

# Omar Said Al-Abri

## CURRICULUM VITAE

### PERSONAL INFORMATION

Nationality                      Omani  
Date of Birth                    October 22<sup>nd</sup>, 1986  
Contact Details                P.O. Box: 96, P.C:132 Al-Khouth – A'Seeb, Sultanate of Oman  
Mobile: (+968) 92505555  
E-mail: [omar.alabri@squ.edu.om](mailto:omar.alabri@squ.edu.om); [omar.abri@hotmail.com](mailto:omar.abri@hotmail.com)

### EMPLOYMENT & EXPERIENCE

#### March 2, 2021 – Present

Director, Vice Chancellor Office  
Sultan Qaboos University, Sultanate of Oman

#### February 14, 2021 – Present

Assistant Professor  
Mechanical and Industrial Engineering Department, SQU, Sultanate of Oman

#### August 16, 2020 – February 13, 2021

In-charge, Directorate General for Programs and Capacity Building  
Ministry of Higher Education, Research and Innovation, Sultanate of Oman

#### Responsibilities:

- a. Oversee operational aspects of the different research and innovation, and capacity building programs of MoHERI.

#### June 30, 2020 – August 15, 2020

Acting Assistant Secretary General for Programs and Capacity Building  
The Research Council (TRC), Sultanate of Oman

#### Responsibilities:

- a. Setting the priorities in the field of programs and capacity building in alignment with the strategic annual goals of The Research Council.

- b. Oversee operational aspects of the different research and innovation, and capacity building programs of the TRC including recruitment, support, performance monitoring, knowledge management, and stakeholder management.

**January 1, 2020 – August 18, 2020**

**Director of Programs Department**

The Research Council (TRC), Sultanate of Oman

**Responsibilities:**

- a. Direct the day-to-day operational aspect of various research and strategic funding programs of the TRC.
- b. Maintain optimal operational conditions, watch over performance indicators, and set funding distribution in alignment with national priorities.

**September 1, 2018 – January 15, 2019**

**Visiting Lecturer in the Department of Mechanical and Industrial Engineering**

College of Engineering, Sultan Qaboos University, Sultanate of Oman

**Responsibilities:**

- a. Taught courses as part-time in mechanical engineering.

**November 21, 2016 – December 31, 2019**

**Manager of Submarine Groundwater Discharge (SGD) – Adaptation of an Autonomous Aquatic Vehicle for Robotic Measurements, Sampling & Monitoring.**

Institute of Advanced Technology Integration (IATI), The Research Council (TRC), Sultanate of Oman

**Responsibilities:**

- a. Liaison person to support and facilitate communication between research team at GEOMAR Helmholtz Centre for Ocean Research and IATI/TRC.
- b. Planning, coordinating and monitoring activities of the project.
- c. Develop work breakdown structures, and provides project status.
- d. Conduct periodical financial and technical evaluation of project.
- e. Establish and maintain communication with relevant stakeholders.
- f. Develop documentation and reporting systems to maintain records and communication for the project.

November 21, 2016 – November 20, 2018

Visiting Scientist, GEOMAR Helmholtz Centre for Ocean Research Kiel.

GEOMAR, Helmholtz Association, Germany, Kiel

Responsibilities:

- a. Project management and support in coordination with German counterpart.
- b. Commercialization and Business Plan Development for "Saaber", a spin-off company for Wave Glider commercialization.
- c. Supervise a study for marine technologies and market in Oman.

July 2016 – November 2016

Postdoctoral Fellow, College of Engineering, Sultan Qaboos University

Responsibility:

- a. Research work on "In-Situ Heating and Tensile Testing of Low-Carbon Steel using Micro Tensile Testing Stage from Gatan".

