

CURRICULUM VITAE

1. PERSONAL INFORMATION

TASNEEM PERVEZ

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College of Engineering
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2. EDUCATION AND EMPLOYMENT INFORMATION

Mar 1988 - Aug 1992: Ph.D. in Mechanical Engineering, University of Minnesota, USA.

Mar 1986 - Feb 1988: M.Sc. in Mechanical Engineering with minor in Computer Science,
University of Minnesota, USA.

Aug 1980 - Sep 1984: B.E. in Mechanical Engineering, NED University of Engineering
& Technology, Karachi, Pakistan.

Employment History (Full-time):

June 2012 - Present	Professor, Department of Mechanical & Industrial Engineering College of Engineering, Sultan Qaboos University
Sep 2010 – Aug 2016	Assistant Dean for Postgraduate Studies and Research College of Engineering, Sultan Qaboos University
Sep 2004 - Aug 2008	Head, Department of Mechanical & Industrial Engineering College of Engineering, Sultan Qaboos University
Aug. 2000 - Present	Associate Professor, Department of Mechanical & Industrial Engineering College of Engineering, Sultan Qaboos University
Jun 1999 - Aug 2000	Deputy Dean (Academic Affairs), Faculty of Engineering, International Islamic University Malaysia.
May 1999 - Aug 2000	Associate Professor, Department of Mechanical Engineering Faculty of Engineering, International Islamic University Malaysia.

Jul 1995 - Jul 1998 Head, Department of Manufacturing Engineering,
Faculty of Engineering, International Islamic University Malaysia.

Jul 1994 - May 1999 Assistant Professor, Department of Mechanical Engineering,
Faculty of Engineering, International Islamic University Malaysia.

Sep 1991 - Jun 1994 Senior Engineer,
Pakistan Space and Upper Atmosphere Research Commission, Pakistan.

Nov 1985 - Mar 1986 Assistant Engineer,
Pakistan Space and Upper Atmosphere Research Commission, Pakistan.

Dec 1984 - Oct 1985 Design Engineer,
Electro International Private Limited, Karachi, Pakistan.

Employment History (Part-time):

Mar 1992 - Jun 1994 Design and Analysis Consultant,
CEMA Incorporation, Karachi, Pakistan.

Feb 1993 - Jun 1994 Part-time Instructor,
Pakistan Institute of Nuclear Sciences and Technology, Pakistan.

Jan 1987 - Jun 1988 Graduate Teaching Assistant (10 hours per week),
Mechanical Engineering Department, University of Minnesota, USA.

Aug 1988 - Jun 1991 Graduate Research Assistant (20 hours per week),
Mechanical Engineering Department, University of Minnesota, USA.

Visiting Positions:

Jun 2008 - Aug 2008 Visiting Faculty,
Institute of Light Weight Structures, University of Aachen, Germany

Jun 2000 – Aug 2000 Visiting Faculty
NED University of Engineering & Technology, Karachi, Pakistan

Dec 1996 Visiting Fellow,
Institut Aeronautique et Spatial, Toulouse, France.

3. AWARDS AND RECOGNITION

Awards:

- 1) The National Research Award for Energy & Industry Sector - The Research Council of Oman, Muscat, Oman, October 2014.
- 2) Best Researcher Award, College of Engineering, Sultan Qaboos University, 2008.
- 3) Outstanding Faculty Achievement Award, Faculty of Engineering, International Islamic University Malaysia, 2000.
- 4) University of Minnesota Graduate Fellowship, 1990-1991.

- 5) Merit Scholarship for Postgraduate Studies, Ministry of Science and Technology, Government of Pakistan, 1985.
- 6) Gold Medal Award, First Merit Position in the University, NED University of Engineering & Technology, 1984.

Awards for Supervised Student's Thesis/Senior Design Projects:

- 1) 2nd place Design Competition supported by MIE Department Industrial Advisory Board, 2017. The award was given to the student team for the Senior Design Project. Title of the project was "Design and Fabrication of Coordinate Measuring Machine 2D Profile Measurement".
- 2) 3rd place in Society of Petroleum Engineers (SPE - Middle East) Undergraduate Category Award, 2015. The award was given to the student team for the Senior Design Project. Title of the Project was "Design of Front-End Software Tool for Use of Expandable Tubular in Field Applications".
- 3) 3rd place in Design Competition supported by MIE Department Industrial Advisory Board, 2014. The award was given to the student team for the Senior Design Project. Title of the Project was "Design and Fabrication of Experimental Setup for Testing of Swelling Elastomers at High Temperatures for Applications in Omani Oilfields".
- 4) Golden Medal - International Trade Fair: Ideas, Inventions, New Products (iENA 2012), Nuremberg, Germany, 01-04 November 2012, The award was given to the student Omar S. Al-Abri.
- 5) 1st prize in Innovation Fair Oman (INFOM 2012), organized by Industrial Innovation Center (IIC) Muscat, Oman, 29th September 2012, The award was given to the student Omar S. Al-Abri.
- 6) 1st place (International), 1st place (Regional) and 1st place (Local) Society of Petroleum Engineers Postgraduate Category Award, 2012 for research conducted on "Analytical, Numerical and Experimental Solution of Stick-Slip Phenomenon in Tube Expansion".
- 7) 1st place (International), 1st place (Regional) and 1st place (Local) Society of Petroleum Engineers Postgraduate Category Award, 2011. The award was given to the student Omar S. Al-Abri for research conducted on "Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular" under my supervision.
- 8) 2nd place (International), 1st place (Regional) and 1st place (Local) Society of Petroleum Engineers Undergraduate Category Award, 2010. The award was given to the student team for the Senior Design Project, which I supervised. Title of the Project was "Design of Cone and Launcher System for SET Applications in Well Drilling".
- 9) 2nd place in Design Competition supported by MIE Department Industrial Advisory Board, 2009. The award was given to the student team for the Senior Design Project. Title of the Project was "Design of Cone-Launcher System for SET Application in Well Drilling".
- 10) Selected finalists in Postgraduate Category to present papers in ASME Pressure Vessels and Piping (PVP) Conference, USA. This was based on the research work done under my supervision on "Analytical Solution for Pop-out Phenomenon in Solid Tubular Expansion" done by the student Ali Karrech (2004 & 2005).
- 11) 1st place at the Design Project Competition in First GCC Engineering Students Gathering, 2004. The award was given to the student team for the Senior Design Project, which I supervised. Title of the Project was "2nd Generation SQU Solar Car".
- 12) 2nd place in Design Competition supported by MIE Department Industrial Advisory Board, 2009. The award was given to the student team for the Senior Design Project, which I supervised. Title of the Project was "Design of Cone and Launcher System for SET Applications in Well Drilling".

- 13) 3rd place in Design Competition supported by MIE Department Industrial Advisory Board, 2008. The award was given to the student team for the Senior Design Project, which I supervised. Title of the Project was “Designing an Effective Elastomer Seal for SET using Finite Element Method”.
- 14) 1st place Design Competition supported by MIE Department Industrial Advisory Board, 2007. The award was given to the student team for the Senior Design Project, which I supervised. Title of the Project was “SQU 3rd Generation Solar Car: Body Design”.

Appreciation/Recognition:

- 1) Letter of Recognition from Al-Russayl Industrial Estate for organizing Academia-Industry collaboration day, January 2015.
- 2) Letter of Appreciation from the Vice Chancellor of Sultan Qaboos University for the efforts and contributions extended toward ABET Accreditation of Engineering Programs, December 2014.
- 3) Certification of Recognition from Industrial Innovation Center to act as a jury for Innovation Fair Oman competitions, 2012 & 2013.
- 4) 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.
- 5) Letter of Recognition from Shell, Brunei for the achievements in research work on solid expandable tubular and elastomers, 2010.
- 6) Letter of Recognition from New Technology Division, Petroleum Development Oman on achievements in research work conducted for PDO, 2009.
- 7) Invited Member, Expandable Technology Forum, in recognition of research work done on Solid Expandable Tubular, (2008 - Present).
- 8) Invited Member, SET Global Technology Implementation Team, in recognition of establishing a research based test facility for Solid Expandable Tubular which was designed, developed and commissioned by Applied Mechanics and Advanced Materials Research Group. The test facility was successfully audited by a team of international experts in 2008. (2008 - Present).
- 9) SQU test facilities for Expandable Tubular Test-rig and Elastomer Characterization included in the video “PDO Insight 3 – Technology Edition” for worldwide distribution in oil companies; 2008.
- 10) Letter of Appreciation for distinguished contributions to the College of Engineering in the capacity of Head of the Department from 2004-2008.
- 11) Letter of Appreciation from the Chairman – Board of Directors of Caledonian College of Engineering for successfully leading the technical committee of the Conference titled as “Recent Trends in Maintenance Management”, October 2005.
- 12) Certificate of Appreciation, for Development of Strategic Plan for the Department of Mechanical and Industrial Engineering, College of Engineering, Sultan Qaboos University, 2002.
- 13) Certificate of Appreciation, for successfully organizing Business and Investment Forum for Renewable Energy in the Arab Regions, Sultan Qaboos University, November 2000.
- 14) Certificate of Appreciation, for acting as Resource Person for Curriculum Level 5 Workshop, German Malaysian Institute, Malaysia, August 1999.

