industrial Innovation Center (IIC)	Completed 2012-2014	10,000/ 26,000	Experimental and Finite Element Analysis of GRE (Composite) Pipes
8	T Pervez (PI), SZ Qamar (Co-PI), SA Al-Hiddabi, OS Al-Abri, R Khan	The Research Council (TRC)	Started 2012-2020	237,150/ 616,590	Experimental and Numerical Study of Expandable Tubular Materials at Multi Levels of Materials and Mechanics (Multi-Scale Modeling)
9	T Pervez (PI), SZ Qamar (Co-PI)	PDO	Completed 2010-2016	94,616/ 246,000	Mono-diameter Expandable Solutions: Improving Understanding of Wall Thinning and Length Shortening of Expandable Tubular Under MoD Conditions for Deep Gas Exploration
10	SZ Qamar (PI), T Pervez (Co-PI)	PDO	Completed 2009-2016	88,462/ 230,000	Characterization and Longevity Testing of Swellable Elastomers

11	T Pervez (PI), SZ Qamar (Co-PI), SA Al-Hiddabi (I)	PDO	Started 2009	84,231/219,000	Low Cost Expandable Research for Well Drilling and Completion
12	T Pervez (PI), SZ Qamar (Co-PI), SA Al-Hiddabi (I)	PDO	Completed 2009	105,769/275,000	Material Characterization of Swelling Elastomer Seals for Zonal Isolation
13	T Pervez (PI), SZ Qamar (Co-PI), SA Al-Hiddabi (I)	PDO	Completed 2008	417,308/1,085,000	Mechanical Profile Control: Performance of Elastomer Seals in Cased and Open Holes
14	T Pervez (PI), SZ Qamar (Co-PI), SA Al-Hiddabi (I)	PDO	Completed 2005	461,539/1,200,000	Wellbore Tubular Expansion
15	AFM Arif (PI), AK Sheikh (Co-PI), SZ Qamar (I)	KACST [□]	Completed 2005	30,000/78,000	Die Life Improvement for Hot Extrusion of Aluminum Alloys
16	AFM Arif (PI), AK Sheikh (Co-PI), SZ Qamar (I)	PDO	Completed 2004	10,000/26,000	Strategies to Produce Quality Products in Aluminum Extrusion
17	AFM Arif (PI), AK Sheikh (Co-PI), SZ Qamar (I)	Fast Track, KFUPM*	Completed 2003	7,500/19,500	A Die Life Enhancement Strategy for Hot Extrusion of Aluminum Alloys
18	AFM Arif (PI), AK Sheikh (Co-PI), SZ Qamar (I)	Fast Track, KFUPM	Completed 2002	7,500/19,500	Prediction of Force Required in Metal Extrusion of Complex Shapes

[□] King AbdulAziz City of Science and Technology, Saudi Arabia

* King Fahd University of Petroleum and Minerals, Dhahran, Saudi Arabia

Consultancies (Externally Funded Projects)

No.	Investigators	Funding Agency	Status	Amount (OMR/USD)	Topic
1	SZ Qamar (PI), T Pervez (CPI)	Maersk Oil, Qatar	Completed 2010	10,769/28,000	Material Characterization of Easywell Water-Swelling and OilSwelling Elastomers
2	SZ Qamar (PI), T Pervez (CPI)	Maersk Oil, Qatar	Completed 2010	10,577/27,500	Material Characterization of Water-Swelling and Oil-Swelling Elastomers
3	SZ Qamar (PI), T Pervez (CPI)	Baker-Hughes/PDO	Completed 2008	6,539/17,000	Material Characterization of Swelling Elastomer

Grants (Internally Funded Projects)

No.	Investigators	Funding Agency	Status	Amount (OMR/USD)	Topic
1	M Al-Maharbi (PI), A Ramanathan (Co-PI), SZ Qamar (Co-PI)	SQU	2015-2018	4,600/11,960	Solid-state recycling of Magnesium alloys through consolidation of Magnesium

					chips using Equal Channel Angular Extrusion
2	SZ Qamar (PI), T Pervez	SQU	2011-2013	3,950/ 10,270	Characterization and Analysis of Elastomer Seals in Petroleum Applications
3	SZ Qamar (PI), T Pervez (CPI), RA Siddiqui (I), Sheikh (I), AF Arif(I)	SQU	2006-2008	10,000/ 26,000	Modeling and Simulation of Extrusion Pressure and Die Life for Complex Aluminum Profiles

TEACHING AND LEARNING

INSTRUCTION AND PROJECT SUPERVISION

Courses Taught at SQU

Postgraduate Courses

Engineering Fracture Mechanics
Advanced Engineering Math
Advanced Engineering Materials
Directed Studies

Undergraduate Courses

Fundamentals of Sustainable Engineering (elective)
Introduction to Fracture Mechanics (elective)
Advanced Materials Technology (elective)
Creative Decisions and Design / Product Design
Manufacturing Processes
Solid Mechanics
Materials Science
Engineering Drawing and Computer Graphics
Applied Math for Engineers
Probability and Statistics for Engineers

Courses Taught at KFUPM and GIKI

CAD/CAM: Computer-Aided Design and Manufacturing
Design of Machine Elements
Solid Mechanics
Engineering Drawing and Computer Graphics
Engineering Economy
Manufacturing Processes I
Manufacturing Processes II
Machine Design II

