

CURRICULUM VITAE

NAME: Benissa M. Tolaieb

D.O.B 08/09/1967.

Marital status Married.

Country Libya.

DESIGNATION: University lecturer
Senior Corrosion & scaling Engineer (Internal corrosion /scaling monitoring and control)

QUALIFICATIONS: Ph.D. in Chemistry – Inorganic scaling kinetics on surfaces in flow condition – Oilfields. University of Leeds, UK.
MSc. degree in Chemistry, University of Windsor, Ontario, Canada.
BSc. degree in Science - Chemistry, University of Sebha, Libya

MEMBERSHIPS: National Association of Corrosion Engineers (NACE)
Professional membership of Flow Assurance Scale Team (FAST group), UK.

WORK HISTORY:

2014 – Present Faculty Scientific affairs head since 2016 & Lecturer in chemistry at the faculty of education/ Traghen/ University of Sebha – Libya.

2009 – 2014 PhD course – Barium sulfate surface scaling kinetics and Inhibition in real oilfield brine.

2007- 2008 Chemistry instructor – University of Sebha.
Taught analytical physical and material chemistry as undergrad courses.

2000 – 2003 MSc. in Chemistry. Surface science chemistry, University of Windsor, Windsor, Canada, Corrosion inhibitors behaviour on metal surfaces.

1993-2007 Senior Corrosion Engineer, Waha Oil Company

Coordinate the corrosion management activities such as corrosion, scaling, and cathodic protection monitoring activities, and preparing weekly and monthly report. Performing internal inspection and evaluation of internal corrosion and scaling data.

Waha Oil Company, Consortium of (National Oil Corporation – Libya, ConocoPhillips, Marathon Oil Corporation, Amerada Hess). Engineering Department, Corrosion Control Section, P. O Box 395, Tripoli, Libya).

Fourteen years of experience in the oil and gas industry encompassing:

Internal corrosion control in oil, gas and water treatments, prepare trial proposals for better selectivity of different chemical products available. System modelled (Portable Electrochemical Cell) to follow up, and collecting corrosion rate data using side stream test equipments onsite for decision-making, the results supported by gas/water interpreted analysis reports. During the actual trial, different techniques were implemented to monitor the system corrosivity e.g ER-probe, LPR, Weight loss corrosion coupons, Hydrogen probe. In addition, deal and exchange ideas and prepare a final report assessment with chemical suppliers companies such as Champion, TROS, Hoechst, Petrolite, Baker, Chemtec, Nalco, Clariant, Jowfe...etc

Internal scale prevention program: experienced most of the aspects related to the mechanism of scale formation problem and propose the remedy based on scale samples analysis, prediction, and scale coupons evaluation. Moreover, investigating the scale deposit propagations in supersaturated fluids in different time intervals, it was studied in different forms of treatment (continuous and squeeze treatment). The resulted data usually supported by scale inhibitor residual analysis represented in phosphonate contents.

Bio corrosion experience represented in a microorganism and bacterial growth in the water system, it includes studies carried out on two different forms of bacteria well known in the oil production systems named Sessile and Plackentonic bacteria. Several techniques were exposed to monitor the growth processes in different media and cultures depend on the salinity of the subjected media of study.

Exposed to most aspects of different gas system (sour and sweet/wet and dry) analysis, treatments, dehydration process and evaluation of the media's corrosivity. Residual amine analysis and investigations.

Cathodic Protection (CP); Measurement, data analysis/interpretation and maintenance for (tanks, pipeline, production wells and production facilities installations).

Paint inspection.

1986 – 1990

BSc. Honor degree – Chemistry. University of Sebha.

Junior graduated chemist for general chemistry applications.

TRAINING:

Training	Ability	Institute & organizations
SEM, EDX, XRD,	Surface & Image Analysis	University of Leeds/UK
Scale predictions:		
ScaleSoftPitzer	Prediction Modeling	University of Leeds/UK
Multiscale v.7	Prediction Modeling	University of Leeds/UK
Surface scaling flow system	Surface scaling investigation	University of Leeds/UK
Field corrosion and scale Inhibitions & control	Corrosion & scale assessment	Waha Oil Co

GENERAL APPLICATIONS

- Scope of work proposed for a trial in the liquid recovery plants, and gas treatment using gas corrosion inhibitor.
- Side stream tests prior to select a proper corrosion inhibitor product for Water and oil treatment.
- The application of biocide as a microorganism preventor in water flood systems.
- Scale prediction and prevention scopes application in oil/water production facilities, continuous and squeeze applications for (carbonate CO_3^{2-} and sulphate SO_4^{2+} reservoirs).
- Long term application of wide range of different corrosion and scale monitoring techniques for data collection and interpretation.
- Practiced most of the available monitoring technique; Corrosion coupons, ER probes, LPR, hydrogen probes, scale coupons, scale analysis and predictions, scale inhibitions of close cooling system, side stream test apparatus for sessile bacteria.

- Surface scaling developments in flow and static regime systems and results interpretations.

CONFERENCES & PUBLICATIONS

1. International energy foundation conference, November 1996 arranged by Tripoli University, Tripoli, Libya.
2. Pipeline Pigging and inspection conference and exhibition, June 1997, Amsterdam, Holland.
3. Presentation at material and surface analysis symposium, March 2002, University of Windsor, Windsor, Canada.
4. Presentations during PhD, FAST (Flow Assurance & Scaling Team) group- University of Herriot-Watt – Edinburgh, UK. Exposed to latest technology applications and solutions proposed, taking part in discussion of different matters related, 2009 - present.
5. Poster presentation at the Royal Academy of Engineering (RAE), May 2010, Sheffield, UK.
6. Presentation in the EuroCorr event held in Stockholm, September, 2011.
7. NACE presentation at deepwater applications symposium. March 2013.