4. TEACHING

INSTRUCTION AND PROJECT SUPERVISION

Courses Taught at Sultan Qaboos University:

Undergraduate level: (Responsibilities include classroom teaching, lab/tutorial sessions, grading and maintaining office hours)

1. Engineering Drawing & Computer Graphics (MEIE 3146)
2. Statics (MEIE 2102)
3. Mechanical Engineering Laboratory I (MEIE 3105)
4. Mechanical Engineering Laboratory II (MEIE 3106)
5. Properties and Strength of Materials (MCTE 3230)
6. Numerical Method for Engineers (MEIE 4183)
7. Probability and Statistics for Engineers (MEIE4281)
8. Creative Decisions and Design (MEIE 3108)
9. Engineering Design I (MECH5180)
10. Engineering Design II (MECH 5181)
11. Capstone Design (MEIE 5149)
12. Computer Application in ME (MEIE 4192)
13. Machine Design-I (MEIE4102)
14. Applied Finite Element Method (MEIE 5110)
15. Business & Entrepreneurship (MEIE5188)
16. Pressure Vessels and Piping System Design (MEIE 5106)
17. Engineering Vibration (MEIE 5101)
18. Nanomaterials & Nanotechnology (MEIE 5190 as Special Topics)
19. Mechanical Engineering Seminar I (MEIE 3198)
20. Mechanical Engineering Seminar II (MEIE 4198)

Postgraduate level: (Responsibilities include classroom teaching, grading and maintaining office hours)

1. Advanced Engineering Mathematics (ENGR 6193)
2. Advanced Numerical Methods (MEIE 6004)
3. Advanced Solid Mechanics (MEIE 6101)
4. Mechanics of Composite Materials (MEIE 6211 as Special Topics)
5. Metal Forming (MEIE6211 as Special Topics)
6. Computer Integrated Design & Manufacturing (MEIE6103)
7. Advanced Vibration (MEIE 6108)
8. Variational Methods in Elasticity and Plasticity (MEIE6099)
9. Directed Studies (MEIE6212)

Courses Taught at International Islamic University Malaysia:

Undergraduate level: (Responsibilities include classroom teaching, lab/tutorial sessions, grading and maintaining office hours)

1. Computer Graphics
2. Computer Aided Drafting & Design
3. Statics and Dynamics
4. Materials Engineering
5. Computer Programming with Engineering Applications (Basic, FORTRAN & C)
6. Solid Mechanics

7. Machine Design
8. Engineering Design, CAD/CAE
9. Finite Element Analysis

Postgraduate level: (Responsibilities include classroom teaching, grading and maintaining office hours)

1. Advanced Engineering Mathematics
2. Nonlinear Finite Element Analysis
3. Advanced Numerical Methods

Courses Taught at Pakistan Institute of Nuclear Sciences and Technology:

Postgraduate level: (Responsibilities include classroom teaching and maintaining office hours)

1. Feedback Control System
2. Pumps and Turbines

Worked as Graduate Teaching Assistant at University of Minnesota, USA:

Responsibilities included recitation, grading and maintaining office hours for following graduate and under-graduate courses;

1. Synthesis and Analysis of Mechanisms
2. Advanced Synthesis and Analysis of Mechanisms
3. Engineering Mechanics (Statics and Dynamics)
4. Finite Element Analysis in Mechanical Design
5. Finite Element Analysis in Metal Forming
6. Technical Drawing

THESIS/PROJECTS SUPERVISION

- Ph.D. (Completed): 04 (03 as Supervisor and 01 as Co-Supervisor)
01 at IIUM (Co-Supervisor)
- Ph.D. (In progress) : 02 (01 each as Supervisor and Co-Supervisor)
- Master's Thesis/Project (Completed) 8 at SQU (7 as Supervisor, 1 as Co-Supervisor)
5 at IIUM (Co-Supervisor)
- Master's Thesis (In progress) 01 (Co-Supervisor)
- Final Year Projects (B.Eng.) 55 (43 at SQU)

Ph.D. Thesis Supervision (after joining SQU):

#	Thesis Title	Supervisors	Student Name	Year
1	Multi Scale Modeling of Nano Composites	Tasneem Pervez* , Khalid Al-Zebdeh, S.Z. Qamar	Moosa Al-Kharusi	2016 F (Completed)
2	Computational Modeling and Experimental Analysis of Martensitic Transformation	Tasneem Pervez* , Majid Al-Moharbi, S.Z. Qamar	Omar S. Al-Abri	2016 Summer (Completed)
3	Microstructure, Transformation Mechanisms and Multi-Scale Modeling of Expandable Tubular Steel	Tasneem Pervez* , S.Z. Qamar, Saif A. Al-Hiddabi	Rashid Khan	2014 S (Completed)
4	Performance Evaluation and Design Improvement of Swelling-Elastomer Seals in Petroleum Applications	S.Z. Qamar*, Tasneem Pervez , Abdullah Al-Shabibi	Maaz Akhtar	2014 F (Completed)
5		Khalid Al-Zebdeh* , Tasneem Pervez, Farooq Al-Jahwari, Nasr Al-Hinai	Mahmood Nassar	2017 F (In progress)
6		Tasneem Pervez* , Farooq Al-Jahwari, S.Z. Qamar	Isra Al-Muscat	2018 S (In progress)

* Main Supervisor

MSc. Thesis/Project Supervision (after joining SQU):

#	Thesis Title	Supervisors	Student Name	Year
	Assessment of Pipelines with Single and Multiple Corrosion Defects – Code and Numerical Solution	Farooq Al-Jahwari* , Tasneem Pervez, S.Z. Qamar	Mohammed Said Saif Al-Ghafri	2018 F (Completed)
1	Finite Element Modeling of Mechanical Behavior of Cellular Structures	Khalid Al-Zebdeh* , Tasneem Pervez	Isra Al-Muscatti	2013 F (Completed)
2	Exact Solutions for Vibration of Rectangular Thick Laminated Plates with Transverse Shear Deformation	Tasneem Pervez* , S.Z. Qamar	Maryam Al-Rajhi	2011 S (Completed)
3	Finite Element Formulation and Programming for Dynamic Analysis of Anisotropic Laminated Composite Plates	Tasneem Pervez* , S.Z. Qamar	Rashid Al-Araimi	2010 S (In progress)
4	Modeling, Simulation and Testing of Water-Swelling and Oil-Swelling Elastomers	S.Z. Qamar*, Tasneem Pervez	Moosa Al-Kharusi	2011 S (Completed)
5	Design of an Oscillatory Neural Network with FES to Assist Paraplegic Walking of Patient with Motor Neuron Disease	Riadh Zaier*, A.S. Al-Yahmedi, Tasneem Pervez	Asia Al-Busaidi	2011 F (Completed)
6	Design, Simulation, Construction and Testing of Solar Dish and Two Axes Tracking System with Economical Considerations	S. A. Al-Hiddabi*, Tasneem Pervez	Saif Al-Jahwari	2011 S (Completed)
7	Modeling and Simulation of Dynamics of Stick-Slip Phenomenon in Tube Expansion	Tasneem Pervez* , S.A. Al-Hiddabi, S.Z. Qamar	Omar Al-Abri	2009 F (Completed)
8	Minimizing Pop-Out Phenomenon Effect in Solid Expandable Tubular Systems	Tasneem Pervez* , S.Z. Qamar, S.A. Al-Hiddabi,	Idris Al-Siyabi	2007 F (Completed)
9	Nonlinear Finite Element Analysis of Tube Expansion	L. K. Kshirsagar* (University of Pune, India), Tasneem Pervez	Parameshwar M. Chabbi	2006 S (Completed)
10	Simulation of Cup Drawing and Extrusion Processes using Finite Element Method	Tasneem Pervez*	Saud Al-Busaidi	2005 F (Completed)
11	Solid Expandable Tubular Technology in Well Drilling	Tasneem Pervez* , S.Z. Qamar	Mohammed Al-Suqri	2004 S (Completed)
12	Development of an Elastic-Plastic	Tasneem Pervez* ,	Mohammed	2003 F

	Yielding Envelop of Pipes Pulling/Running Through Curved Wellbore Sections	A.C. Seibi	Al- Khozaimi	(Completed)
13	Development of Finite Element Program for Thick Anisotropic Laminated Plates	Tasneem Pervez *	Farooq Al-Jahwari	2002 F (Completed)

* Main Supervisor

** Start Semester

Final Year Project Supervision (after joining SQU):

2017-2018

- 1) Design of a Flexible Pipe Collapse Test System: Flexibility in Terms of Length, Diameter and Materials; 4 students (Supervisor)

2016-2017

- 2) Design and Fabrication of Coordinate Measuring Machine 2D Profile Measurement; 3 students; 4 students (Co-Supervisor)

2014-2015

- 3) Design of a Front-End-Tool Software for Use of Expandable Tubular in Field Applications; 3 students (Supervisor)

2013-2014

- 4) Design and Fabrication of an Experimental Setup for Testing of Swellable Elastomers at High Temperatures for Omani Oil Field Applications; 3 students (Supervisor)

2012-2013

- 5) Design of GRE pipes for Supply of Crude Oil at High Pressure; 2 students (Supervisor)

2011-2012

- 6) Modeling and Simulation of Elastomer Seal Design in Drilling Operations – Phase II; 3 students (Co-Supervisor)
- 7) Design and Fabrication of Test Facility for Determination of Bulk Properties of Elastomers; 3 students (Co-Supervisor)
- 8) Investigation of Mechanical Properties of Solid Expandable Tubulars; 3 students (Co-Supervisor)

2010-2011

- 9) Design of Fire Resistant Door for SQUH Operation Theater; 2 students (Supervisor)
- 10) Modeling and Simulation of Elastomer Seal Design in Drilling Operations; 3 students (Co-Supervisor)

2009-2010

- 11) Design of SET Cone and Launcher Assembly – Phase II: Mechanisms and Controls; 2 students (Supervisor)
- 12) Retrofitting of Tensile Testing Machine; 2 students (Co-Supervisor)

- 13) Design and Fabrication of Test Facility for Longevity Testing of Elastomer Seals; 3 students (Co-Supervisor)
- 14) Material Testing and Characterization of SETs; 3 students (Co-Supervisor)

2008-2009

- 15) Optimal Design of Cone and Launcher System for SET in Well Drilling; 3 students (Supervisor)
- 16) Design of Swellable Elastomer Seal for Zonal Isolation Using Finite Element Method; 3 students, (Supervisor)
- 17) Development of Gear and Spring Design Software; 3 students, (Supervisor)
- 18) Fracture Mechanics Based Design of Extrusion Die Design; 3 students (Co-Supervisor)
- 19) Testing of Solid Expandable Tubulars (SET) and Elastomers; 3 students; (Co-Supervisor)
- 20) Microstructure of H11 Steel after Heat Treatment and Mechanical Testing; 3 students (Co-Supervisor)