February 2012 – May 2016

Research Assistant, College of Engineering, Sultan Qaboos University

Responsibility:

- a. Research work on "Experimental and Numerical Work on Expandable Tubular Materials at Multi Levels of Materials and Mechanics" supported by The Research Council of Oman

September 2009 - January 2012

Research Assistant, College of Engineering, Sultan Qaboos University

Responsibilities:

- a. Research work on "Nonlinear Finite Element Analysis of Tubular Expansion" supported by Petroleum Development Oman
- b. Research work on "8.1/4" and 8.1/2" Pass Through Tubular Expansion" supported by Petroleum Development Oman
- c. Research work on "Analytical Model of Thick-wall Tubular Expansion under Compression", supported by Petroleum Development Oman
- d. Research work on "Analytical and Numerical Solutions of Tubular Expansion under Tension" supported by Petroleum Development Oman

- e. Research work on “Fast Swell Elastomer Testing for Shallow Aquifer Applications” supported by Petroleum Development Oman

## **EDUCATION**

👍 09/2011 - 06/2016

**Doctorate of Philosophy, Mechanical Engineering**

College of Engineering, Sultan Qaboos University, Muscat, Sultanate of Oman

**Thesis title:** Experimental Investigation and Constitutive Modeling of Expandable Tubular Materials at Multi Levels of Materials and Mechanics

👍 09/2009 - 08/2011

**Master of Science, Mechanical Engineering; CGPA 3.93 out of 4.00**

College of Engineering, Sultan Qaboos University, Muscat, Sultanate of Oman

**Thesis title:** Modeling and Simulation of Dynamics of Stick-Slip Phenomenon in Tube Expansion

👍 09/2004 - 06/2009

**Bachelor of Engineering, Mechanical Engineering; CGPA 3.25 out of 4.00**

College of Engineering, Sultan Qaboos University, Muscat, Sultanate of Oman

**Graduation Project:** Design of Cone - Launcher System for SET Application in Well Drilling

👍 Summer Internship (06/2008 – 08/2008)

Maintenance Department, Safah Field, Occidental of Oman Inc., Sultanate of Oman

👍 2003/2004

**High School Diploma; Science Section (12<sup>th</sup>Class); (93.35%)**

Saif bin Sultan Secondary School, Ministry of Education, Ibri, Sultanate of Oman

## **CONTINUING EDUCATION**

### **Teaching & Learning**

1. 2020 KISTEP-ISTIC S&T Innovation Training Program for High level Policy Makers; Korea Institute of S&T Evaluation and Planning in collaboration with International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO, Korea, 27-30 October 2020.

2. **Introduction to The CDIO™ (Conceive-Design-Implement-Operate) Initiative;** 3-daysworkshop organized by College of Engineering, Sultan Qaboos University, Muscat, Oman, May17-19, 2016.

Presented by Dr. Juha Kontio, Dean of Faculty of Business, ICT and Chemical Engineering, Turku University of Applied Science, Finland.

### Technical

1. **Simulation and Analysis of Solid Structures and Frames using ANSYS Workbench;** 5-daysworkshop organized by Independent Learning Center, Sultan Qaboos University, Muscat, Oman, April (10-12 & 17-18), 2016.
2. **Metallographic Samples Preparation: Sectioning, Mounting, Polishing and Etching;** Buehler Laboratory, Dusseldorf, Germany, April 14-15, 2015.
3. **International Summer School on Martensitic Transformation – ISSOMAT;** School dedicated for PhD students and young researchers, Bilbao, Spain, July 3-5, 2014.
4. **EBSD, Aztec Energy (EDS), and INCAWave (WDS) Training Courses;** Oxford Instruments, London, UK, June 2-6, 2014.
5. **Finite Element Method with Applications to Solid Mechanics, Fluid Mechanics, & Heat Transfer;** 2-days course presented by Prof. J.N. Reddy, College of Eng., Sultan Qaboos University, Muscat, Oman, December 3-4, 2012
6. **Water Management: Turning a Liability into an Opportunity;** 3-days SPE Applied Technology Workshop, Doha, Qatar, May 15-17, 2011
7. **Residual Stresses Measurement by Hole-Drilling Method;** 2-days Training on Residual Stress Analyzer (RESTAN/MTS3000) System, SINT Technology, Florence, Italy, May 09-10, 2011.