Supervision of MSc and PhD Students at SQU

PhD

- Mobashar Kabir; Co-Supervisor; A New Modelling Approach for Functionally Graded Plates based on RVEs having a Layered Plate Like Structure; Started 2020

- Al Yaqadhan Al Lamki; Co-Supervisor; Improved Tensile Strength and Electrical Conductivity of Aluminum Alloys for Overhead Conductor and Line Distribution; Started 2020
- Omar Al-Abri; Co-Supervisor; Thesis: Experimental Investigation and Constitutive Modeling of Expandable Tubular Material at Multi Levels of Materials and Mechanics; Completed 2016
- Maaz Akhtar; Supervisor; Thesis: Performance Evaluation and Design Improvement of Swelling Elastomer Seals in Petroleum Applications; Completed 2014
- Rashid Khan; Co-Supervisor; Thesis: Microstructure, Transformation Mechanisms and MultiScale Modeling of Expandable Tubular Steel; Completed 2013

MSc

- Nassr Al Rasbi; Co-Supervisor; Thesis (tentative): Numerical Simulation of PVC Pipes in Thermal Wells; started Sep 2024
- Aadel Al Niyadi; Supervisor; Thesis: Analysis of Clad Failure in Aluminum Smelter; completed Dec 2022
- Waleed Al Qasmi; Supervisor; Thesis: Assessment of Burst and Collapse Strength of Pipelines; completed Aug 2022
- Ahmed Medhat; Co-Supervisor; Thesis: Finite Element Analysis of Composite Plates; started 2020
- Almandhar Al Naamani; Co-Supervisor; Thesis: Solid-State Recycling of Magnesium Alloys using Equal Channel Angular Pressing; completed 2021
- Jaber Al Maawali; Co-Supervisor; Thesis: Development of a Sustainable Novel Aluminum Alloy from Scrap Car Wheels through Stir-Squeeze Casting Process; Completed 2020
- Josiah Cherian Chekotu; Supervisor; Thesis: Analysis of Product and Tooling Defects in Extrusion; Completed 2018
- Mohammed SS Al-Ghafri; Co-Supervisor: Thesis: Assessment of Pipelines with Single and Multiple Corrosion Defects; Completed 2017
- Moosa Al-Kharusi; Supervisor; Thesis: Modeling, Simulation, and Testing of Water-Swelling and OilSwelling Elastomers; Completed 2012
- Omar Al-Abri; Co-Supervisor; Thesis: Dynamic Effects in Expansion of Solid Expandable Tubulars in Oilfields; Completed 2011
- Idrees Al-Siyabi; Co-Supervisor; Thesis: Parametric Investigation of Pop-Out Phenomenon in Solid Expandable Tubulars; Completed 2011
- Muhammad Al-Suqri; Co-Supervisor; Thesis: Design of Solid Expandable Tubular Test Rig; Completed 2007

Thesis Exams of MSc/PhD Students at SQU

- Served as Chairman exam committee, External examiner, or Examiner for around 30 MSc/PhD thesis exams conducted since 2007

Supervision/Co-Supervision of Final-Year Student Projects at SQU (Involved in Research Projects)

- Small-Scale Device for Carbon Capture; completed Spring-2024
- Tensile Performance Evaluation of PVC Pipes for Steam Injection Wells; completed Spring-2023
- Enhancement of Surface Characteristics of Extrusion Die Steel; completed Spring-2022
- Design, Fabrication, and Testing of Fusion Joints for High-Strength Plastic Pipes; Completed Spring-2021
- Design, Fabrication, and Testing of Fusion Joints for High-Strength Plastic Pipes; Completed Spring-2020
- Assessment of PVC/GRE Pipes under Tensile-Compressive Loading: Design/Fabrication of Test Setup, Testing, and Analysis; Completed Spring-2019
- Tensile-Compressive Evaluation of PVC Pipes: Design, Fabrication, Testing and Analysis; Completed Spring-2018