2007-2008

- 21) Designing an Effective Elastomer Seal for Solid Expandable Tubular (SET) using FEM; 3 students (Supervisor)
- 22) Design of Test Apparatus for Testing Fast Swell Packer; 3 students (Supervisor)
- 23) Material Characterization of Swelling Elastomers; 4 students (Co-Supervisor)
- 24) Heat Treatment and Mechanical Testing of H11 Steel; 2 students (Co-Supervisor)

2006-2007

- 25) 3rd Generation SQU Solar Car (Phase 2); 5 students (Supervisor)
- 26) Extrusion Die Design Improvement and Die Life Prediction; 4 students (Co-Supervisor)
- 27) Design of Plastic Injection Molded Parts using ProEngineer; 2 students (Co-Supervisor)
- 28) Design Representation of Automotive Differential/Gear Box using Features and Mating Conditions; 2 students (Co-Supervisor)

2005-2006

- 29) 3rd Generation SQU Solar Car - Electrical and Mechanical Systems; 3 students (Supervisor)
- 30) 3rd Generation SQU Solar Car - Body Design; 2 students (Co-Supervisor)
- 31) Designing and Conducting Experiments for Material Characterization of Inert Elastomers Exposed to Desert Environment; 3 students (Co-Supervisor)

2004-2005

- 32) 2nd Generation SQU Solar Car – Fabrication, Testing and Refinement; 4 students (Supervisor)
- 33) Design of an Automatic Storage and Retrieval System; 2 students (Supervisor)

2003-2004

- 34) 2nd Generation SQU Solar Car (Detailed Design and Analysis, Part 2); 4 students (Supervisor)

- 35) Design of a Mobile HDPE Tank; 2 students (Supervisor).

2002-2003

- 36) 2nd Generation SQU Solar Car (Conceptual design and Analysis); 10 students (Supervisor)
- 37) Vibration Analysis of Laminated Composite Plate; 2 students (Supervisor)
- 38) Development of Finite Element Method Software; 2 students, (Supervisor)
- 39) Investigation of Stress Concentration Factor for Plates Using Finite Element Method; 2 students (Supervisor)
- 40) Design and Development of an Experimental Test-Rig for Vibration Analysis; 2 students; (Supervisor)

2001-2002

- 41) First Generation SQU Solar Car Project; 9 students (Supervisor)
- 42) Defining the Elastic/Plastic Limits of casings Running Through Curved Sections in Hor. Drilling; (Co-Supervisor).
- 43) Fatigue Characteristics of GRE Joints Under Cyclic Loading; 1 student; (Co-Supervisor)

CURRICULUM DEVELOPMENT AND TEACHING MANAGEMENT

Curriculum Development for College of Applied Sciences Sohar, Oman (2010-2011):

Mechanical Engineering Program

- 1) Developed with another ME faculty the complete Mechanical Engineering Program including: curriculum structure; semester based study plan; course descriptions and course outline for all course; laboratories needed; equipment list with technical specifications and experiments to be conducted for each laboratory; list of text and reference books; list of software; number and qualification of faculty; number and qualification of technical staff.

Curriculum Development at Sultan Qaboos University (2001–2015):

College of Engineering Programs

- 2) Chaired the College Committee for curriculum revision of all engineering programs offered by the College of Engineering.

Mechatronics Engineering Program

- 3) Chaired the College Committee to develop Mechatronics Engineering Program offered in College of Engineering starting from Fall 2003 semester. A comprehensive proposal was prepared including curriculum structure, degree plan, course descriptions, laboratory requirement with equipment details, and faculty and technician needed to execute the program.

Mechanical Engineering Program

- 4) Involved in revisiting the curriculum of Mechanical Engineering Program (2014-present)
- 5) Involved as a member in modernizing the Mechanical Engineering program curriculum in 2010 to cater emerging needs of local and regional industries.
- 6) Chaired the Department Curriculum Committee in thoroughly revising Mechanical Engineering Program curriculum in 2001-2006 to satisfy the needs of program constituents and ABET EC 2000 criteria.

Industrial Engineering Program

- 7) Chaired the Department Curriculum Committee to revise the curriculum of Industrial Engineering program to satisfy ABET EC 2000 criteria.

Curriculum Development at International Islamic University Malaysia (1994-2000):

Materials Engineering Program

- 8) Chaired the Materials Engineering Program Committee to develop the curriculum structure, semester based study plan, course descriptions, laboratories needed, equipment list with technical specifications for each laboratory and human resources required to start and run the program.

Aerospace Engineering Program

- 9) Member of the Aerospace Engineering Program Committee to develop the curriculum structure, semester based study plan, course descriptions, laboratories needed, equipment list with technical specifications for each laboratory and human resources required to start and run the program.

Automotive Engineering Program

- 10) Member of the Automotive Engineering Program Committee to develop the curriculum structure, semester based study plan, course descriptions, laboratories needed, equipment list with technical specifications for each laboratory and human resources required to start and run the program.

COURSE DEVELOPMENT:

Lead the Course Focus Groups in developing following courses, which involves development of course outline, selection of text and reference books, design of lab experiments, preparation of lab manuals, software simulation tutorials and use of WebCT or Moodle (if possible):

At Sultan Qaboos University:

1. Properties and Strength of Materials
2. Creative Decisions and Design
3. Engineering Design I
4. Engineering Design II
5. Capstone Design
6. Computer Application in ME
7. Mechanical Engineering Seminar I
8. Mechanical Engineering Seminar II
9. Pressure Vessels and Piping System Design
10. Business & Entrepreneurship
11. Nanomaterials & Nanotechnology
12. Metal Forming (Postgraduate level)
13. Mechanics of Composite Materials (Postgraduate level)
14. Computer Integrated Design & Manufacturing (Postgraduate level)
15. Advanced Solid Mechanics (Revision - Postgraduate level)
16. Variational Methods in Elasticity and Plasticity (Postgraduate level)

At International Islamic University Malaysia

1. Computer Graphics
2. Materials Engineering
3. Computer Programming with Engineering Applications (Basic, FORTRAN & C)
4. Engineering Design, CAD/CAE
5. Finite Element Analysis
6. Nonlinear Finite Element Analysis (Postgraduate level)
7. Advanced Numerical Methods (Postgraduate level)

LABORATORY DEVELOPMENT:

At Sultan Qaboos University

- 1) Development of *Burst and Collapse Test Facility* in Engineering Research Laboratory (2015017).
- 2) Development of *Microscopic Study Setup* in Properties of Materials Laboratory (2013-2014). (Budget: US \$ 550,000)
- 3) Developed *Engineering Research Laboratory* (Mechanical Section) with other research groups. (2005-2009). (Budget: US \$ 2.5 million)
- 4) Developed *Automation and Robotics Laboratory* in cooperation with Electrical and Computer Engineering Department. (2004-2005). (Budget: US \$ 91000).
- 5) Developed *Computer Integrated Manufacturing Laboratory* in cooperation with IE faculty. (2004-2006). (Budget: US \$ 325000).

At International Islamic University Malaysia

- 1) Developed Engineering Workshop, which consist of Machine shop, Metal forming shop, Welding, Heat treatment, Casting, Wood working, and Nontraditional machining (1994-1998), (Budget: US \$ 3.5 Million).
- 2) Developed CAD/CAM/CAE, Engineering Mechanics, Material Testing, Metrology, Production, Die and Mold Manufacturing, and General Purpose Computer Laboratories (1995-1999), (Budget: US \$ 7.5 Million).
- 3) Developed Mechatronic Systems Laboratory (1999-2000), (Budget: US \$ 230,000).

STUDENT ADVISING

- Cohort 2015 (Mechanical Engineering) - 22 students
- Cohort 2008 (Mechanical Engineering) - 30 students
- Sep 2004 – Aug 2008: As Head of the Department advised students of all Cohorts having critical situations such consecutive probation, psychological problems, etc.
- Cohort 2005 (Mechatronics Engineering) - 30 students
- Cohort 2003 (Mechatronics Engineering) - 30 students
- Cohort 2000 (Mechanical Engineering Program) - 25 students

TEACHING ACTIVITIES OUTSIDE THE CLASSROOM

Short Courses Given to Industries:

- 1) Conducted following professional courses for UNILEVER, BEECHAM, SK&F, Pakistan Petroleum Limited, WELCOME, SIEMENS, PETRONAS (Petroleum Company Malaysia), PERODUA (Preodua Automobile Malaysia) and PROTON (Proton Automobile Malaysia).
 - Computer Based Maintenance Management
 - Preventive Maintenance
 - Composite Materials for Automotive Applications
 - Finite Element Method in Design
 - CAD & FEM
 - Materials Selection in Design
 - Modeling and Mesh Generation
 - Design of Gears for Heavy Machinery using AGMA Standard
- 2) Conducted courses on use of following commercial software (1994-1999);
 - NASTRAN, PATRAN, ALGOR, CADD5 and NASTRAN for Windows.