### **TEACHING EXPERIENCE**

#### Taught full-time course at SQU

- |  |               |
|--|---------------|
| a. Engineering Materials (MEIE4161)                  | (Fall 2021)   |
| b. Statics (MEIE2102)                                | (Fall 2018)   |
| c. Probability & Statistics for Engineers (MEIE4182) | (Summer 2016) |

### Responsibilities:

- Delivering lectures
- Conduct tutorial sessions
- Grading
- Maintaining office hours

### Worked as a Teaching Assistant at SQU for following courses

- |   |               |
|---|---------------|
| a. Applied Finite Element Method (MEIE5110)             | (3 Semesters) |
| b. Pressure Vessels and Piping System Design (MEIE5106) | (2 Semesters) |
| c. Computer Aided Machine Design (MEIE4101)             | (2 Semesters) |
| d. Solid Mechanics (MEIE3102)                           | (2 Semesters) |

### Responsibilities:

- Conduct laboratory sessions
- Conduct tutorial sessions (software, problem solving and help sessions)
- Deliver lectures as and when needed
- Grading
- Maintaining office hours

### **OTHER EXPERIENCES**

- Worked on "Tensile, Compressive and Collapse Testing of PVC Pipes" for Petroleum Development Oman (PDO) project.
- Worked on "Mechanical Characterization of Metallic Materials (Strength, Fractography, Microscopy)" for PDO project.
- Worked on "Selection and commissioning of sample preparation equipment for metallographic samples preparation (sectioning, grinding and polishing)", for Properties of Materials Lab., Mechanical & Industrial Engineering Department, College of Engineering, SQU.
- Worked on "Selection and commissioning of Scanning Electron Microscope (SEM)", for Properties of Materials Lab., Mechanical & Industrial Engineering Department, College of Engineering, SQU.
- Worked on "Material Characterization of Expandable Tubular", for PDO project.

- f. Worked on “Burst Testing of GRE (Composite) Pipes”, for Composite Pipes Industry, Sohar, Oman project.
- g. Worked on “Full-Scale Expansion Testing of Solid Expandable Tubular”, for PDO project.
- h. Worked on “Development of Mobile and Low-Cost Educational Platforms for Teaching Engineering Systems Control and Measurement based on Machine-Vision Approach”, Mechanical & Industrial Engineering Department, College of Engineering, SQU.
- i. Worked on “Design and Fabrication of R/C Flapping Wing Air Vehicle” for Capstone project.

### **AWARDS AND RECOGNITION**

#### **1. December 2018**

Certificate of Appreciation from The Research Council for Excellence in Job duties

#### **2. September, 2017**

Selected among 100 young, promising leaders worldwide to participate in The “Future Leaders Program” where interactive dialogues between future leaders and Nobel Laureates takes place in areas of science and technology.

Kyoto, Japan, 30<sup>th</sup> September 2017

#### **3. April, 2017**

Received the GCC Honorary Award for Recognition of Creative Young People as Part of the GCC Joint Youth Work

Manama, Kingdom of Bahrain, 26<sup>th</sup> April 2017

#### **4. October, 2016**

The Occidental Oman Student Awards 2016 for the Advancement of Post-Graduate Education.

Muscat, Oman, 18<sup>th</sup> October 2016

#### **5. May, 2015**

Certificate of Appreciation from Deanship of Postgraduate Studies at SQU for Participation in the University Day 2015

Muscat, Oman, 3<sup>rd</sup> May 2015

6. October, 2014

Winning The National Research Award 2014; Best Research Led by Young Researcher (non-PhD holder) in Energy and Industry Sector; Awarded by The Research Council of Oman

Muscat, Oman, 29<sup>th</sup> October 2014

7. May, 2013

Certificate of Recognition from Vice Chancellor of Sultan Qaboos University for the outstanding achievements in research and obtaining international awards; Awarded in the University Day 2013

Muscat, Oman, 2<sup>nd</sup> May 2013

8. December, 2012

Winning the Best Business Idea Award; Sanad Program Awards 2012; In the 10<sup>th</sup> Anniversary of Sanad Program - Ministry of Manpower

Muscat, Oman, 08<sup>th</sup> December 2012

9. November, 2012

Winning Golden Medal; International Trade Fair: Ideas, Inventions, New Products (iENA 2012)

