# Dr. Talal ETRI

### 1. CONTACT INFORMATION

Department of Civil and Architectural Engineering Sultan Qaboos University, PO Box 33 Al-Khoudh, Muscat 123, Oman

Tel: +968-2414-3760, Fax: +968-2441-3416

Mobile: +96898891573, E-mail: t.etri1@squ.edu.om



## 2. PERSONAL DETAILS

Date of birth:05-09-1972Place of birth:Tripoli-Libya

### 3. RESEARCH INTEREST

My main research interest is the numerical models for simulating hydrodynamics, sediment dynamics, morphodynamics and coastal changes in the coastal areas including short, medium-and long-term numerical modelling of morphodynamics.

The objective of using these numerical models is to analyse the physical processes on the ocean- coastal- and estuarine scale and to assess their impact on coastal evolution on variable time scales.

In addition, I am involved in several ongoing national and international under and postgraduate programs at several universities in Libya and Germany.

Since 2003, I am providing lectures on several topics related to hydrodynamics, coastal engineering, water resources and environmental engineering (Fluid Mechanics, Hydrology, Environmental Engineering, Hydraulics, Hydraulic structures).

### 4. EDUCATION

- PhD. in Coastal Geosciences and Engineering, December 2007, Christian-Albrechts-Universität zu Kiel, Germany
- M.Sc. in Computational Engineering, October 2002, Ruhr-Universität Bochum, Germany -Okayama University, Japan
- B.Sc. in Civil Engineering, April 1995, University of Tripoli, Faculty of Engineering, Tripoli Libya

#### 5. Academic and Professional Experiences

- > Jan. 2020 to present (full time)
  - Assistant Professor at Civil Eng. Dep., Sultan Qaboos University, Oman.
- > Sep. 2019 to Jan. 2020 (One semester)
  - Visiting Instructor at Civil Eng. Dep., Sultan Qaboos University, Oman.
- > Sep. 2013 to present (full time)
  - Assistant Professor at Civil Eng. Dep., The University of Gharyan, Libya.
  - Head of the scientific committee of the civil Eng. Dep.

# **Sep. 2013 to July 2018** (Part-time)

- Assistant Professor at The Libyan Academy, Tripoli, Libya.
- Assistant Professor at The Alrefag University, Tripoli, Libya (Private University)
- > Sep. 2013 to July 2018 (Part-time)
  - Assistant Professor at Azzaytuna University, Tarhuna, Libya.
- Dec. 2007 to July 2013 (full time)
  - Assistant Professor at Christian-Albrechts-Universität zu Kiel, Germany
  - Member of Coastal Research Laboratory (CORELAB) at the University of Kiel.

- Member of Technology and research centre West coast (FTZ) at the University of Kiel.
- Involved in many coastal projects in Germany, Brazil, Saudi Arabian and Indonesia.

# > Apr. 2003 to Dec. 2007

PhD. Candidate at Christian-Albrechts-Universität zu Kiel, Germany

# > Oct. 2000 to Oct. 2002

M.Sc. from Ruhr-Universität Bochum, Germany - Okayama University, Japan

- Oct. 2000 to Apr. 2002 Computational Eng., Ruhr Universität Bochum, Bochum, Germany
- Apr. 2002 to Oct. 2002 Master thesis at Okayama University, Okayama, Japan

### May 2000 to Sep. 2000

German course for beginners at Hartnackschule, Berlin, Germany

> Aug. 1998 to Apr. 2000

In-site supervisor Eng., National Consulting Bureau, Tripoli, Libya

Jul. 1997 to Jun. 1998

In-site supervisor Eng., Brega and Ras Lanuf Higher committee (National service), Brega, Libya

> 1995 to May 1997

Providing technical assistance to several consulting bureaus, free work, Libya

> 1990 to 1995

B.Sc. degree from University of Tripoli, Tripoli, Libya

> 1987 to 1990

General secondary school certificate, scientific division, Ali Wraith secondary school, Tripoli, Libya

> 1984 to 1987

Preparatory school certificate, Ali haidar Al-Sahatee preparatory school, Tripoli, Libya