5. SERVICE

UNIVERSITY ADMINISTRATION AND COMMITTEES

Administrative Positions:

At Sultan Qaboos University

- Assistant Dean for Postgraduate Studies and Research, College of Engineering (Sep 2010 - Aug 2016)
- Head, Department of Mechanical and Industrial Engineering (Sep 2004 - Sep 2008)
- Chair, Steering Committee for Mechatronics Engineering Program (Sep 2003-Aug 2005 and Sep 2007 – Aug 2008)

At International Islamic University Malaysia

- Deputy Dean, Academic Affairs, Faculty of Engineering, International Islamic University Malaysia (Jun 1999 - Aug 2000)
- Head, Department of Manufacturing Engineering, International Islamic University Malaysia (Jul 1995 - Jul 1998)

National Services:

Academic Programs Development Committee, Oman University

Ministry of Higher Education

Role: Member (Jan 2013 – June 2016)

Program Advising Committee, College of Applied Sciences – Sohar

Role: Member (2011 – 2016)

Reviewer for Mechanical Engineering Program, Ministry of Higher Education

Role: Program Reviewer (2015, 2014)

Innovation Fair Oman, Industrial Innovation Center

Role: Member of Jury (2012, 2013)

Quality Assurance Committee for Auditing Documents prepared for developing Research Strategy for The Research Council of Oman

Role: Member (2006-2008)

University Services:

Research, Development and Evaluation Committee for Center for Excellence in Teaching and Learning

Role: Member (2015 – 2016)

Strategic Committee for Postgraduate Teaching and Learning

Role: Member (2015 – 2016)

FURAP Projects Evaluation Committee

Role: Member (2013 – 2016)

University Academic Promotion Committee

Role: Member (Sep 2012 – May 2014)

Publication Award Committee

Role: Member (2012 – 2013)

Research Incentives Committee

Role: Member (Sep 2011 – 2015)

Strategic Planning Committee for Research

Role: Chair (Sep 2012 – Aug 2013)

Innovation Advisory Committee

Role: Member (Sep 2011 – 2016)

SQU Journal of Engineering Research

Role: Founding Member (2001); Editor (February 2013 – 2017);
Associate Editor (2002 - 2008, Oct 2017 - Present)

Earthquake Monitoring Center

Role: Member (Sep 2010 – 2016)

Board of Postgraduate Studies

Role: Member (Sep 2010 – 2016)

Postgraduate Studies and Research Strategic Planning Implementation Committee

Role: Member (Mar 2011 - Jun 2011)

SQU/PDO Liasion Committee

Role: Member (Sep 2010 – 2016)

Consultancy Committee for College of Applied Sciences, Sohar

Role: Member (Jun 2010 – 2017)

Environment Scan Committee, sub-committee of SQU Long-term Strategic Plan (2014-2025)

Role: Member (Feb 2009 - Nov 2010)

University Senate, International Islamic University Malaysia (IIUM)

Role: Member (1996-2000).

Committee for Development of Center of Engineering Excellence, IIUM

Role: Co-Chair (1998).

College Service

College of Engineering Curriculum Revision Committee

Role: Chair (Sep 2017 - present)

College Academic Promotion Committee

Role: Member (2014 – present)

College Postgraduate Studies & Research Committee

Role: Chair (2010 - 2016); Member (2000 - 2002); also at IIUM (1999-2000)

College of Engineering Board

Role: Member (2004-2008), (2010-present); also at IIUM (1995-2000)

College Executive Committee

Role: Member (2004-2008), (2010-2016); also at IIUM (1995-2000)

College Strategic Planning Committee

Role: Member (2014 - 2016)

College of Engineering Industrial Advisory Board

Role: Member (2014 - 2016)

College Equipment Committee

Role: Chair (2012 - 2016)

College ABET Committee

Role: Member (2001 – 2009)

Mechatronics Engineering Program Development Committee

Role: Chair (2001-2002)

Steering Committee for Mechatronics Engineering Program

Role: Chair (2003 - 2005 & 2007 - 2008); Member (2003 - 2010)

College Promotion Committee

Role: Member (2003-2006, 2008); also at IIUM (2000)

College Computing Committee (2003-04)

Role: Chair (2003 – 2004)

Postgraduate Program Policies and Regulations Committee (at IIUM)

Role: Member (1997 - 1998)

Materials Engineering Program Development Committee (at IIUM)

Role: Chair (1998-99).

Automotive and Aerospace Engineering Programs Development Committee (at IIUM)

Role: Member (1998-99).

Accreditation Committee for Manufacturing and Mechatronics Engineering programs (at IIUM)

Role: Chair (1995 - 1999). Both programs were successfully accredited in 1999.

Modules Development Committee for Master's Program in Manufacturing Engineering (at IIUM)

Role: Member (1999 - 2000).

Department Services

Department Board

Role: Chair (2004 – 2008); Member (2000 – 2003 & 2009 – Present)

Department Academic Promotion Committee

Role: Chair (2004-2007), Member (2002-2003 & 2008-2011)

Industrial Advisory Board

Role: Chair (2004-2008), Member (2003 & 2009-2011)

Curriculum and Accreditation Committee

Role: Chair (2004-2008), Coordinator (2001-2003), Member (2009 & 2011)

Department Strategic Planning Committee (2001-03).

Role: Member (2012 – present; 2001 - 2003)

Staff Recruitment Committee

Role: Chair (2004-2008), Member (2003 & 2008-2009)

Postgraduate Studies and Research Committee

Role: Chair (2004-2005); Member (2000-2002)

Department Doctoral Program Development Committee

Role: Member (2003-04)

Consultancy Committee

Role: Chair (2000 - 2001), Member (2003)

Courses' Timetabling

Role: ME Program Coordinator (2001 - 2003)

PROFESSIONAL SERVICES:

Keynote Speaker

- “Trends and Approaches in Design and Development of Tailored Materials”, In: *Emerging Trends in Automotive Engineering (CETAE-2017)*, Karachi, Pakistan, 28-29 December 2017.
- “Wellbore Expandable Tubular - Progress, Issues and Challenges”, In: International Conference on Mechanical Engineering, Institute of Engineers, Pakistan, August 05-06, 2015.
- “Accreditation of Engineering Programs – An Option or Necessity”, In: *International Conference on Operations Research and Management*, Dhaka, January 08-10, 2010.
- “Integrating Research Outcomes in CAD, CAM & CAE for Product Design and Development in Malaysian Companies”, In: *Collaborating CAD, CAM & CAE into Production*, Kuala Lumpur, Malaysia, July 2000.

Invited Speaker

- “A Researcher Perspective on Interdisciplinarity”, *Regional Meeting of the Global Research Council (GRC) in the MENA Region*, Muscat, Oman, 10-11 January 2016.
- “Integrating Teaching of Contemporary Issues into Engineering Education – A case study” *Engineering Leaders Conference on Engineering Education*, Doha, Qatar, 9-11 November 2014.
- “Modernization of Engineering Curriculum”, 25 September 2013, NED University of Engineering and Technology, Karachi, Pakistan.
- “Compartmentalization and Contextualization: Neglected Aspects of Engineering Education”, *World Congress on Engineering Education*, 7-9 January 2013, Doha, Qatar.
- “Issues and Challenges in Expandables and Swellables Research”, *Expandable Technology Forum*, 22-23 February 2011, Hamburg, Germany.
- “Current Issues in Low Cost Expandable Solution”, *2010 Global Drilling Knowledge Expansion Roundtable Workshop*, 17-20 October, Morocco.
- “Material and Mechanical Characterization of Expandable Tubular”, *Production Optimization Middle East*, 08-12 May 2010, Kuwait.
- “Solid Expandable Tubular and Swelling Elastomer Research at SQU”, *Expandable Technology Forum*, 19-20 January 2009, Abu Dhabi, UAE.
- “Experimental and Numerical Investigations of Tubular Expansion Under Various End Conditions”, *Middle East Drilling Technology Conference*, 24-27 February 2008, Abu Dhabi, UAE.

Conference/Workshop Service

- 1) Chair and Organizer of session on “Experimental and Numerical Analysis of Elastomers” under Mechanics of Solids and Fluids for *ASME 2016 International Mechanical Engineering Congress & Exposition (IMECE2016)*, Phoenix, Arizona, USA, 11-18 November 2016.

- 2) Member of the Program Committee, SPE International Production and Operations Conference and Exhibition, 14-16 May 2012, Doha, Qatar
- 3) Member of the Advisory Board / Technical Committee:
 - 11th International Conference on Composite Science and Technology, 2017
 - 7th International Conference on Composite Science and Technology 2009.
 - 6th International Conference on Composite Science and Technology, 2007.
- 4) Member of the International Advisory Board, 8th International Conference on Composite Science and Technology, March 2011, Kuala Lumpur, Malaysia.
- 5) Member of Advisory Committee, Expandable Technology Forum, 22-23 February 2011, Hamburg, Germany.
- 6) Member of Discussion Panelist of Experts for:
 - 2010 Global Drilling Knowledge Expansion Round Table Workshop
 - Expandable Technology Forum, 2009.
 - Middle East Drilling Technology Conference, 2008
- 7) Member of the Technical Committee, International Conference on Applied Mechanics, Materials and Manufacturing (ICAMM), 13-16 December 2010, Muscat, Oman.
- 8) Member of the Technical Committee, Production Optimization Middle East, May 2010, Kuwait.
- 9) Chair of the Closing Session, Renewable Energy Development Forum in Oman Forum, 22-23 November, 2009, Muscat, Oman.
- 10) Discussion Leader and Resource Person for “Controlled Pressure Drilling for Reservoir Characterization, Productivity Improvement and Drilling Performance”, 2008 Drilling Interactive Technology Masterclass, Praxis Global Research, 24-27 February, Abu Dhabi, UAE.
- 11) Deputy Chair of the Technical Committee, “Recent Trends in Maintenance Management”, October 2005, Muscat, Oman.
- 12) Technical Chairman and Member of the Organizing Committee, First International Conference on Mechatronics (ICOM’ 01), February 2001, Kuala Lumpur, Malaysia.
- 13) Member of the Organizing Committee, Business and Investment Forum For Renewable Energy in the Arab Region, Organized by UNESCO, European Commission and SQU, November 2000, Muscat, Oman.
- 14) Member of the National Advisory Committee, International Conference on Advances in Materials and Processing Technologies, August 1998, Kuala Lumpur, Malaysia.