Nuremberg, Germany, 01-04 November 2012

10. September, 2012

Winning 1<sup>st</sup> prize in Innovation Fair Oman (INFOM 2012); Organized by Industrial Innovation Center (IIC)

Muscat, Oman, 29<sup>th</sup> September 2012

11. October, 2011

Paper Selected for Presentation in the SPE International Student Paper Contest – Graduate Level – by Merit of Placement in a Regional Student Paper Contest; "Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular"

2011 International Student Paper Contest, SPE Annual Technical Conference & Exhibition, Denver, Colorado, USA, 30<sup>th</sup> October – 02<sup>nd</sup> November 2011

12. September, 2011

Scholarship for Ph.D. Degree, 2011-2015

College of Engineering, Sultan Qaboos University, Oman



13. May, 2011  
Winning 1<sup>st</sup> prize in SPE Middle East Regional Student Paper Contest – Graduate Level;  
“Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular”  
Texas A&M University at Qatar, Doha, Qatar, 16<sup>th</sup> May 2011
14. May, 2011  
Winning 2011 SPE (Society of Petroleum Engineers) Star Academic Fellowship for the Middle East Region; this fellowship provides 3300 USD/year to attend international conference or workshop once in a year for four years.
15. January, 2011  
Winning 1<sup>st</sup> prize in SPE GCC Sub-Regional Student Paper Contest – Graduate Level;  
“Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular”  
Texas A&M University at Qatar, Doha, Qatar, 22<sup>nd</sup> January 2011
16. September, 2010  
Winning 2<sup>nd</sup> prize in SPE International Student Paper Contest – Undergraduate Level;  
“Design of Cone - Launcher System for SET Application in Well Drilling”  
2010 International Student Paper Contest, SPE Annual Technical Conference & Exhibition, Florence, Italy, 19-22 September 2010.
17. April, 2010  
Winning 1<sup>st</sup> prize in SPE Regional Student Paper Contest – Undergraduate Level; “Design of Cone - Launcher System for SET Application in Well Drilling”  
2010 SPE EOR Conference, Oil & Gas West Asia, Oman, 10<sup>th</sup> April 2010.
18. February, 2010  
Winning 1<sup>st</sup> prize in SPE GCC Sub-Regional Student Paper Contest – Undergraduate Level; “Design of Cone - Launcher System for SET Application in Well Drilling”  
Sultan Qaboos University, Muscat, Oman, 22<sup>nd</sup> February 2010.
19. September, 2009  
Scholarship for M.Sc. Degree, 2009-2011  
College of Engineering, Sultan Qaboos University, Oman.

20. June, 2009

Winning 2<sup>nd</sup> prize in Final Year Project Design Competition; "Design of Cone – Launcher System for SET Application in Well Drilling"

Department of Mechanical & Industrial Engineering, SQU, Oman.

## SKILLS

### Communication & Interpersonal Skills

- ❖ Excellent written and oral communication skills (Arabic; English)
- ❖ Highly motivated individual and skillful in working with team
- ❖ Work dedication to achieve desired goals / accomplish tasks
- ❖ Able to work independently or under supervision

### Technical Skills

- ❖ Problem definition and proposal writing
- ❖ Problem solving
- ❖ Design of components/systems

### Computing Skills

- ❖ Worked with following engineering software in solving research and practical problems for the industries:
  - ABAQUS, ANSYS and ALGOR,
  - AutoCAD and SolidWorks
  - Other common engineering software such as FORTRAN, MATLAB, MathCAD, Mathematica, etc.
- ❖ Comprehensive knowledge of Microsoft Office and Internet.

### Research Skills

- ❖ Professional skill in using scanning electron microscope (SEM) with electron backscatter diffraction (EBSD) for microstructure and texture analysis of steel samples.

- ❖ Professional skill in preparing steel samples for SEM study.
- ❖ Excellent hands on work experience on determining various strength properties of materials at bulk level
- ❖ Good experience in preparing steel samples for TEM study using the full line of instruments from Gatan, including: disc punch, disc grinder, ultrasonic cutter, dimple grinder, and PIPS.
- ❖ Excellent skill in using finite element method for design and research works including Crystal Plasticity Finite Element Method (CPFEM)-based micromechanical modeling and simulations of multiphase steels undergoing slip and/or twin induced plastic deformation.
- ❖ Good experience in using Gatan Tensile and Heating Stage (MICROTEST) for in-situ micro analysis in SEM.
- ❖ Good experience in conducting experiments for residual stress measurements by hole-drilling method through residual stress analyzer (RESTAN, Model: MTS3000) from SINT Technology.