- Reduction of Streaking and Die Line Defects in Extrusion of Hollow Profiles; Completed Spring-2017
- Design Improvement of Extrusion Tooling and Process to Eliminate Blisters and Blow Holes; Completed Spring-2016
- Design of Solid-State Recycling Process for Magnesium Alloys using Equal Channel Angular Extrusion; Completed Fall-2015
- Design and Construction of Fatigue Test Facility for Petroleum Casings and Connections; Funded by TRC FURAP program; Completed Spring-2015
- Design of Thermal Fatigue Test Facility for Petroleum Casing Connections – Phase II; Completed Spring-2014
- Modeling and Simulation of Elastomer Seal Design in Drilling Operations – Phase II; Completed Spring-2012
- Design and Fabrication of Test Facility for Determination of Bulk Properties of Elastomers; Completed Spring-2012
- Investigation of Mechanical Properties of Solid Expandable Tubulars; Completed Spring-2012
- Effect of Shape Complexity on Design Parameters of Extrusion Dies; Completed Spring-2012
- Modeling and Simulation of Elastomer Seal Design in Drilling Operations; Completed Spring 2011
- Design and Fabrication of Test Facility for Longevity Testing of Elastomer Seals; Completed Spring 2010
- Heat Treatment and Mechanical Testing of AISI D6 Cold Work Tool Steel; Completed Spring 2010
- Material Testing and Characterization of SETs; Completed Spring 2010
- Design of SET Cone and Launcher Assembly – Phase II: Mechanisms and Controls; Completed Spring 2010
- Extrusion Die Design using Fracture Mechanics; Completed Spring 2009
- Testing of Solid Expandable Tubulars (SET) and Elastomers; Completed Spring 2009
- Design of Cone and Launcher System for SET in Well Drilling; Completed Spring 2009
- Designing an Effective Elastomer Seal for Solid Expandable Tubular (SET) using FEM – Phase II; Completed Spring 2009
- Microstructure of H11 Steel after Heat Treatment and Mechanical Testing; Completed Spring 2009
- Material Characterization of Fast-Swelling Elastomers II; Completed Fall 2008
- Material Characterization of Fast-Swelling Elastomers; Completed Spring 2008
- Heat Treatment and Mechanical Testing of H11 Steel; Completed Spring 2008
- Designing an Effective Elastomer Seal for SET using FEM – Phase I; Completed Spring 2008
- Extrusion Die Design Improvement and Die Life Prediction; Completed Spring 2007
- Designing and Conducting Experiments for Material Characterization of Swelling Elastomers; Completed Fall 2006
- Design and Fabrication of Extrusion Test Rig; Completed Spring 2006
- Material Characterization of Swelling and Inert Elastomers; Completed Fall 2005

Supervision/Co-Supervision of Final-Year Student Projects at SQU (Not Research Based)

- Design of an Advanced Material System (Nanocomposite / Foam) and its Die for Automotive Applications; co-supervisor; completed Fall-2018
- Design and Fabrication of Human-Powered Submarine – Phase II: Structure; Completed Spring 2010
- Design and Fabrication of Human-Powered Submarine – Phase II: Components; Completed Spring 2010
- Hydrogen Embrittlement of Steel; Completed Spring 2010
- Design and Fabrication of Human-Powered Submarine; Completed Fall 2010
- Hydrogen Embrittlement in Quenched Low Carbon Steel; Completed Spring 2009

- Effect of Heat Treatment and Specimen Thickness on Fatigue Fracture Properties of Aluminum Alloy 6063; Completed Spring 2008
- 3rd Generation Solar Car; Completed Spring 2006
- 2nd Generation Solar Car; Completed Spring 2005

Supervision of Student Seminars and Reports at SQU

1. “Corrosion in Oli & Gas Industries,” MIE Dept, SQU, Spring-2020
2. “Non-Traditional Manufacturing Techniques,” MIE Dept, SQU, Fall-2017
3. “Modern Manufacturing Techniques,” MIE Dept, SQU, Fall-2016
4. “Shape Complexity in Metal Extrusion,” MIE Dept, SQU, Spring-2016

Supervision of Final-Year Student Projects at other Universities

- Reverse Engineering of Diesel Fuel Injector; 2 students
- Design of Plastic Injection Molded Parts using ProEngineer; 2 students
- Design Representation of Automotive Differential/Gear Box using Features and Mating Conditions; 2 students
- Development of Optimization Software for Mechanical Engineering Design; 2 students

CURRICULUM DEVELOPMENT AND TEACHING MANAGEMENT AT SQU

1. Development and delivery of various courses for remote/online teaching, including video lectures and online quizzes and exams
2. Extensive participation in curriculum development of the Mechanical Engineering program (as part of ABET accreditation process)
3. Extensive participation in writing and editing of Self Study Report (SSR) of the Mechanical Engineering program (as part of ABET accreditation process)
4. Active participation in annual review of all courses in two focus groups: Applied Mechanics and Design, and Materials & Manufacturing through Course Assessment and Improvement Report (CAIR)
5. Active participation in curriculum development, course equivalencies, etc for the Agricultural Engineering program
6. Developed course material and description for new courses
 - a. MEIE-5161: Advanced Materials Technology
 - b. MEIE-6116: Engineering Fracture Mechanics
 - c. MEIE-5165: Introduction to Fracture Mechanics
7. Edited/updated course material and description for
 - a. MEIE-6003/ENGR-6913: Advanced Math for Engineers
 - b. MEIE-3108: Product / Creative Design
 - c. MEIE-3104: Engineering Drawing and Computer Graphics
 - d. MEIE-4182: Applied Mathematics for Engineers
 - e. MEIE-4281: Probability and Statistics for Engineers
 - f. MEIE-3161: Materials Science
 - g. MEIE-3102: Solid Mechanics
 - h. MEIE-4262: Manufacturing Processes
8. Extensive use of e-mail for curriculum management in all courses taught
9. Use of WebCT (moodle) for curriculum management in various courses

Laboratory Development at SQU

1. Participated in designing experiments and preparing/updating laboratory manuals for
 - a. Computer Integrated Manufacturing (CIM) Lab
 - b. Solid Mechanics Lab
 - c. Metrology Lab
 - d. Properties of Materials Lab
2. Developed new experiments and procured/commissioned new machines / equipment and software for
 - a. Computer Integrated Manufacturing (CIM) Lab
 - b. Properties of Materials Lab
 - c. Solid Mechanics Lab