Reviewer/Editorial Services

- 1) Editor, “The Journal of Engineering Research”, (2013-2017).
- 2) Guest Editor for Special Issue based on ICAMIS-2016 conference for “The Journal of Engineering Research”, Sultan Qaboos University (2017) (Eds: T. Pervez, J. Abdo and N.Z. Al-Rawahi)
- 3) Guest Editor for Special Issue on Solid Expandable Tubular and Swellables for Monodiameter Wells of “The Journal of Engineering Research”, Sultan Qaboos University (2012) (Eds: T. Pervez and S.Z. Qamar).
- 4) Guest Editor for Special Issue of “Journal of Materials and Manufacturing Processes”, (2012) (Eds: S.Z. Qamar, T. Pervez and J. Abdo)

- 5) Member of the International Advisory Board, NED University Journal of Research, (2009- Present).
- 6) Associate Editor, “The Journal of Engineering Research”, Sultan Qaboos University (2002 - 2008).
- 7) Member of the Editorial Board, Journal of Solids and Structures, (2004 - 2005)
- 8) Member of the Editorial Board, IIUM Journal of Engineering (1999–2000).
- 9) Reviewed research articles for following international/regional journals:
 - Composite Structures
 - Applied Composite Materials
 - Composite Materials
 - Finite Elements in Analysis and Design
 - Applied Mathematical Modeling
 - Materials and Design
 - Materials and Manufacturing Processes
 - Composite Science and Technology
 - Nonlinear Mechanics
 - Experimental Techniques
 - International Journal of Computer Aided Engineering and Technology
 - The Journal of Engineering Research
- 10) Reviewer for many regional and international Conferences
- 11) Session Chair in following conferences:
 - Engineering Leaders Conference on Engineering Education, 9-11 November, Doha, Qatar
 - World Congress on Engineering Education, 7-9 January 2013, Doha, Qatar
 - 2010 Global Drilling Knowledge Expansion Round Table Workshop
 - International Conference on Composite Science and Technology, 2007, 2009
 - Advances in Materials & Processing Technologies, 2009
 - Trend in the Development of Machinery and Associated Technologies, 2007
 - 15th Middle East Oil and Gas Show and Conference, MEOS 2007
 - 2nd International Conference on Advances and Processing of Aluminum, APPA 2005
 - International Mechanical Engineering Conference, 2004
 - 6th ASME Biennial Conference on System Design and Analysis, 2002
 - First International Conference on Mechatronics, 2001
 - International Conference on Application of Numerical Methods in Engineering, 1997
 - Combustion Technology Conference, 1997
- 12) Reviewed Faculty Promotion Dossier for promotion from Assistant to Associate Professor (Petroleum Institute UAE, Glasgow Caledonian University, University Kebangsaan Malaysia, Institute Teknologi Mara)
- 13) Reviewed research proposals and final reports for the Office of the Vice President for Postgraduate Studies and Research, SQU; King Fahad University of Petroleum and Minerals; Pakistan Space and Upper Atmosphere Research Commission; KANUP Institute of Nuclear Power Engineering; UAE University, Petroleum Institute, King Abdulaziz University, and Ministry of Science, Technology and Environment, Malaysia.

External Examiner

External Examiner, Mechanical & Mechatronics Engineering Program, Sohar University, Sohar (2016)

External Examiner, Mechanical Engineering Program, College of Applied Sciences, Sohar (2014, 2015)

External Examiner, Mechanical and Mechatronics Engineering Programs, Dhofar University (2013)

External Examiner, Mechanical and Mechatronics Engineering Programs, Caledonian College of Engineering, Glasgow Caledonian University (2004 - 2008)

External Examiner for Mechanical Engineering Program, German Malaysian Institute, Malaysia (1999-2000)

External Examiner / External Assessor for Master's Project or Thesis (CAE, ECE, PCE and MIE Department, College of Engineering, SQU; ME Department UAE University; Banaras Hindu University, India; and NED University of Engineering and Technology, Pakistan)

Workshop/Seminar on ABET Service

- 1) Workshop on "Assessment and Evaluation for ABET Accreditation", College of Applied Sciences, Sohar, June 2014
- 2) Seminar on "ABET Criterion", NED University of Engineering and Technology, Pakistan, Sep 2013
- 3) Seminar on "Criteria for ABET Accreditation", College of Applied Sciences, Sohar, June 2013
- 4) Seminar on "Assessment and Evaluation for ABET Accreditation", Department of Computer Science, College of Science, SQU, November 2008
- 5) Conducted workshop on "Assessment and Evaluation for ABET Accreditation" for University of Jordan, Jordan University of Science and Technology, Hashemite University, and Mutah University, 23-27 June 2007, Amman, Jordan
- 6) Conducted workshop at University of Jordan on "ABET Accreditation and SQU Experience", 8-10 January 2005, Amman, Jordan

ABET Accreditation Related Services at College of Engineering, SQU:

An anchor person for ABET (Accreditation Board for Engineering & Technology) accreditation activities in the Mechanical and Industrial Engineering Department as well as for the College of Engineering from 2000-2008 and 2012-2013. It was a very demanding and time consuming job especially in the beginning from January 2001 till August 2003. My specific accomplishments related to accreditation activities are:

- 1) Led MIE Department and the Curriculum and Accreditation Committee to successfully achieve the accreditation of Mechanical Engineering Program by ABET in March 2006.
- 2) Co-Chaired Department to successfully achieve the accreditation of Industrial Engineering Program by ABET in October 2008.
- 3) Developed Accreditation Roadmap for four engineering programs with members of the College Accreditation Committee.
- 4) Developed and implemented the process for establishing Program Educational Objectives and Program Outcomes for Mechanical Engineering program.
- 5) Modified Mechanical Engineering Degree plan to suit the ABET requirement (short and long term fix of degree plan).
- 6) Introduced courses and activities in Mechanical Engineering program to satisfy ABET Criterion on Program Outcomes.

- 7) Developed various processes and forms for smooth and systematic progress towards accreditation. Particularly involved in
 - Assessment and Evaluation Process,
 - Documentation and Filing Process,
 - Measurement Methods, Outcome Indicator, Responsibility and Schedule
 - Survey of PEO, PO and Mission statement from different constituents (Student, Staff and Industry)
 - Responsible for MIE Department Industrial Advisory Board for ABET activities.
- 8) Chair of the committee to write the Self Study Report for Mechanical Engineering Program.
- 9) Member of the committee to write the Self Study Report for Industrial Engineering Program.
- 10) Conducted various workshops in the Department and the College related to accreditation and quality control process.
 - Understanding ABET (March 2001)
 - ABET Workshop # 1 (April 2002)
 - College ABET Workshop on Measurement Methods and Outcome Indicators (October 2002)
 - ABET Workshop # 2 (April 2003)
 - Program Education Objectives and Program Outcomes (2004, 2009)
 - Assessment and Evaluation Process (2004, 2010)
 - Continuous Improvement Process (December 2004)
 - Assessment & Evaluation of ME Program (March 2005)
 - Self Study Report (September 2005)

Professional Societies Membership

- Member of Society of Petroleum Engineers
- Member of American Society of Mechanical Engineers
- Member of Oman Society of Engineers
- Professional Engineer and Life Member of Pakistan Engineering Council

SERVICE TO THE PUBLIC

- 1) Delivered public lecture to postgraduate students on “*Problem Definition and Proposal Writing*”, organized by Deanship of Postgraduate Studies, SQU, Muscat, Oman, October 2010.
- 2) Delivered lecture on “*Estimation of Errors in Scientific Measurements*” to high schools students of Srilankan School Muscat, March 2011.
- 3) Delivered public lecture on “*Trends in Engineering Education and its Adoption in SQU*” to Oman Society of Engineers Forum on Engineering Education, Muscat, Oman, March 2011.
- 4) Member of the Steering Committee for the workshop on Design with Constructal Theory: Nature, Hydrology, and Engineering, Muscat, Oman, 21 March, 2011.
- 5) Organized 2-day training workshop on “*Fatigue Life of Casing while Drilling*” for Petroleum Development Oman, SQU and TESCO USA, Muscat, Oman, 9-10 February 2011.
- 6) Delivered lecture on “*Physics is Fascinating*” to high schools students of Srilankan School Muscat, November 2010.
- 7) Member of the Organizing Committee for the workshop on, “*Reservoir Characterization and Modeling - Sharing PARTEX Experience and Knowledge*”, Muscat, Oman, November 2010.

- 8) Delivered public lecture to postgraduate students on “*Effective Writing: Do’s and Don’ts of Scientific Writing*”, organized by Deanship of Postgraduate Studies, SQU, Muscat, Oman, October 2010.
- 9) Organized 1-day training workshop in cooperation with Macneal Schwindler Corporation on MSC Software Suite “*Multidisciplinary Simulation using ADAMS and NASTRAN*”, for College of Engineering staff and students, October 2010.
- 10) Member of Tender Evaluation Committee, Ministry of Higher Education, Evaluation of New Engineering Programs, Muscat, Oman, (Mar – Apr 2010).
- 11) Guest lecture on “*Mono-diameter wells: Concept to Reality*”, at NED University of Engineering and Technology, Karachi, Pakistan, August 2008.
- 12) As a member of Quality Assurance Team audited following documents for The Research Council, Oman:
 - Benchmarking and Bench Practices, National Innovation Systems
 - Organizational CORE Business Programs and Processes
 - Human Resources and Administration Processes
 - Human Resources Policy Manual
 - Research Strategy for the Sultanate of Oman
- 13) Started “Eng for Kids” initiative for high schools students of Oman to generate interest in science and engineering fields. This has resulted in an Annual Robotics Competition with the cooperation of Ministry of Education, Oman.
- 14) Organized 5-day training course in cooperation with Macneal Schwindler Corporation on “Computational Fluid Dynamics using CFX”, for MIE Department staff and students, Muscat, Oman, February 2004.
- 15) Delivered public lecture on “Composite Materials and Their Applications”, organized by Caledonian College of Engineering, Muscat, Oman, 12 November 2003.
- 16) Delivered public lecture on “Composites”, organized by Caledonian College of Engineering, Muscat, Oman, 23 October 2002.
- 17) Conducted, in cooperation with INFOTRAX Sdn Bhd of Malaysia, numerous awareness seminars on “Engineering Analysis using Finite Element Method” for industries and universities in Malaysia from 1995 till 1999.
- 18) Member of the MIGHT (Malaysian Industry-Government Group for High Technology) Task Force Committee on “Human Resource Development of Malaysian Aerospace Industry”, Under Prime Minister’s Department, Government of Malaysia (February 1995 – June 1998).
- 19) Member, University Senate, International Islamic University Malaysia, (1996-2000).
- 20) Member, Board of Directors, Center of Engineering Excellence (1999-2000).

6. SCHOLARLY ACHIEVEMENTS

SUMMARY:

My research focus is in Applied Mechanics and Composite Materials with application in oil and gas industry.

- 1) Published 51 journal and 62 conference papers, 7 conference abstracts, 2 book chapters and 40 technical reports.