### **SCHOLARLY ACHIEVEMENTS**

#### **Refereed Journal Papers**

1. Thomas Müller, Jan Friesen, Stephan M. Weise, **Omar Al Abri**, Ali Bakhit Ali Bait Said and Nils Michelsen, 'Stable Isotope Composition of Cyclone Mekunu Rainfall, Southern Oman', Water Resources Research 2020, 56 (12). e2020WR027644. DOI [10.1029/2020WR027644](https://doi.org/10.1029/2020WR027644).
2. R. Khan, T. Pervez, N. Al Rasheedi, **Omar S. Al-Abri**, and A. Sajid, "Effects of Expansion Rate on Plasticity and Structural Integrity of Down-Hole Tubular", Int. J. of Pressure Vessels & Piping 2017, 151, 1-10.
3. **Omar 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 2016, 101, 58-74.

4. **Omar 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* 2016, 654, 94-106.
5. **Omar S. Al-Abri**, T. Pervez, S. Z. Qamar and Asiya M. Al-Bussaidi, "Optimum Mandrel Configuration for Efficient Down-Hole Tube Expansion", *ASME Journal of Manufacturing Science & Engineering* 2015, 137(6), 061005 (14 pages).
6. **Omar S. Al-Abri**, 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* 2015, 125, 218-233.
7. **Omar S. Al-Abri** and T. Pervez, "Structural Behavior of Solid Expandable Tubular Undergoes Radial Expansion Process – Analytical, Numerical, and Experimental Approaches", *International Journal of Solids and Structures* 2013, 50(19), 2980-2994.
8. Francisco J. Sanchez and **Omar S. Al-Abri**, "Tube Expansion under Various Down-Hole End Conditions", *The Journal of Engineering Research (TJER)* 2013, 10(1), 25-40.
9. T. Pervez, S.Z. Qamar, **Omar S. Al-Abri** and R. Khan, "Experimental and Numerical Simulation of In-Situ Tube Expansion for Deep Gas Wells", *Materials and Manufacturing Processes* 2012, 27(7), 727-732.

#### Book Chapter

1. T. Pervez, S.Z. Qamar, **Omar S. Al-Abri**, and R. Khan "Indirect Extrusion- A Multifaceted Approach of Sub-Surface Tubular Expansion", In S.Z. Qamar (Ed.), *Extrusion*, InTech, ISBN 978-953-51-5340-5

#### Journal Papers (In-Preparation)

1. **Omar S. Al-Abri**, T. Pervez, S.Z. Qamar and F.K. Al-Jahwari, "Finite Element Modeling of Stick-Slip Phenomenon in Tube Expansion".

2. **Omar S. Al-Abri**, T. Pervez, "Mechanical and Structural Performance of LSX-80 Steel Tubular Undergoing Cold Expansion Process – Experimental Measurements and FEM Simulations".