STUDENT ADVISING AT SQU

1. Student advisor for different cohorts, MIE Dept (40-45 students in each batch); 2005 to date
2. Active interaction with all final-year ME students as Coordinator of Final Year Projects
3. Advising of students for Mechanical Engineering Society and SQU Engineering Society about projects, lectures, events, etc

TEACHING ACTIVITIES OUTSIDE THE CLASSROOM

1. Supervision of student seminars and reports, MIE Dept, SQU: Spring-2021; Spring-2020, Fall-2017, Fall-2016, Spring-2016
2. Active coordination with IIC, PDO, Shell, NAPCO, and CPI for facilitation of ME Final Year projects; SQU
3. Coordinating and conducting student visits to local industries (such as United Eng Services, Ray Precision Eng, National Aluminum Products Co, Muscat Steel, etc) for courses and projects; SQU
4. Involving students as Research Assistants in funded research projects; SQU
5. Delivering (and helping in the organization) of seminars for students; SQU
6. Coordinating and conducting student visits to local industries; KFUPM

UNIVERSITY AND COMMUNITY SERVICE

UNIVERSITY ADMINISTRATION AND COMMITTEES; SQU

University

1. SQU Covid Committee; 2022-2023
2. CoEng representative, Academic Quality Assurance Committee, 2012 - 2018
3. CoEng representative, Agriculture Engineering Program Steering Committee; 2007 to 2024

College of Engineering

3. Chair, College Risk Management (HSE) Committee, 2018 to date
4. Member, College Academic Promotions Committee; 2021 onwards
5. Member, College Risk Management (HSE) Committee, 2017-2018
6. Member, College Board (MIE representative); 2016-2017
7. Coordinator, College Accreditation Committee (ABET), 2012-2015

8. Member, College Strategic Planning Committee; MIE representative; 2009-2011
9. Member, College Computer Committee; MIE representative; 2005-2008

MIE Dept

1. Chair, Dept Accreditation Committee (DAC) for both ME and IE programs, 2017 to date
2. Chair, Dept ABET Committee (ME Program), 2021
3. Chair, Materials and Manufacturing Focus Group; 2020 to date
4. Chair, Dept Health, Safety, and Environment (HSE) Committee, 2017 to date
5. Chair, ABET SSR Committee, ME Program; 2010-2013
6. Coordinator, External Liaison Committee, 2011 to date
7. Coordinator, Department Strategic Planning Committee; 2009 to 2019
8. Coordinator, ME FYP-I (Final Year Project I); 2006-2009
9. Coordinator, ME FYP-II (Final Year Project II); 2006-2009
10. Chair, Dept Computer Committee; 2005-2008
11. Chair, Materials and Manufacturing Focus Group; 2007-2010
12. Member, Industrial Advisory Board; 2006 to date
13. Member, Department Curriculum and Accreditation Committee (DCAC); ABET; 2009 to date
14. Member, Department Conference Committee; 2009 to date
15. Member, Dept Academic Promotions Committee; 2014 to 2021
16. Member, Department Recruitment Committee; 2011 to date
17. Member, Continuous Assessment and Evaluation Committee – ME Program (CAECME), 2014 to date
18. Member, Materials and Manufacturing Focus Group; 2005 to date
19. Member, Design and Applied Mechanics Focus Group; 2005 to date
20. Member, Dept Board; 2005 to date
21. Secretary, Department Curriculum and Accreditation (DCAC) program; ABET; 2005-2006
22. Secretary, Dept Board; 2005-2006
23. Member, SSR Committee, MIE ABET program; 2005-2007
24. Member, ME Program Assessment and Evaluation Committee; 2005-2007
25. Advisor 2, Society of Mechanical Engineers; 2008 to date

PROFESSIONAL SERVICE

1. Academic Advising/Consultancy
 - a. Advisor, Board of Studies, Mechanical Eng Dept, Chandigarh University, India
 - b. Member, Board of Directors, Pakistan School System, Oman, Jan 2024 to date
 - c. Chair, Academic Committee, Pakistan School System, Oman, Aug 2022 to date
2. Editorial Experience
 - a. Member, Editorial Board, *Journal of Materials and Manufacturing Processes*, Q1, Jan-2016 to 2020
 - b. Associate Editor, *Arabian Journal of Science and Engineering (AJSE)*, Q1, Elsevier, 2023 to date
 - c. Member, Editorial Board, Comprehensive Materials Processing (13-volume series), 2nd edition, Reference Module in Materials Science and Materials Engineering, Elsevier