- 2) In 2000, I established and have been leading, the research group “Applied Mechanics and Advanced Materials Research Group (AM²RG)” the first research group in MIE Department and College of Engineering.
- 3) Successfully completed development of two major research infrastructure at Mechanical and Industrial Engineering Department, College of Engineering, which are:
 - “Expandable Tubular Test-rig”, a research based testing facility housed in Engineering Research Laboratory inaugurated by HE the VC in June 2009.
 - “Mechanical and Materials Characterization of Inert and Swellable Elastomers” for research work housed in Materials Engineering Laboratory.
- 4) As a recognition, I was requested to be Invited Member in “Expandable Technology Forum” and Solid Expandable Tubular Global Technology Implementation Team since 2008.
- 5) Research in collaboration with Enventure Global Technology (Houston, USA), Swellfix and Brinker Technology (Scotland), RUMA Rubbers (Holland) and Aachen University (Germany). A major portion of these research works are confidential and all of them have signed “Non Disclosure Agreement” with SQU.
- 6) After joining SQU, I have completed twelve research projects with eight as ‘Principal Investigator’ with a total fund of 5,003,616 US dollars.

Refereed Journal Papers*: (Accepted/Published)

- 1) S.Z. Qamar, M. Akhtar and **T. Pervez**, “Performance Evaluation of Swelling Elastomers Seals”, Accepted for publication in *Journal of Petroleum Science and Engineering*, 48 (6):535–545, 2018.
- 2) R. Khan, **T. Pervez**, N. Alrasheedi, Omar S. Al-Abri, and A. Sajid, "Effects of Expansion Rate on Plasticity and Structural Integrity of Down-Hole Tubular", *Int. Journal of Pressure Vessels & Piping*, 151, 1-10, 2017.
- 3) O.S. Al-Abri, **T. Pervez**, M.H. Al-Maharbi, and R. Khan, “Microstructure Evolution of Ultra-Fine Grain Low-Carbon Steel Tubular Undergoing Radial Expansion Process”, *Materials Science & Engineering A*, 654:94-106, 2016.
- 4) S.Z. Qamar, **T. Pervez** and M. Akhtar, “Performance Evaluation of Water-Swelling and Oil-Swelling Elastomers”, *Journal of Elastomers and Plastics*, 48 (6):535–545, 2016.
- 5) O.S. Al-Abri, **T. Pervez**, S.Z. Qamar and R. Khan, “On the Performance Analysis of AHSS with an Application to SET Technology – FEM Simulations and Experimental Measurements”, *Thin-Walled Structures*, 101:58-74, 2016.
- 6) M.S.M. Al-Kharusi, K. Alzebdeh and **T. Pervez**, “An Atomistic-Based Continuum Modeling for Evaluation of Effective Elastic Properties of Single-Walled Carbon Nanotubes”, *Journal of Nanomaterials*, Article ID 8641954, 2016:1-13, 2016.
- 7) O.S. Al-Abri, **T. Pervez**, S.Z. Qamar and A.M. Al-Bussaidi, "Optimum Mandrel Configuration for Efficient Down-Hole Tube Expansion", *ASME Journal of Manufacturing Science & Engineering*, 137(6), 061005 (14 pages), 2015.
- 8) K. Laxman, M.T.Z. Myint, R. Khan, **T. Pervez** and J. Dutta, “Effect of a semiconductor dielectric coating on the salt adsorption capacity of a porous electrode in a capacitive deionization cell”, *Electrochimica Acta*, 166:329-337, 2015.
- 9) S.A. Al-Hiddabi, **T. Pervez**, S.Z. Qamar, F.K. Al-Jahwari, F. Marketz, S. Al-Houqani and M.v.d. Velden, “Analytical model of elastomer seal performance in oil wells”, *Applied Mathematical Modeling*, Vol. 39, Issue 10-11, 2836-2848, 2015.

- 10) **T. Pervez**, S.A. Al-Hiddabi and S.Z. Qamar, “Analytical model for stick-slip phenomenon in solid tubular expansion”, *Journal of Petroleum Science and Engineering*, Vol. 125, pp 218-233, 2015.
- 11) K. Laxman, M.T.Z. Myint, R. Khan, **T. Pervez** and J. Dutta, “Improved desalination by zinc oxide nanorod induced electric field enhancement in capacitive deionization of brackish water”, *Desalination*, Vol. 359, pp 64-70, 2015.
- 12) **T. Pervez**, and A.S. Al-Harthy, “Compartmentalization and contextual issues: The neglected aspects of engineering education”, *Special issue of QScience from selected papers of World Congress on Engineering Education*, pp. 1-6, 2014
- 13) O.S. Al-Abri and **T. Pervez**, "Structural behavior of solid expandable tubular undergoes radial expansion process – Analytical, numerical, and experimental approaches", *Int. J. of Solids & Structures*, Vol. 50, Issue 19, pp. 2980-2994, 2013.
- 14) R. Khan, **T. Pervez** and S.Z. Qamar, “Influence of Martensite Volume Fraction on Mechanical Properties of High-Mn Steels”, *Journal of Minerals and Materials Characterization and Engineering*, Vol. 12, Issue 6, pp 293-300, 2013.
- 15) S.Z. Qamar, M. Akhtar, **T. Pervez**, M.S.M. Al-Kharusi, “Mechanical and Structural Behavior of a Swelling Elastomer under Compressive Loading”, *Journal of Materials and Design*, Vol. 45, pp 487-496, 2013.
- 16) **T. Pervez**, S.Z. Qamar, O.S. Al-Abri, R. Khan and B.H. Al-Abri, “Experimental and Numerical Simulation of In-Situ Tube Expansion for Deep Gas Wells”, *Journal of Materials and Manufacturing Processes*, Vol. 27, No. 7, pp 727-733, 2012.
- 17) **T. Pervez**, S.Z. Qamar and M. vd Velden, “Comparison between Fresh and Exposed Swelling Elastomer”, *Journal of Elastomers and Plastics*, Vol. 44, No. 3, pp 237-250, 2012.
- 18) **T. Pervez**, S.A. Al-Hiddabi, A. Al-Yahamadi and A.C. Seibi, “Dynamic Analysis and Vibration of Beam Inside Annulus for Ultra Short Radius Water Jet Drilling”, *The Journal of Engineering Research*, Vol. 9, No. 1, pp 67-75, 2012.
- 19) S.Z. Qamar, **T. Pervez**, M. Akhtar and M.S.M. Al-Kharusi, “Design and Manufacture of Swell Packers: Influence of Material Behavior”, *Journal of Materials and Manufacturing Processes*, Vol. 27, No. 7, pp 721-727, 2012.
- 20) M. Akhtar, S.Z. Qamar, **T. Pervez**, R. Khan and M.S.M. Al-Kharusi, “Elastomer Seals in Cold Expansion of Petroleum Tubulars: Comparison of Material Models”, *Journal of Materials and Manufacturing Processes*, Vol. 27, No. 7, pp 715-721, 2012.
- 21) **T. Pervez** and S.Z. Qamar, “Finite Element Analysis of Tubular Ovality in Oil Well” *Advanced Materials Research*, Vol. 265, pp 1654-1659, 2011.
- 22) **T. Pervez**, F.K. Al-Jahwari and A.C. Seibi, “Vibration Analysis of Thick Arbitrarily Laminated Plates of Various Shapes and Edge Conditions”, *Periodical of Key Engineering Materials: Composite Science and Technology*, Vol. 472, pp 1177-1183, 2011.
- 23) A.C. Seibi, **T. Pervez**, X. Qu and A. Khalaf, “Field Layout of Glass Reinforced Epoxy Pipeline – A Practical Approach”, *Periodical of Key Engineering Materials: Composite Science and Technology*, Vol. 471, pp 285-290, 2011.
- 24) **T. Pervez**, S.Z. Qamar, S.A. Al-Hiddabi, F.K. Al-Jahwari, F. Marketz, S. Al-Houqani and M. vd Velden, “Tubular Expansion in Irregularly Shaped Boreholes – Computer Simulation and Field Measurement”, *Journal of Petroleum Science and Technology*, Vol. 29, No. 7, pp 735-744, 2011.

