

Prevention and control of microbial induced corrosion in fuel storage tanks

Khalil Mataqi and **B Mathew**

Kuwait Institute for Scientific Research, Kuwait

Microbial induced corrosion can lead to several deteriorating outcomes in the oil industry. The growth of microorganisms (bacteria) in fuel storage tanks results in costly maintenance measures as well as alteration in oil product specifications which leads to issues such as corrosion of steel and fiberglass reinforced plastic tanks, tank linings, elastomeric seals and hoses, low points in the piping, leak detectors, turbine pump components, filters and valves, etc. The aim of this work is to evaluate and monitor the several approaches that aid in the prevention and reduction of microbial corrosion in fuel storage tanks in Kuwait. Predator 8000, Acticide CMG, Kathon FP 1.5 Biocide and Predator 6000 are the most effective biocides among the eight tested, in terms of agar well diffusion technique.

Biography

Khalil Mataqi has completed his M.Sc in Microbiology at Kuwait University during 1988-1992. He finished his M.Phil at University of Sheffield, U.K during 1996-1998 on topic "Effects of Environmental changes on the carbon – Flux in two isogenic mutants of *Escherichia coli*". He did his PhD on topic Bio desulphurization of Organic Sulphur Compounds during 1999 – 2002. Khalil Participated in many projects like: Corrosion–pipe corrosion, Bio surfactant, Biodesulphurisation, Bio-remediation, Seawater injection for oil production, etc. Principal Investigator in: PP023 "Seawater Injection Project- North Kuwait. Principal Investigator in: PP024C: "Monitoring and Assessment of Parameter Effecting Minageesh Water Injection Plant- West Kuwait. Principal Investigator in PP017C: "The Microbiological Aspect of Oil Field Injection System Field Trials for Sea Water in North Kuwait. Assessment and Control of Biomass Growth in Fuel Storage Tank at the KNPC Phase I: Quantification and Identification of Microbial Activities in the Products Storage Tanks. Identification and Bio typing of Bacteria Isolated from Petroleum Installation in Kuwait. Evaluation Of The Effectiveness Of Biocides In Controlling The Microorganisms Causing Problems In Oil Products Tanks"-2014. He received distinguished scientist award in KISR during the period 2012-2013.

kmataqi@hotmail.com

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