- d. Member, Editorial Board, Encyclopedia of Renewable and Sustainable Materials, Elsevier
 - e. Member, Editorial Board, *Journal of Elastomers and Plastics*, Q3, 2015-to date
 - f. Associate Editor, *The Journal of Engineering Research*, SQU, 2012-2022
 - g. Member, Editorial Board, *American Journal of Mechanical and Industrial Engineering*, Jan-2016 to date
3. Guest Editor, journal special issues
- a. “Applied Mechanics and Industrial Systems,” special issue of *Materials and Manufacturing Processes*, 2016-17
 - a. “Applied Mechanics, Materials, and Manufacturing,” special issue of *Materials and Manufacturing Processes*, **27** (7), 2012
 - b. “Expandable Tubulars, Elastomers and Associated Technologies,” special issue of *The Journal of Engineering Research*, SQU, 2012
 - c. ICAMMM-2012, special issue of *The Journal of Engineering Research*, SQU, **8** (2), June 2011
4. Review of manuscripts for international refereed journals Add journals
- i ASME Journal of Pressure Vessel Technology
 - ii Materials and Design
 - iii Materials Science and Engineering – A
 - iv Journal of Materials Processing Technology
 - v Materials and Manufacturing Processes
 - vi Fatigue and Fracture of Engineering Materials and Structures
 - vii Journal of Elastomers and Plastics
 - viii Arabian Journal for Science and Engineering
 - ix The Journal of Engineering Research
 - x Transactions of the Canadian Society for Mechanical Engineering
 - xi Frontiers in Built Environment
 - xii Heliyon
 - xiii International Journal of Advanced Manufacturing Technology
 - xiv Materials, MDPI
 - xv Procedia CIRP, International Center for Production Research
 - xvi Energies, MDPI
 - xvii Int Journal of Pressure Vessels and Piping
 - xviii Journal of Eng Research, Kuwait
 - xix Metals, MDPI
 - xx Petroleum Science
 - xxi Polymer Testing
 - xxii Transactions of the Canadian Society of Mech Eng
5. Review of manuscripts for international refereed conferences
- a. 2nd GCC Industrial Engineering and Operations Management Conference (IEOM-2024-Oman), Muscat, Oman, 1-3 December 2024
 - b. 4th Indian Int Conf on Industrial Engineering and Operations Management (IEOM-2024-India), Hyderabad, India, 7-9 Nov 2024
 - c. 28th Arab Engineering Education Conference, 11-13 December 2018, Muscat
 - d. IMECE-2016, ASME International Mechanical Engineering Congress, November 2016, Arizona, USA

- e. ICAMIS-Oman-2016, International Conference on Applied Mechanics and Industrial Systems, December 2016, Muscat, Oman
- f. IMECE-2012, ASME International Mechanical Engineering Congress, November 2012, Houston, Texas, USA
- g. ICAMMM-2012, International Conference on Applied Mechanics, Materials and Manufacturing, December 2010, Muscat, Oman
- 6. Review of research proposals for
 - a. Office of the Asst Dean for Postgraduate Studies and Research, College of Eng, SQU
 - b. Mechanical Eng Dept, KFUPM, Dhahran, Saudi Arabia
 - c. The Research Council of Oman (TRC)
 - d. Deanship of Postgraduate Studies & Research, SQU
- 7. Member of Organizing Committee, Technical/Scientific Committee, Session Organizer, Session Chair, etc for international conferences
 - a. Session chair, Global Engineering Education VII, *16th IEOM Global Engineering Education: First GCC International Conference on Industrial Engineering and Operations Management* (IEOM-2019), 26-28 Nov 2019, Riyadh, Saudi Arabia
 - b. Session chair, Oil and Gas Production Operations, *2nd International Oil and Gas Conference*, 3-5 Dec 2018, Dubai, UAE
 - c. Member, Organizing Committee; International Conference on Applied Mechanics and Industrial Systems (ICAMIS-Oman-2016), December 2016, Muscat, Oman
 - d. Member, Technical Advisory Committee, 6th International Mechanical Engineering Congress (IMEC-2016), 15-16 July 2016, Karachi, Pakistan
 - e. Member, Technical Program Committee, 2016 Spring International Conference on Material Sciences and Technology (MST-S), 17-19 April, 2016, Suzhou, China
 - f. Session/Topic Co-Organizer, Mechanics of Soft Materials, IMECE-2015, ASME International Mechanical Engineering Congress, November 2015, Houston, Texas, USA
 - g. Member, Technical Program Committee, International Conference on Polymer Physics and Chemistry (ICPPC 2015), 18-20 December, 2015, Guilin, China
 - h. Member, Technical Committee, 4th International Conference on Key Engineering Materials (ICKEM 2014), 22-23 March, 2014, Bali, Indonesia
 - i. Member, Technical Committee, 5th International Conference on Key Engineering Materials (ICKEM 2014), 21-23 March, 2015, Singapore
 - j. Session Co-Organizer, Session 3-19-1: Sustainable Manufacturing Engineering Design-Structure Analysis and Practices, IMECE-2012, ASME International Mechanical Engineering Congress, November 2012, Houston, Texas, USA
 - k. Topic Co-Organizer, Topic 3-3: Design Innovations Methodologies and Practices, IMECE-2012, ASME International Mechanical Engineering Congress, November 2012, Houston, Texas, USA
 - l. Member, Organizing Committee; International Conference on Applied Mechanics, Materials and Manufacturing (ICAMM), December 2010, Muscat, Oman
 - m. Chair, Scientific Committee, Materials and Manufacturing Sessions; International Conference on Applied Mechanics, Materials and Manufacturing (ICAMM), SQU, December 2010

8. Coordination of professional/management workshops
 - a. Two-week training workshop on “Procurement of Goods, Works, and Consultants’ Services under World Bank Financed Projects,” sponsored by World Bank and GIK Institute, 1995
 - b. Two-week training workshop on “Procurement of Works and Consultants’ Services under World Bank Financed Projects,” sponsored by World Bank and GIK Institute, 1994
9. Member, Design Jury, Annual design competition for final-year projects sponsored by Industrial Advisory Board, MIE Dept, SQU, 2010 to date