> 1978 to 1984

Elementary school certificate, Al-Falouga elementary school, Tripoli, Libya

### 6. CONFERENCES AND WORKSHOPS

- 1) International Workshop on Wave propagation Moving load Vibration Reduction (WAVE2002), Okayama, Japan, 18-20 September 2002
- 2) Meersumwelt-Symposium, Hamburg, 7-8 June 2005
- 3) Meersumwelt-Symposium, Hamburg, 13-14 June 2006
- 4) The 30<sup>th</sup> International Conference on Coastal Engineering (ICCE), San Diego, California, USA, 3-8 September 2006
- 5) The 7<sup>th</sup> International Conference on Hydroscience and Engineering (ICHE), Philadelphia, Pennsylvania, USA, 10-13 September 2006
- 6) The 31<sup>st</sup> International Conference on Coastal Engineering (ICCE), Hamburg, Germany, 31 August to 5 September 2008
- 7) 1<sup>st</sup> International Remote Ocean Sensing Workshop (ROS), Büsum, Germany, 30- 31 October 2008
- 8) International Colloquium on Geoengineering, Kiel, Germany, 3 June 2009
- 9) 1<sup>st</sup> Libyan student workshop, Berlin, Germany, 26 June 2010
- 10) Acoustic Imaging, short course, Kiel, Germany, 14-18 April 2011
- 11) Kick off SPICE III, Jakarta, Indonesia, September 25<sup>th</sup> 2012.
- 12) 6<sup>th</sup> National conference for building materials and structural engineering, 29<sup>th</sup> 30<sup>th</sup> March 2016, Gharyan, Libya.
- 13) Workshop on Science, Technology & Innovation Observatory, 23-26 April 2018, Arab League Educational, Cultural and Scientific Organization (ALECSO), Tunis, Tunisia.
- 14) Workshop on Innovation & copyright in Libya, 6 November 2018, The Libyan Science, Technology & Innovation Indicators Observatory (LSTIIO), Tripoli, Libya.
- 15) Workshop on Science, Technology & Innovation Indicators, 26-28 March 2019, The Libyan Science, Technology & Innovation Indicators Observatory (LSTIIO), Sabratha, Libya.

- 16) NASA Applied Remote Sensing (ARSET) training, Remote Sensing of Coastal Ecosystems, 25 August, 1 September, and 8 September, National Aeronautics and Space Administration (NASA), USA (online).
- 17) SciVal for SQU, 30 November 2020, Sultan Qaboos University, Oman (online).
- 18) Using OneNote for E-learning, 30 November 2020, E-learning in universities and higher education institutions in the countries of the Cooperation Council for the Arab States of the Gulf, Kuwait University (online).

#### 7. PUBLICATIONS

## • Conference Papers

- ➤ Talal Etri, R. Mayerle. EFFECTIVENESS OF WAVE HINDCASTS FOR FORCING MEDIUM-SCALE MORPHODYNAMIC MODELS. Proceedings of the 30<sup>th</sup> International Conference on Coastal Engineering, San Diego, California, USA, 3-8 September 2006, 2195-2207.
- ➤ Talal Etri, R. Mayerle. EFFECT OF STORM EVENTS ON THE MORPHODYNAMICS OF TIDALLY-DOMINATED COASTAL ENVIRONMENT. Proceedings of the 7<sup>th</sup> International Conference on Hydroscience and Engineering, Philadelphia, Pennsylvania, USA, 10-13 September 2006.
- ➤ Talal Etri, R. Mayerle. MORPHODYNAMICS DUE TO STORM SURGES IN A TIDALLY-DOMINATED COASTAL ENVIRONMENT. Proceedings of the 31<sup>st</sup> International Conference on Coastal Engineering, Hamburg, Germany, 31 August to 5 September 2008, 2195-2207.
- ➤ Talal Etri, A. R. Hakim, and R. Mayerle. MODELLING OF MEDIUM-SCALE MORPHODYNAMICS IN THE PARANAGU ESTUARINE COMPLEX IN BRAZIL. Brazilian-German Cooperation on Marine Sciences Seminar, Curitiba, Brazil, September 2009 (Poster).
- ➤ Diem Nguyen, **Talal Etri**, R. Mayerle, and K. H. Runte. MORPHODYNAMIC MODELING OF A TIDAL CHANNEL NEAR AN OIL PLATFORM USING PROCESS-BASED MODEL. Proceedings of the 32<sup>nd</sup> International Conference on Coastal Engineering, Shanghai, China, 30 June to 5 July 2010.
- ➤ Talal Etri. INTEGRATION OF FIELD MEASUREMENTS AND NUMERICAL MODELING OF COASTAL ENGINEERING. 1st Libyan student workshop, Berlin, Germany, 26 June 2010 (Poster).
- ➤ Ibrahim Dovan, **Talal Etri** and Abdalhadee Gohl. Studying some of drinking water properties produced by water treatment units in Gyhrian city. First International Libyan Water Conference, April 24<sup>th</sup> 26<sup>th</sup> 2018, Tripoli-Libya.
- ➤ **Talal Etri**, Ibrahim Dovan, Mohamed Altaher and Mohamed Rajab. Study of properties of light concrete produced using polystyrene. Proceedings of the 7<sup>th</sup> National conference for building materials and structural engineering, November 5<sup>th</sup> 6<sup>th</sup> November 2018, Albhayda, Libya, 215-223.
- ▶ Ibrahim Dovan , Talal Etri, Abdaleem Alfahid, Salm Almshout and Nedal Ballah. Comparative study of some kinds of steel in the local market of Libya. Proceedings of the 7<sup>th</sup> National conference for building materials and structural engineering, November 5<sup>th</sup> − 6<sup>th</sup> 2018, Albhayda, Libya, 202-214.
- ➤ **Talal Etri**, İbrahim Dovan, Aiada Abogahela and Rabee Algahwe. Numerical Modelling of pumping stations for Yefran City-Libya. Proceedings of the International Conference on Technology, March 4<sup>th</sup> − 6<sup>th</sup> 2019, Tripoli, Libya, 215-223.