- 25) K. Al-Zebdeh, **T. Pervez** and S.Z. Qamar, "Finite Element Simulation of Compression of Elastomeric Seals in Open Hole Liners," ASME Transaction - Journal of Energy Resources Technology, Vol. 132, No. 3, pp 1-8, 2010.
- 26) **T. Pervez**, K. Al-Zebdeh and F.K. Al-Jahwari, "Effects of Boundary Conditions for Laminated Composite Plates Using Higher Order Shear Deformation Theory", Journal of Applied Composite Materials, Vol. 17, No. 5, pp 499-514, 2010.
- 27) **T. Pervez**, "Experimental and Numerical investigation of expandable tubular structural integrity for well applications," Journal of Achievements in Materials and Manufacturing Engineering, Vol. 41, No. 2, pp 147-154, 2010.
- 28) A.C. Seibi, A. Karrech, F. Boukadi and **T. Pervez**, "Wellbore path estimation using measurement while drilling techniques: A comparative study and suggestions for improvements," Journal of Energy Sources, Part A, Recovery, Utilization, and Environmental Effects, Vol. 31, No. 14, pp 1205-1216, 2009.
- 29) A.C. Seibi, A. Karrech, **T. Pervez**, S.A. Al-Hiddabi, A. Al-Yhamadi and, A. Al-Shabibi, "Dynamic Effects of Mandrel/Tubular Interaction on Downhole Solid Tubular Expansion in Well Engineering," ASME Transaction - Journal of Energy Resources Technology, Vol. 131, No. 1, pp 1-7, 2009.
- 30) S.Z. Qamar, S.A. Hiddabi, **T. Pervez** and F. Marketz, "Mechanical Testing and Characterization of a Swelling Elastomer," Journal of Elastomers and Plastics, Vol. 41, No. 5, pp 415-431, 2009.
- 31) A. Kacimov, F. Marketz and **T. Pervez**, "Analytical Solution for one-phase Seepage Flows Impeded by Well bore Seals", Journal of Petroleum Science and Engineering, Vol. 64, No. 2, pp 67-76, 2009.
- 32) **T. Pervez**, S.Z. Qamar, R.A. Siddiqui, M. van de Velden, "Effect of Exposure on Material Response of a Swelling Elastomer", Archives of Materials Science and Engineering, World Academy of Materials and Manufacturing Engineering, Vol. 37, No. 2, pp 77-84, 2009.
- 33) A. Kacimov, F. Marketz and **T. Pervez**, "Optimal Placement of a Wellbore Seal Impeding Seepage from a Tilted Fracture", Applied Mathematical Modeling, Vol. 33, No. 1, pp 140-147, 2009.
- 34) **T. Pervez**, S.Z. Qamar, A.C. Seibi and F.K. Al-Jahwari, "Use of SET in Cased and Open Holes: Comparison between Aluminum and Steel", Journal of Materials and Design, Vol. 29, pp 811-817, 2008.
- 35) A.C. Seibi, **T. Pervez** and A. Gastli, "Finite Element Modeling of Above-Ground Wavy Pipelines – A Practical Approach," ASCE Transaction - Journal of Transportation, Vol. 134, No. 8, pp 319-326, 2008.
- 36) R.A. Siddiqui, S.Z. Qamar, S.A. Abdul-Wahab and **T. Pervez**, "Hydrogen Embrittlement in Low Carbon Steel," Archives of Materials Science, Vol. 28, No. (1-4), pp 136-142, 2008.
- 37) R.A. Siddiqui, S.A. Abdul Wahab and **T. Pervez**, "Effect of Ageing Time and Temperature on Fatigue and Fracture Behavior of 6063 Aluminum Alloy Under Seawater Influence", Journal of Materials and Design, Vol. 29, pp 70-79, 2008.
- 38) S.Z. Qamar, A.K. Sheikh, A.F.M. Arif, M. Younas and **T. Pervez**, "Monte Carlo Simulation of Extrusion Die Life," Journal of Materials Processing Technology, Vol. 202, pp 96-106, 2008.
- 39) S.Z. Qamar, A.K. Sheikh, A.F.M. Arif and **T. Pervez**, "Defining Shape Complexity of Extrusion Dies — A Reliabilistic View," Materials and Manufacturing Processes, Vol. 22, No. 7, pp 804-810, 2007.

- 40) A.C. Seibi and **T. Pervez**, "Strain Measurements in Baffles of High Density Polyethylene Mobile Water Tanks," *Experimental Techniques*, Vol. 31, No. 5, pp 37-41, 2007.
- 41) S.Z. Qamar, **T. Pervez**, R.A. Siddiqui, A.K. Sheikh and A.F.M. Arif, "Sensitivity Analysis in Life prediction of Extrusion Dies," *Journal of Achievements in Materials and Manufacturing Engineering*, Vol. 25, No. 1, pp 49-54, 2007.
- 42) A. Karrech, A.C. Seibi and **T. Pervez**, "Damping Effect on Mechanical Waves in an Elastic Solid Expanded Tubular," *ASME Transaction - Journal of Pressure Vessels Technology*, Vol. 129, No. 4, pp 698-712, 2007.
- 43) A.C. Seibi, A. Karrech and **T. Pervez**, "Post-Expansion Tube Response under Mechanical and Hydraulic Expansion – A comparative Study," *ASME Transaction - Journal of Pressure Vessels Technology*, Vol. 129, No. 1, pp 118-124, 2007.
- 44) S.Z. Qamar, A.K. Sheikh, A.F.M. Arif, **T. Pervez** and R.A. Siddiqui, "Heat Treatment of a Hot-Work Die Steel", *Archives of Materials Science and Engineering*, Vol. 28, No. 8, pp 503-508, 2007.
- 45) A.C. Seibi, **T. Pervez**, S.A. Al-Hiddabi and A. Karrech, "Coupled Stress and Pressure Waves Propagation in an Elastic Solid Tube Submerged in Fluids", *ASME Transaction - Journal of Energy Resource Technology*, Vol. 128, pp 247-256, 2006.
- 46) **T. Pervez**, A.C. Seibi and A. Karrech, "Analytical Solution for Wave Propagation Due to Pop-Out Phenomenon in Solid Expandable Tubular System", *Journal of Petroleum Science and Technology*, Vol. 24, pp 923-942, 2006.
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- 15) **T. Pervez**, S.Z. Qamar, S.A. Al-Hiddabi and F.K. Al-Jahwari, “Swelling and Material Characteristics of EPDM and HNBR Elastomers”, January 2008, [For PDO, Oman].
- 16) S.Z. Qamar and **T. Pervez**, “Evaluation of High Salinity Elastomer in Low Salinity Environment”, October 2007, [For PDO, Oman].
- 17) **T. Pervez**, S.A. Al-Hiddabi, F.K. Al-Jahwari and S.Z. Qamar, “Mechanics of Solid Tubular Expansion in Irregularly Shaped Boreholes (Ovality Problem)”, May 2007, [For PDO, Oman].
- 18) S.A. Al-Hiddabi, **T. Pervez**, F.K. Al-Jahwari and S.Z. Qamar, “Analytical Performance Estimation of Elastomer Sealing in Oil Wells”, April 2007, [For PDO, Oman].
- 19) **T. Pervez** and A. Kacimov, “Seepage Flow through Formation around Annular Barriers”, April 2007, [For PDO, Oman].
- 20) **T. Pervez**, S.A. Al-Hiddabi, F.K. Al-Jahwari, S.Z. Qamar and A. Kacimov, “Mechanical Profile Control: Literature Survey”, March 2006, [For PDO, Oman].
- 21) **T. Pervez**, S.A. Al-Hiddabi, F.K. Al-Jahwari, M. Al-Suqri and S.Z. Qamar, “Design of Expandable Tubular Test Rig”, (January 2006), [For PDO, Oman].
- 22) **T. Pervez**, S.A. Al-Hiddabi, A.C. Seibi and F.K. Al-Jahawari, “Analysis of Tubular Expansion in Horizontal Wells Using Finite Element Method”, September 2005, [For PDO, Oman].
- 23) **T. Pervez**, S.A. Al-Hiddabi and et. al., “Second Generation SQU Solar Car Project”, March 2005, [For PDO, Oman].
- 24) A.C. Seibi, **T. Pervez**, S.A. Al-Hiddabi, A. Karrech, A.S. Al-Yahmadi and A. Al-Shabibi A., “Dynamic Effects on Solid Tubular Expansion – Effect of Mandrel Stick-Slip”, May 2004, [For PDO, Oman].
- 25) **T. Pervez**, A.C. Seibi, S.A. Al-Hiddabi and A. Karrech, “Simulation of Pop-Out Phenomena in Well Bore Expandable Tubular”, January 2004, [For PDO, Oman].

- 26) **T. Pervez** and S. Al-Araimi, “Simulation of Taper-Taper Joint in Laminated Composite Plates”, January 2004, [For Sultan Qaboos University]
- 27) S.A. Al-Hiddabi, A.S. Al-Yahmadi, **T. Pervez** and A.C. Seibi, “Ultra-Short Radius Drilling Jetting Systems: Controller Design”, October 2002, [For PDO, Oman]
- 28) **T. Pervez**, S.A. Al-Hiddabi and et. al., “First Generation SQU Solar Car Project”, October 2002, [For PDO, Oman].
- 29) S.A. Al-Hiddabi, A. Al-Yahmadi, **T. Pervez** and A.C. Seibi, “Dynamic Analysis of Ultra-Short Radius Drilling Jetting Systems”, February 2002, [For PDO, Oman].
- 30) A.C. Seibi, **T. Pervez**, S.A. Al-Hiddabi, A. Karrech, “Strength of Expandable Liner Hangers (X-Liner Hanger)”, May 2002, [For PDO, Oman].
- 31) **T. Pervez**, A.C. Seibi and S.A. Al-Hiddabi, “Vibration Analysis of GRE Piping System and its Fatigue Characteristics under Cyclic Loading”, June 2001, [For PDO, Oman].
- 32) **T. Pervez** and S.A. Aziz, “Experimental, Modal and Dynamic Analysis of the MI-17 Helicopter Fire-fighting Boom”, February 2000, [For AIROD Sdn. Bhd., Malaysia]
- 33) **T. Pervez** and S.A. Aziz, “Aeroelasticity Analysis of the MI-17 Helicopter Fire-fighting Boom”, June 1999, [For AIROD Sdn. Bhd., Malaysia].
- 34) **T. Pervez** and S.A. Aziz., “Vibration Analysis of Cooling Water Pump Components (shaft and casing)”, (February 1999), [For Segari Power Plant, Malaysia].
- 35) **T. Pervez**, S.A. Aziz and M.I. Hilmy, “Stress, Fatigue and CFD Analysis of Gas Turbine Diverter Damper (WALCO heat recovery steam generator Metro Flex Type)”, December 1998, [For Tenaga Nasional Research and Development Bhd., Malaysia].
- 36) **T. Pervez**, “Simulation of Cup Drawing and Punching Processes Using Finite Element Method”, January 1998, [For SAMCAM Sdn. Bhd., Malaysia].
- 37) **T. Pervez**, “A Design and Analysis Tool for Sheet Metal Forming Processes Using Finite Element Method”, September 1996, [For Ministry of Science, Technology and Environment, Malaysia].
- 38) **T. Pervez**, “Stress and Vibration Analysis of PROTON Wira C-pillar Structure”, April 1996, [For PROTON, Malaysia].
- 39) **T. Pervez**, “Special Purpose Software for Determining the Properties of Composite Laminates Based on Lamina Properties”, May 1995, [For IIUM Research Center, Malaysia].
- 40) **T. Pervez**, “Last Minute Extraction Mechanism of Steel Cables for Timer Startup & Arming System of a Rocket”, 1994, [For SUPARCO, Pakistan].
- 41) **T. Pervez**, “Structural Design and Analysis of BADR-II Satellite”, 1993, [For SUPARCO].
- 42) **T. Pervez**, “Analysis of Composite Materials (Property Determination): Part I”, 1992, [For SUPARCO].