SERVICE TO THE PUBLIC

Seminars/Workshops Conducted

1. “A Renewability and Sustainability Primer for Engineers,” Technical Tea Talk (TT Talk) seminar series, Mech and Indust Eng Dept, College of Eng, SQU, 24 Oct 2024
2. Waleed Al-Qasmi and Sayyad Zahid Qamar “Workshop on Defects Assessment of Corroded Pipes,” Oman Materials, Corrosion, and Integrity Summit, 9-11 Sept 2024, Muscat
3. “What Makes a Good Teacher — An Engineer’s Viewpoint,” seminar at Faculty of Mechanical Eng, NED University of Eng and Tech, Karachi, Pakistan, 13 Jun 2024
4. “What Makes a Good Teacher — An Engineer’s Viewpoint,” seminar at Faculty of Mechanical Eng, NED University of Eng and Tech, Karachi, Pakistan, 13 Jun 2024
5. “How to Teach Critical Thinking with Examples from Materials and Manufacturing Courses,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 06 July 2023
6. “Expandable Steels in Petroleum Drilling and Development: Testing and Analysis,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 04 July 2023
7. “Best Practices in Higher Education: An Engineer’s Perspective,” seminar (hybrid mode) at International Center for Chemical and Biological Sciences (ICCBS), University of Karachi, in collaboration with Committee on Scientific and Technological Cooperation (COMSTECH) of the Organization of Islamic Cooperation (OIC), and Sindh Innovation Research, and Education Network (SIREN), ICCBS, Karachi, Pakistan, 27 Jan 2023
8. “Metal Extrusion: Process, Product, and Tooling,” Faculty of Mechanical Engineering, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI), Topi, Pakistan, 25 Jan 2023
9. “New Pedagogical Trends in Engineering Education,” Faculty of Materials and Chemical Engineering, Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI), Topi, Pakistan, 24 Jan 2023
10. “Challenges, Opportunities, and Future Trends in Engineering Education,” seminar (hybrid mode) at Committee on Scientific and Technological Cooperation (COMSTECH) of the Organization of Islamic Cooperation (OIC), COMSTECH Secretariat, Islamabad, Pakistan, 23 Jan 2023
11. “Overview of Engineering Accreditation Process — Excerpts from Personal Experience, especially for Materials and Manufacturing Courses,” workshop/seminar (online) for India-UK SPARC Webinar on Metal Additive Manufacturing and Friction Stir Processing: Present and Future, organized jointly by

Department of Mechanical Engineering, Indian Institute of Technology Patna, Patna (India), Department of Mechanical and Aerospace Engineering, IIT Hyderabad (India), and School of Materials, University of Manchester, United Kingdom; 6-7 Sept 2022

12. “Designing Course Outcomes Using Bloom's Taxonomy,” workshop conducted for faculty and staff, Pakistan School Seeb, Aug-2019
13. “Performance Analysis of Swelling Elastomers in Petroleum Applications,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 08 July 2022
14. “Modeling and Analysis of Extrusion Process, Product and Tooling: Estimation and Prediction of Die Life,” workshop/seminar (online) for International Faculty Development Program, Chandigarh University, India, 06 July 2022
15. “Elastomer Research at MIE Dept: Development of Experimental Facilities,” student seminar organized by the Mechanical Engineering Society, SQU, Oct 2021
16. “Steam Injection Wells: Performance Assessment of PVC Pipes under Tensile Loading,” seminar (online) for Advanced Metallic Systems Centre for Doctoral Training, Dublin City University, Dublin, Ireland, May 2021
17. “Modern Engineering Materials,” seminar for faculty and final-year students of Middle East College (online), Muscat, Nov-2020
18. “Tensile Performance Evaluation of PVC Pipes for Steam Injection Wells, seminar (online) organized by the Engineering Society, SQU, Oct-2020
19. “Some Latest Developments in Materials Science and Engineering: Swelling Elastomers and Expandable Steels,” student seminar organized by the Mechanical Engineering Society, SQU, Feb 2020
20. “Outcome Based Education Using Bloom's Taxonomy,” workshop conducted for faculty and staff, Pakistan School Muscat, Nov-2019
21. “Qualities of a Good Teacher,” seminar for faculty and staff, Pakistan School Musanah/Muladdah, Nov-2019
22. “Risk Management Committee at SQU College of Engineering,” seminar for team from Military Technical College Muscat, MIED, SQU, Sep-2019
23. “Experimental, Numerical, and Analytical Investigation of Swell Packers: Elastomer Research at Sultan Qaboos University,” College of Petroleum and Geosciences, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia, Aug 2019
24. “Best Practices in Higher Education — An Engineer’s Perspective,” Mechanical Engineering Department, King Fahd University of Petroleum and Minerals (KFUPM), Dhahran, Saudi Arabia, Aug 2019
25. “Hybrid Machining: Optimum Combination of Advanced Machining Processes,” seminar organized by the Independent Learning Center, SQU, Sept 2018
26. “How to be a Good Teacher?” seminar for faculty and staff, Pakistan School Muscat, Darsait, Sep-2018
27. “ABET Accreditation: Why, What, How,” Student seminar, MIE Dept, SQU, Sept 2016
28. “University Teaching and Learning: Personal Experience and Perspective,” Faculty seminar, MIE Dept, SQU, Mar-2016
29. “Metalforming of Aluminum Products: Overview, Industrial Projects, Student Projects,” Student seminar, MIE Dept, SQU, Feb 2016