#### Refereed Conference Papers

1. P. Leibold and **Omar S. Al-Abri** "An integrated web-based approach for near real-time mission monitoring", In: 2019 1st International Conference on Unmanned Vehicle Systems-Oman (UVS), February 2019, Muscat, Oman. IEEE, Article number 8658284. ISBN 978-153869368-1 DOI [10.1109/UVS.2019.8658284](https://doi.org/10.1109/UVS.2019.8658284).
2. P. Leibold, W. Brueckmann, M. Schmidt, H. Al-Balushi, and **Omar S. Al-Abri** "Using an Autonomous Wave Glider to Detect Seawater Anomalies Related to Submarine Groundwater Discharge - Engineering Challenge", The American Geophysical Union (AGU) 2017 Fall Meeting, December 11-15, 2017, New Orleans, USA
3. R. Khan, T. Pervez, **Omar S. Al-Abri**, and S.Z. Qamar "Constitutive Modeling of Martensitic Transformation in Twinning Induced Plasticity Steels Subjected to Thermo-mechanical Load", International Conference on Martensitic Transformations (ICOMAT2017), July 9-14, 2017, Chicago, IL, USA.
4. **Omar S. Al-Abri**, T. Pervez, and M.H. Al-Maharbi, "Mechanical and Microstructural Changes of Fine Grained C-Mn Steel Tubular Undergoing Down-Hole Cold Expansion Process", IMECE2015-51568, ASME 2015 International Mechanical Engineering Congress & Exposition (IMECE2015), 13<sup>th</sup>-19<sup>th</sup> November, 2015, Houston, Texas, USA.
5. T. Pervez, **Omar S. Al-Abri**, and S.Z. Qamar, "Minimization of Pop-Out Phenomenon Effect in Down-Hole Tubular Expansion", IMECE2015-51653, ASME 2015 International Mechanical Engineering Congress & Exposition (IMECE2015), 13<sup>th</sup>-19<sup>th</sup> November, 2015, Houston, Texas, USA.
6. R. Khan, T. Pervez, and **Omar S. Al-Abri**, "Modeling and Simulations of Transformation and Twinning Induced Plasticity in Advanced High Strength Austenitic Steels", IMECE2015-51953, ASME 2015 International Mechanical Engineering Congress & Exposition (IMECE2015), 13<sup>th</sup>-19<sup>th</sup> November, 2015, Houston, Texas, USA.

7. R. Khan, T. Pervez, **Omar S. Al-Abri**, and S. Z. Qamar, "Modeling of Twinning Based Plasticity Phenomenon in Austenite Dominated Steels under Combined Loading", IMECE2014-37014, ASME 2014 International Mechanical Engineering Congress & Exposition (IMECE2014), 14<sup>th</sup>-20<sup>th</sup> November, 2014, Montreal, Canada.
8. **Omar S. Al-Abri**, T. Pervez, R. Khan, and S.Z. Qamar, "Experimental Investigation of Mechanically Induced Martensitic Transformation in Expandable Steel", International Conference on Martensitic Transformations (ICOMAT2014), July 6-11, 2014, Bilbao, Spain.
9. **Omar S. Al-Abri**, T. Pervez, S. Z. Qamar, and R. Khan "Finite Element Formulation for Prediction and Quantification of Stick-Slip Phenomenon in Down-Hole Tubular Expansion", IMECE2013-66228, Proceedings of the ASME 2013 International Mechanical Engineering Congress & Exposition (IMECE2013), 13<sup>th</sup>-21<sup>st</sup> November, 2013, San Diego, California, USA
10. **Omar S. Al-Abri** and T. Pervez, "Analytical, Computational & Experimental Studies of Stick-Slip Phenomenon in Tube Expansion", Proceedings of the 24<sup>th</sup> Canadian Congress of Applied Mechanics (CANCAM), 2<sup>nd</sup>-6<sup>th</sup> June, 2013, Saskatoon, Saskatchewan, Canada
11. **Omar S. Al-Abri**, "Analytical and Numerical Solution for Large Plastic Deformation of Solid Expandable Tubular", SPE # 152370, SPE International Student paper Contest at the SPE Annual Technical Conference & Exhibition (ATCE 2011), 30<sup>th</sup> October – 02<sup>nd</sup> November 2011, Denver, Colorado, USA.
12. T. Pervez, S.Z. Qamar, **Omar S. Al-Abri**, M. vd Velden, S.A. Al-Houqani and J. Van Eijden, "Full Scale Testing of Fast Swell Packer for Shallow Aquifer Applications", SPE # 148533, SPE/IADC Middle East Drilling Technology Conference and Exhibition, 24-26 October 2011, Muscat, Oman.
13. T. Pervez, **Omar S. Al-Abri**, S.Z. Qamar and S.A. Al-Hiddabi, "Stick– Slip Friction Modeling in Tube Expansion", 15<sup>th</sup> International Research/Expert Conference, "Trends in the Development of Machinery and Associated Technology", TMT 2011, 12-18 September 2011, Prague, Czech Republic.
14. T. Pervez, S.Z. Qamar, **Omar S. Al-Abri**, R. Khan and B. Al-Abri, "Material Integrity of Expandable Tubular in Adverse Environment", Proceedings of International Conference

on Applied Mechanics, Materials & Manufacturing (ICAMMM 2010), 13-15 December 2010, Sultan Qaboos University, Oman