RESEARCH GRANTS AND CONTRACTS SUPPORT

Research Projects

#	Project Title	Role	Funding Agency	Amount (USD)
1.	Tensile-Compressive and Collapse Evaluation of PVC Pipes	Co-Principal Investigator	Petroleum Development Oman	104,000
2.	Pipeline Defects Assessment	Investigator	Petroleum Development Oman	214,656
3.	Qualification Testing of Swellable Elastomers	Co-Principal Investigator	Petroleum Development Oman	76,000
4.	Probabilistic approach for UWD Budget Incorporating Risk Analysis; <i>Mahmood Al-Kindi</i> as PI, <i>S.Z. Qamar</i> and <i>T. Pervez</i> (2012-2013)	Investigator	Petroleum Development Oman	130,500
5.	Experimental and Finite Element Analysis of GRE (Composite) Pipes; <i>S.Z. Qamar</i> as PI and <i>T. Pervez</i> (2012)	Co-Principal Investigator	Composite Pipes Industry	26,000
6.	Experimental and Numerical Study of Expandable Tubular Materials at Multi Levels of Materials and Mechanics (Multi-scale Modeling); <i>T. Pervez, S.Z. Qamar, M. Al-Maharbi</i> and <i>S.A. Al-Hiddabi</i> (2012 – 2014)	Principal Investigator	The Research Council of Oman	838,500
7.	Mono-diameter Expandable Solutions: Improving Understanding of Wall Thinning and Length Shortening of Expandable Tubular Under MoD Conditions for Deep Gas Exploration; <i>T. Pervez, S.Z. Qamar</i> and <i>S. Trautwein</i> ; (2010-2011)	Principal Investigator	Petroleum Development Oman	246,000
8.	Low Cost Expandable Research for Well Drilling & Completion; <i>T. Pervez, S.Z. Qamar, S. Trautwein, and F.K. Al-Jahwari</i> ; (2009-2011)	Principal Investigator	Petroleum Development Oman	219,820
9.	Reliability and Longevity Tests of Swellable Elastomers; <i>S.Z. Qamar, T. Pervez</i> and <i>S. Trautwein</i> ; (2009-2013)	Co-Principal Investigator	Petroleum Development Oman	290,000
10.	Design and construction of Solid Expandable Tubular Test-rig; <i>T. Pervez, S.Z. Qamar, S. Trautwein, S.A. Al-Hiddabi</i> and <i>F.K. Al-Jahwari</i> ; (2007-2008)	Principal Investigator	Petroleum Development Oman	325,000
11.	Mechanical profile Control Research: Performance of Elastomer Seals in cased and Open Holes; <i>T. Pervez, S.A. Al-Hiddabi, S.Z. Qamar, S. Trautwein, and F.K. Al-Jahwari</i> ; (2005-2008)	Principal Investigator	Petroleum Development Oman	839,415
12.	Well-bore tubular expansion: Simulation and experimental work for solid expandable tubulars; <i>T.</i>	Principal Investigator	Petroleum Development	1,100,000

	<i>Pervez, A.C. Seibi, S.A. Al-Hiddabi and A. Karrech; (2001-2005)</i>		Oman	
13.	Ultra short radius drilling jetting systems: Dynamic analysis and design of controller to control sagging phenomena; <i>S.A. Al-Hiddabi, T. Pervez, and A.C. Seibi; (2001-2002)</i>	Investigator	Petroleum Development Oman	120,000
14.	Modeling and simulation of taper-taper joints for composites; <i>T. Pervez, S. Al-Araimi and R.A. Siddiqui; (2001-2002)</i>	Principal Investigator	Sultan Qaboos University	32,600
15.	Vibration analysis of glass reinforced epoxy piping system and its fatigue characteristics under cyclic loading for Fahud field; <i>A.C. Seibi, T. Pervez and S.A. Al-Hiddabi; (2000-2001)</i>	Investigator	Petroleum Development Oman	17,931
16.	Experimental, modal and dynamic analysis of the MI-17 Helicopter Fire- fighting Boom; <i>T. Pervez and S. Abdulaziz; (1999-2000)</i>	Principal Investigator	AIROD Sdn. Bhd., Malaysia	71,000
17.	Aeroelasticity Analysis of the MI-17 Helicopter Fire-fighting Boom; <i>T. Pervez and S. Abdulaziz; (1999-2000)</i>	Principal Investigator	AIROD Sdn. Bhd., Malaysia	55,000
18.	Development of a Design and Analysis Tool for Sheet Metal Forming Processes Using Finite Element Method; <i>T. Pervez; (1996-1999)</i>	Principal Investigator	Ministry of Sci. Tech. & Env. Malaysia	110,000
19.	Special purpose software for determining the properties of composite laminates based on lamina properties; <i>T. Pervez; (1995)</i>	Principal Investigator	IIUM Research Center	16,000
20.	Prediction of failure phenomena such as delamination, peeling, FPF and LPF of CFRP and GFRP laminated composites; <i>T. Pervez; (1996)</i>	Principal Investigator	IIUM Research Center	9,000
Grand Total				4,727,872

Support Services

#	Project Title	Role	Funding Agency	Amount (USD)
1.	Establishment of New Engineering Programs at College At College of Applied Sciences – Sohar; <i>A.S. Al-Harthy, H. Al-Hadrami, T. Pervez, N. Al-Rawahi, J. Jervase, A. Al-Habsi, T. Al-Waihab and I. Ashour; (2010-2011)</i>	Lead Member for Mechanical Eng. Program	Ministry of Higher Education, Oman	680,000
2.	Design and testing of woven composite pipes for high pressure applications; <i>S.Z. Qamar, T. Pervez, and Nilupul; (2011)</i>	Co-Principal Investigator	Industrial Innovation Center, Oman	26,000
3.	Material Characterization of New Swellable Elastomer under Saline Water, Crude Oil and Acid; <i>S.Z. Qamar and T. Pervez; (2010)</i>	Co-Principal Investigator	Maersk Oil	45,000

4.	Material Characterization of RE-Packer, <i>S.Z. Qamar and T. Pervez</i> , (2008)	Co-Principal Investigator	Baker Hughes & PDO	16,400
5.	Design and construction of Second Generation SQU Solar Car Project; <i>T. Pervez, S.A. Al-Hiddabi, and others</i> ; (2003-2004)	Principal Investigator	Petroleum Development Oman	60,000
6.	Design and construction of First Generation SQU Solar Car Project; <i>T. Pervez, S.A. Al-Hiddabi, and others</i> ; (2001-2002)	Principal Investigator	Petroleum Development Oman	95,000
7.	Carbon Dispersion Analysis of Composites; <i>S.A. Al-Hiddabi, T. Pervez and A.C. Seibi</i> ; (2002)	Investigator	Amiantit Oman	9,000
8.	Vibration analysis of cooling water pump components (shaft and casing); <i>T. Pervez and S. Abdulaziz</i> ; (1999)	Principal Investigator	Segari Power Plant, Malaysia	26,300
9.	Stress, fatigue and CFD analysis of gas turbine diverter damper (WALCO heat recovery steam generator Metro Flex Type); <i>T. Pervez and S. Abdulaziz</i> ; (1998)	Principal Investigator	Tenaga Nas. R&D Bhd., Malaysia	28,400
10.	Simulation of cup drawing and punching processes using finite element method; <i>T. Pervez and S. Abdulaziz</i> ; (1998)	Principal Investigator	SAMCAM Sdn. Bhd. Malaysia	8,000
11.	Stress and vibration analysis of PROTON Wira C-pillar structure; <i>T. Pervez and S. Abdulaziz</i> ; (1997)	Principal Investigator	PROTON Sdn Bhd., Malaysia	63,000
Grand Total				1,057,100

7. OTHERS

Continuing Education:

- 1) "High Pressure Water Jet Technology", 2-day course offered by Hammelmann, Germany, February 01-02, 2008.
- 2) "Development of Research Scenarios and Strategies", 2-day workshop offered by CRA International, Sultanate of Oman, September 03-05, 2007.
- 3) "Sector Analysis, Research Capacity and Potential Pitfalls", 2-day workshop offered by CRA International, Sultanate of Oman, June 02-03, 2007.
- 4) "Formulating Science and Technology Strategy for Oman", 1-day workshop offered by CRA International, Sultanate of Oman, March 26, 2007.
- 5) "Methodology for Research Policy Formation", 3-day workshop offered by CRA International, Sultanate of Oman, January 22-24, 2007.
- 6) "Using WebCT", 5-day course offered by Center for Educational Technology, Sultan Qaboos University, Oman, January 10-14, 2004.
- 7) "2nd ABET International Faculty Workshop on Continuous Program Improvement." 2-day course offered by ABET International at National University of Singapore, Singapore, December 9-11, 2003.

- 8) “Thermal Desalination Processes – Principles, Design and Applications”, 5-day course offered by The Middle East Desalination Research Center, September 13-17, 2003.
- 9) “Malaysian Engineering Model 2000”, 1-day course offered jointly by University Putra Malaysia, Institute of Engineers Malaysia and Board of Engineers Malaysia, February 03, 2000.
- 10) “CADENCE: Integrated Design Software Training”, 2-week course offered by Yokogawa Corporation, Japan, June, 1996.
- 11) ”Automotive Structural Analysis for Engineers”, 400-hour course offered by Northrop Grumman, El-Segundo, California, USA, November - December 1995.
- 12) “Computer-Based Modeling for Design and Analysis with MSC/PATRAN”, 1-day course offered by The Macneal-Schwender Corporation (MSC) Institute of Technology, Pasadena, California, USA, October 13, 1995.
- 13) “Basic MSC/NASTRAN Linear Static and Normal Modes Analysis”, 5-day course offered by Macneal-Schwender Corporation, Pasadena, California, USA September 25-29, 1995.
- 14) “Mechanics of Composite Materials and Structures Engineering”, 4-week short course offered by UCLA Extension, University of California, Los Angeles, USA, June 1998.
- 15) “Orientation Course on Overseas Graduate Study”, 6-week course offered by National Academy of Higher Education, University Grants Commission, Pakistan, January - February 1985.