30. "ABET Self Study Report," presentation regarding ABET accreditation for College of Agricultural and Marine Science (CAMS), April 2014, SQU
31. "Program Accreditation and ABET; An Introduction for Students and New Faculty Members," College of Eng, October 2013, SQU
32. "ABET Self Study Report (SSR); Introduction and Current Status," December 2011, Mech Eng Dept, SQU
33. "Creative Design for Engineers and Non-Engineers," presentation for Society of Mechanical Engineers (SME), June 2009, SQU
34. "SET Test Rig and Elastomer Research at SQU," December 2008, NED University, Karachi
35. "Testing and Characterization of Swelling and Inert Elastomers," presentation for Ministry of Oil and Gas, June 2008, PDO
36. "Material Characterization of Swelling Elastomers," May 2008, PDO
37. "Current Status of Elastomer Testing at SQU," April 2007, PDO
38. "Elastomer Research at SQU," presentation for Shell visitors, January 2007, SQU
39. "Extrusion of Complex Aluminum Profiles — An Overview," Student seminar series, May 2006, SQU
40. "Morphology, Analysis and Prediction of Tooling Failures in Extrusion of Complex Aluminum Profiles," October 2004, College of Engineering, SQU
41. "Modeling and Analysis of Extrusion Pressure and Die Life for Complex Aluminum Profiles," March 2004, Mechanical Engineering Department, KFUPM
42. "Process Parameters, Dies and Tooling, and Product Defects in Extrusion of Complex Aluminum Profiles," December 2003, Mechanical Engineering Department, KFUPM
43. "Product Representation for Intelligent CAD/CAM," March 2000, Mechanical Engineering Department, KFUPM
44. "Looking at the Softer Side of Science," (in Urdu) January 1999, GIK Institute
45. "Mechanical Design with Features and Mating Conditions," February 1997, GIK Institute
46. "Automated Drawing Management System," March 1996, General Engineering Division, Karachi Shipyard and Engineering Works Ltd.
47. "Karachi Shipyard and Engineering Works Ltd: Past, Present and Future," December 1995, *Annual Board Meeting*, Karachi Shipyard and Engineering Works Ltd.
48. "Mathematics for CAD/CAM," May 1995, Mathematics Department, University of Karachi, Karachi
49. "A Literary Excursion into Science," (in Urdu) March 1994, Literary Science Society, Pakistan Association of Scientists and Scientific Professions, Karachi
50. "Representing Mechanical Assemblies with Features and Mating Conditions," March 1993, Institute for Design and Innovation in Engineering, Texas A&M University
51. "An Introduction to the Feature-Based Design Approach," September 1991, Institute for Innovation and Design in Engineering, Texas A&M University
52. "A General Purpose Design Optimization Computer Program," January 1985, NED Engineering University
53. "An Introduction to Design Optimization Techniques in Mechanical Engineering," March 1984, NED Engineering University

Other Activities

1. Chair, Academic Committee, Pakistan Schools System, Oman; Aug-2022 to date
2. Conducted/presented sessions in workshops and short courses
 - a. “3D Modeling and Analysis using ANSYS,” during 5-day Short Course on *Applications of Finite Element Analysis in Mechanical Engineering*, April 2003, KFUPM
 - b. “2D Modeling and Analysis using ANSYS,” during 5-day Short Course on *Mechanical Design and Stress Analysis*, April 2002, KFUPM
 - c. “Solid Modeling and CAD-Based Design Representation,” during 5-day Interactive Workshop on *Product Development Solutions for Designing through Manufacturing*, December 2000, GIK Institute
3. Advisor, Literary Forum, GIK Institute, 1998-99
4. President, Pakistan Club, Texas A&M University, 1991-93
5. President, Debating Society, PECHS Education Foundation Science College, Karachi, 1976-78
6. President, Literary Forum, Little Folks’ School, Karachi, 1974-76

OTHER INFORMATION

Membership of Professional Societies

1. American Society of Mechanical Engineers (ASME)
2. Canadian Society of Mechanical Engineers (CSME)
3. The Materials Society (TMS)
4. American Society of Metals (ASM)
5. Society of Petroleum Engineers (SPE)
6. American Society of Engineering Education (ASEE)
7. IEEE Education Society
8. World Academy of Materials and Manufacturing Engineering (AMME)
9. Oman Accreditation Council
10. Oman Society of Engineers
11. Pakistan Engineering Council (PEC)
12. Pakistan Association of Scientists and Scientific Professions (PASSP)