### • Journal Papers

1. R. Mayerle, Rangaswami Narayanan. **T. Etri** and Ahmad Khairi Abd Wahab. A case study of sediment transport in the Paranagua Estuary Complex in Brazil. 2015, Ocean Engineering, Vol. 106, 161-174 (Q1, IF: 3.795).

- **2. Talal Etri**, Almabruk A. Sanoussi, Kahled Rashed and Entesar Gouhl. Hydrological study to analyze the water budget of the Wade Gahn dam. 2018, Journal of Pure & Applied Sciences, Vol. 17, No.2, 67-72.
- 3. Hanan Al-Khatri, **Talal Etri**, Mohamed B. Gadi. User response to indoor thermal environment in female high school buildings in Oman. 2022, Building Research & Information, Vol. 50, Issue 1-2, 192-212 (Q1, IF: 5.322).
- **Talal Etri**, Ahmed F. Abugdera and Abdelrahman Elata. A Tidal flow model of the Western coast of Libya. 2022, Journal of Engineering Research (TJER), Vol. 19, Issue 1, 55-62 (Q4, IF: 0.38).
- **5.** Mehdi Vahidi, Moharram Pirooz, Mohammad Nikoo, Iman Varjavand, Shahab Amanant, **Talal Etri**, and Mostafa Gandomi. Optimization of double-layer perforated breakwater based on risk assessment of uncertainties. 2022, Ocean Engineering, Vol. 265, Issue 1 (Q1, IF: 4.729)

#### 9. TECHNICAL SKILLS

Delft3D and Open Delft3D Packages from Deltares (Excellent)

Regional Ocean Modeling System, ROMS (Well informed)

MIKE21 and MIKE3 from Danish Hydraulic Institute (Well informed)

ArcGIS (Well informed)

MATLAB experience (Advanced)

Instrumentation and Control (Well informed)

Programming languages and Applications (Very good)

Operating Systems (Well informed)