15. **Omar S. Al-Abri**, "Design of Cone-Launcher System for SET Applications in Well Drilling", SPE # 141131, SPE International Student Paper Contest at the SPE Annual Technical Conference & Exhibition (ATCE 2010), 19<sup>th</sup>-22<sup>nd</sup> September 2010, Florence, Italy.

### Conference Presentations

1. Thomas Müller, Hajar Al Balushi, Mark Schmidt, Patrick Leibold, **Omar Al Abri** and Warner Brückmann, "Freshwater Ocean aquifers – seasonal triggers: a case study from southern Oman" [Talk] In: Workshop on "Onshore-offshore groundwater connections", Texas A&M University, College of Geosciences, College Station TX, U.S., 05.12.2019.
2. W. Brückmann, P. Leibold, M. Schmidt, **O. Al Abri**, "USVs for Environmental Monitoring - Wave Gliders hunting for submarine freshwater discharge offshore Oman" [Talk], In: First Annual Workshop on Dual Use Marine Technologies in Cyprus. Cyprus University of Technology, Limassol, 8-9 November 2018.
3. T. Pervez, S. Z. Qamar, and **Omar S. Al-Abri**, "Testing of Combined Fast Swell and Low Salinity Elastomers Under Replication of OilField Conditions", IMECE2016-68474, ASME 2016 International Mechanical Engineering Congress & Exposition (IMECE2016), 11<sup>th</sup>-17<sup>th</sup> November, 2017, Phoenix, Arizona, USA.
4. T. Pervez, R. Khan, **Omar S. Al-Abri**, and S. Z. Qamar, "Combined Effects of Transformation and Twinning Induced Plasticity on Mechanical Properties of High-Mn Austenitic Steels", IMECE2014-37504, ASME 2014 International Mechanical Engineering Congress & Exposition (IMECE2014), 14<sup>th</sup>-20<sup>th</sup> November, 2014, Montreal, Canada.

### Technical Reports

1. "Marine Environment Monitoring and Assessment of the PDO MAF Bay using a Wave Glider", Jan 2020, for PDO funded project (Project PO Ref. No.: 4500830841), Oman, *Principal Investigator* – Omar Al-Abri.

2. "Experimental and Numerical Study of Expandable Tubular Materials at Multi Levels of Materials and Mechanics", July 2016, for TRC funded project (SQU Project Code: RC/ENG/MIED/12/01), Oman, *Principal Investigator* – Tasneem Pervez.
3. "Testing and Finite Element Analysis of Expandable Tubulars for 8.1/2" Pass Thru Deep Gas Wells", March 2011, for Petroleum Development Oman (PDO), Oman, *Principal Investigator* – Tasneem Pervez.

### PUBLICATION METRICS

|                |     |                  |
|----------------|-----|------------------|
| ❖ Publications | 25  |                  |
| ❖ Citations    | 156 | (Google Scholar) |
| ❖ H-index      | 8   | (Google Scholar) |

### INVITED TALKS

1. Talk presented in the 1<sup>st</sup> Forum on the Supervision of Postgraduate Thesis, SQU; Title: "Postgraduate Studies at SQU: Personal Experience and Perspective", April 9<sup>th</sup>, 2017.
2. Seminar presented to the senior bachelor students in Mechanical & Industrial Engineering Department and Mechatronics Program as part of the seminar course (MEIE5295); Title: "What is Research and How to do it? – Personal Experience and Perspective", April 2016.
3. Technical talk presented in the College of Engineering open day 2015; Title: "On Performance Enhancement of AHSS Steels through M<sup>3</sup> Structure Control", May 2015.
4. Technical talk presented in the 2014 Annual Researcher Forum organized by The Research Council of Oman; Title: "Structural Behavior of Tubular under Expansion", October 2014.