Popular Science Publications

1. “Testing and Applications of Swelling Elastomers,” *Horizon*, SQU, 2009
2. “Solid Expandable Tubular (SET) Technology and Test Rig,” *Horizon*, SQU, 2009
3. “Unification of Forces in Physics,” (in Urdu) *The Young Engineer*, December 1983, NED University of Engineering and Technology, Karachi
4. “From Aristotle to Einstein: A Critical Look at the Evolution of Mathematical Sciences,” (in Urdu) *Science for the Young*, August 1979, Scientific Society Pakistan
5. “Landmark Muslim Contributions in Mathematics and Science,” (in Urdu) *Science for the Young*, December 1978, Scientific Society Pakistan
6. “Hope for the Future: Treasures under the Seas,” (in Urdu) *Science for the Young*, June 1977, Scientific Society Pakistan
7. “From Interstellar Clouds to Black Holes: Birth and Death of a Star,” (in Urdu) *Science for the Young*, January 1976, Scientific Society Pakistan

Professional/Educational/Management Workshops Attended

1. One-week workshop (face-to-face/online) on “Learning from Within: Peer Review's Role in Teacher Development,” March 2024; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Dr Nazanin Dehdary and Mr Ndreu Allmark
2. One-day workshop on “SQU Teaching Philosophy & Teaching Strategies: Awareness Raising Sessions about the Strategies used for Implementing SQU Teaching Philosophy and Teaching and Learning Methodologies,” 09 Nov 2023, organized by Center of Excellence in Teaching and Learning (CETL), SQU
3. Three-month course (face-to-face/online) on “Teaching Critical Thinking,” Oct-Dec 2019; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Mr David Paquin
4. One-day workshop on “Developing Your Teaching Philosophy Statement,” 03 Nov 2019; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Dr Frances Kalu, Teaching and Learning Specialist, Center for Teaching and Learning, University of Calgary, Qatar
5. One-day workshop on “Teaching Critical Thinking,” 24 Oct 2019; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Mr David Paquin
6. Two-day workshop on “Project Risk Management Masterclass,” 19-20 Dec 2018, organized by Center for Staff Development and Risk Management Office, SQU; conducted by Dr David Hillson, the Risk Doctor Partnership
7. One-day workshop on “Engaging Students in Active Significant Learning Experiences,” 10 Sep 2018; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Dr Stewart Ross, Dee Fink & Associates
8. One-day workshop on “Creating Significant Learning through Integrated Course Design,” 9 Sep 2018; organized by Center of Excellence in Teaching and Learning (CETL), SQU; conducted by Dr Stewart Ross, Dee Fink & Associates
9. Three-day workshop on “Introduction to CDIO Initiative,” 17-19 May 2016, SQU; conducted by Dr Juha Kontio, Turku University of Applied Sciences, Finland
10. Three-day workshop on “Innovation and Entrepreneurship,” 14-16 December 2015, SQU; conducted by Dr Emad Summad, Innovation and Entrepreneurship Consultant, Quartet Solutions LLC
11. Springer Author Workshop, 29-October 2015, SQU; conducted by Dr Nabil Khélifi, Publishing Editor, Springer Middle East & North Africa, and Dr Jeffrey Robens, Editorial Development Manager
12. Workshop on “Developing Assessment Tools and Rubrics,” 12 Nov 2015; organized by Center of Excellence in Teaching and Learning, SQU
13. Three-day workshop “Preparing Engineers for a Globalized Economy: How to Teach Engineering Students Process Skills,” 26-28 May 2015, SQU; conducted by Dr Nikos J Mourtous, Professor and Director of Aerospace Engineering, San José State University
14. Three-day ABET Annual Symposium and Program Assessment Workshops, 11-13 April 2013, Portland, Oregon, USA
15. One-day ABET Workshop “Creating a Culture of Assessment: Facilitating Change at Your Institution,” 11 April 2013, Portland, Oregon, USA; conducted by Dr James Warnock, Adjunct Director, Educational Research and Assessment, ABET and Assoc Prof, Dept of Agricultural and Biological Engineering, Mississippi State University; Dr Janice Bordeaux, Program Assessment Workshop Facilitator, ABET, and Assoc Dean, George R. Brown School of Engineering, Rice University, USA

16. One-day ABET Workshop “Using Project Management to Create Your Self-Study and Prepare for the Visit,” 11 April 2013, Portland, Oregon, USA; conducted by Dr James Conrad, Assoc Prof, Electrical and Computer Engineering, University of North Carolina at Charlotte, USA
17. Two-day ABET (Accreditation Board for Engineering and Technology) Workshop on “Program Assessment,” SQU, 14-15 February 2012; conducted by Dr Ashley Kranov, ABET's Managing Director of Professional Services
18. Three-day Training on “Residual Stress Measurement and Analysis,” SINT Technology, Florence, Italy, May 2011
19. Four-week training workshop on “Equipment Procurement Management,” International Training Center of the ILO, Turin, Italy; funded by the World Bank, 1996
20. Two-week training workshop on “Procurement of Goods, Works, and Consultants’ Services under World Bank Financed Projects,” GIK Institute; funded by the World Bank, 1995
21. Five-day workshop funded by the World Bank on “Procurement of Goods and Works under World Bank Financing Conditions,” World Bank Head Office, Islamabad, Pakistan; funded by the World Bank, 1994
22. Three-day training workshop on “Physical Quantification of Environmental Impacts,” GIK Institute; funded by the Asian Development Bank, 1995
23. One-day training workshop on “Economic Evaluation of Environmental Impacts,” GIK Institute; funded by the Asian Development Bank, 1994