The role of Greek Chemical Engineer in future upstream activities in Greece

Sotirios Nik. Longinos*, Can Bakiler, Mahmut Parlaktuna

Petroleum & Natural Gas Engineering Department, Middle East Technical University, Ankara, Turkey

Corresponding author: <u>s.n.longinos@gmail.com</u>

ABSTRACT

Greece together with Cyprus is believed that will be the next big thing in the upstream sector of Eastern Mediterranean sea while there is no any school or department of petroleum and natural gas engineering. Apart from Metallurgical and Mining Engineering School in N.T.U.A and Resources Engineering in T.U.C, which are the most, close schools compared to their curriculum, chemical engineering schools can play vital role especially until the establishment of a new school of petroleum and natural gas engineering. In this paper, there is a presentation of the main divisions of petroleum engineer together with the applications in a reservoir field. There is a description of all the tasks that a chemical engineer can participate with the appropriate training in reservoir engineering, in Enhanced Oil Recovery operations and in conformance improvement in production and injection well. Furthermore, in production engineering applications can participate in handling flow assurance problems, in surface facilities, in field processing: of produced natural gas to prepare it for transportation and sale, of produced crude oil to prepare it for storage, transportation and sale and of produced water to prepare it for disposal or injection. Yet importantly, in drilling engineering applications chemical engineer can participate by measuring the composition and rheology of drilling fluids where represent the lifeblood of the well.

Keywords: Chemical Engineer, Greece, Petroleum Applications