### RESEARCH PROJECTS

| #  | Project Title   | Role | Funding Agency | Amount OMR (USD) | Period              |
|----|---|------|----------------|------------------|---------------------|
| 1. | Marine Environment Monitoring and Assessment of the PDO MAF Bay using a Wave Glider | PI   | PDO            | 33,339 (86,682)  | Oct 2019 – Jan 2020 |
|    | <b>Outcome:</b> Minimum viable product (MVP)  |      |                |                  |                     |



|    |   |                    |   |                   |           |
|----|---|--------------------|---|-------------------|-----------|
| 2. | Experimental and Numerical Study of Expandable Tubular Materials at Multi Levels of Materials and Mechanics (Multi-Scale Modeling); (PI: T. Pervez)                                     | Doctoral Student   | Research Council of Oman                                      | 237,150 (616,590) | 2012-2016 |
|    | <b>Outcome:</b> Doctoral Thesis; 4 Journal Papers; 5 Conf. Papers   |                    |   |                   |           |
| 3. | Mono-diameter Expandable Solutions: Improving Understanding of Wall Thinning and Length Shortening of Expandable Tubular Under MoD Conditions for Deep Gas Exploration; (PI: T. Pervez) | Researcher         | Petroleum Development Oman                                    | 94,616 (246,000)  | 2010-2011 |
|    | <b>Outcome:</b> 3 J. Papers; 7 Conf. Papers   |                    |   |                   |           |
| 4. | Experimental and Finite Element Analysis of GRE (Composite) Pipes; (PI: S.Z. Qamar)   | Research Assistant | Composite Pipes Industry (CPI) & Industrial Innovation Center | 10,000 (26,000)   | 2012      |

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### **PROFESSIONAL SERVICES**

- ❖ Member of the TRC-PDO Taskforce for R&D Collaboration
  - Developed the 2017 Oman Energy Industry-Academia R&D Protocol
  - Developed 'Ejaad' as a membership-based virtual collaborative platform where industry, academia and government can interact and engage in energy-related research and innovation activities. It works as a marketplace that connects academic research and know-how to industry needs, and vice versa.
- ❖ Reviewed research articles for regional/international journals and conferences:
  - Thin-Walled Structures – Elsevier
  - International Journal of Mechanical Sciences – Elsevier
  - Journal of Petroleum Science & Engineering – Elsevier
  - Journal of Petroleum Engineering – Hindawi
  - ASME 2013 International Mechanical Engineering Conference & Exposition.
  - ASME 2016 International Mechanical Engineering Conference & Exposition.

### **PROFESSIONAL SOCIETIES MEMBERSHIP**

- ❖ **2014–Present**, Member in American Society of Mechanical Engineers (ASME), Membership # 100784310.
- ❖ **2010–Present**, Member in International Society of Petroleum Engineers (SPE), Membership # 3471708.
- ❖ **2009–2010**, Member in International Society of Automotive Engineers (SAE International)
- ❖ **2006–2009**, Member in Society of Mechanical Engineering, College of Engineering, SQU

### **EXTRA-CURRICULAR ACTIVITIES**

- ❖ **2008–2009**, Head of Financial Committee, Society of Mechanical Engineering, College of Engineering, SQU
- ❖ **2007–2008**, Participated in the 3<sup>rd</sup> Engineering Student Gathering, College of Engineering, SQU

### **HOBBIES & INTERESTS**

- ❖ Repair and Maintenance of Machines
- ❖ Computing and Web Browsing
- ❖ Reading, Swimming and Traveling

### **REFERENCES**

☎ **HH Sayyid Dr Fahad Bin Al Julanda Al Said**

Vice Chancellor,  
Sultan Qaboos University, Oman

☎ **HE Dr. Saif Abdullah Al Hiddabi**

Undersecretary for Research and Innovation,  
Ministry of Higher Education, Research and Innovation, Oman

☎ **HE Dr. Ali Amur Al Shidhani**

Undersecretary for Communication and Information Technologies,  
Ministry of Transportation, Communication and Information Technologies, Oman

☎ **Prof. Tasneem Pervez**

Professor, Mechanical and Industrial Engineering Department,  
College of Engineering, Sultan Qaboos University, Oman