10. Research Projects

Timespan/place	Donor/Role	Title/Subject
November 2003 / Germany	ARCADIS CONSULT GmbH, Germany / Numerical modeller	Inspection of the construction and the operation of an offshore wind park on the Baltic Sea
May 2003 to April 2007 / Germany	KFKI, Germany / Numerical modeller	Medium-term wave modelling on the German North Sea coast
November 2009 / Germany	Landesbetrieb für Küstenschutz, Nationalpark und Naturschutz Schleswig-Holstein (LKN-SH), Germany / Numerical modeller	Evaluation of alternative actions to improve the access situation for the harbour of Friedrichkoog city using numerical modelling
November 2006 to October 2009 / Brazil	Federal Ministry of Education and Research (BMBF), Germany / Numerical modeller	Development of Improved Strategies for Sustainable Environmental Management in Brazilian Harbours
February 2008 / Germany	Amt für Ländliche Räume Husum, Germany / Numerical modeller	Inspection of possible effects from dumping activities close to a small harbour on the western coast of the Schleswig-Holstein state
February 2009 to September 2010 / Germany	RWE-Dea company, Germany / Numerical modeller	Assessment of the Morphological developments close to an offshore oil platform
July 2010 up 2014 / Saudi Arabia	King Abdulaziz University, Saudi Arabia / Numerical modeller, technical assistants and short courses lecturer	Development of a Coastal Monitoring System for the Sustainable Environmental Planning of Jeddah Coastline, Saudi Arabia
2010 to 2014 / Germany	Regierungsvertretung Oldenburg / Numerical modeller	Hydromorphological investigations of different approaches to improving the ecological state of the lower Ems river
2011 to 2013 / Germany	Landsamt für Landwirtschaft, Umwelt und Ländliche Räume / Numerical modeller	Morphodynamic at Kieler Förde
2012 to 2015 / Indonesia	Ministry of Marine Affairs and Fisheries, Indonesia / Numerical modeller	Ocean renewable energy in the Indonesian Seas
2016 Libya	Brega Petroleum Marketing Company (BPMC) / Consultancy service	HYDROLOGICAL / HYDROGEOLOGICAL INVESTIGATION FOR BREGA ALKHUMS TERMINAL

11. Supervision of B.Sc. and M.Sc. Students

11. Supervision of B.Sc. and M Author/Institution/Year	Role	Title
Dogan Kisacik / CORELAB,		Investigation of the effect of Wind Park
University of Kiel / 2004	scientific advisor	structures using non-resolved grids
Fischer, Manuel / CORELAB, University of Kiel / 2005	scientific advisor	Development, calibration and validation of a three-dimensional numerical flow model for the Kiel bight
Hermida Testa, Pablo / CORELAB, University of Kiel / 2005	scientific advisor	Hydrodynamics and sediment dynamics in the Fehmarn Belt: Simulation of a sediment dumping
Kesse, Emmanuel Kwame / CORELAB, University of Kiel / 2005	scientific advisor	Simulation of wave during a typical meteorological event in the Kiel bight
Mavromatis, Vasillis / CORELAB, University of Kiel / 2005	scientific advisor	Simulation of the wave induced currents and sediment transport in the Heilgenhafen region
Bruss, Gerd / CORELAB, University of Kiel / 2006	scientific advisor	Set-up, calibration and validation of a three dimensional numerical flow model of the Mecklenburg Bight
Leslie Malick / CORELAB, University of Kiel / 2007	scientific advisor	Development of a forward coupled three- dimensional hydrodynamic flow and wave model of the Lübeck Bight
Hendra Pangkey / CORELAB, University of Kiel / 2008	scientific advisor	Development of hydrodynamic numerical flow model for Pegametan Bay, Bali, Indonesia
Enno Dietrich / CORELAB, University of Kiel / 2008	scientific advisor	Set up of a morphodynamic model of Pranaguá Bay, Brazil
Aytac Asik / CORELAB, University of Kiel / 2008	scientific advisor	Development of a numerical model for the Elbe Estuary and the harbour of Hamburg
Farhad Nazarpour / CORELAB, University of Kiel / 2008	scientific advisor	Setting up a phase-average wave model and evaluation of its applications for Paranagua Bay in Brazil
Anne-Christine Graff / CORELAB, University of Kiel / 2008	scientific advisor	Sensitivity analysis and calibration of a sediment transport Model for Paranagua Bay, Brazil
Stefan Kraatz / CORELAB, University of Kiel / 2008	scientific advisor	Oil spill modelling and contingency planning in the bay of Paranaguá-Brazil
Alexandrova, Lidia / CORELAB, University of Kiel / 2009	scientific advisor	Development of a water quality model for the Paranaguá Bay/South Brazil
Tkachenko, Nikolay / CORELAB, University of Kiel / 2009	scientific advisor	Effectiveness of different measuring devices for the development of the Dithmarschen Bight wave model
Vargas Hernandez, Jose Mauro / CORELAB, University of Kiel / 2009	scientific advisor	Modelling of flow and sediment dynamics in the Pranaguá estuary complex, Brazil
Ebadee , Mohamed / University of Gharyan / 2015	scientific advisor	Assessment of the sewage plant for Gharyan city - Libya
Algahwe, Rabee / University of Gharyan / 2016	scientific advisor	Numerical Modelling of pumping stations for Yefran city-Libya