Corrosion is a common problem encountered in the oil and gas industry. Oil and gas pipelines, refineries and petrochemical plants have serious corrosion problems. Internal corrosion in oil and gas industry is generally caused by water, carbon dioxide (CO2) and hydrogen sulfide (H2S), and also can be aggravated by microbiological activity. Importantly, the flow regimes of multiphase fluids greatly influence the corrosion rate. For example, at high flow rates, flow induced corrosion and erosion–corrosion may occur, whereas at low flow rates, pitting corrosion is more common. Corrosion is generally related to the amount and nature of the sediments. High–velocity flow tends to sweep sediments out of the pipeline, whereas low velocity allows sediments to settle at the bottom, providing sites for pitting corrosion. Metallic equipment and constructions in oil, gas, and refinery plants contact crude oils, natural gas, petroleum products and fuels, solvents, water, atmosphere, and soil. All processes with participation of aggressive substances occur in metallic equipment at temperatures from –196 ° C to +1400 °C and pressures from vacuum to 1000bar oil gas and refinery units represent a high hazard industry with media which are flammable, explosive, toxic to human health or harmful to the environment. The combination of numerous factors makes oil, gas and refinery equipment very vulnerable to a variety of corrosion phenomena that can lead to serious accidents. On the one hand, oil, gas and refining industry has accumulated large experience. On the other hand, the development and production of new deep wells in harsh conditions, introduction of new technologies, materials, strict requirements to the quality of gas and fuels, and to the reduction of environmental pollution state new problems to safe functioning of equipment and constructions. In order to understand and to solve corrosion problems, corrosion and materials specialist should learn diverse physicochemical processes which are the basis of treatment of oil and gas and production of fuels and other chemicals. Humans in this industry are responsible in 65–85% of corrosion events. Using proper corrosion management, it is possible do diminish them. The pipeline system in the oil and gas industry is the heart for transportation of crude and refined petroleum. Nevertheless, continuous exposure of the pipeline surfaces to impurities and sources of corrosion such as sulfur and chromate is totally unavoidable. Vast employment of commercial corrosion inhibitors to minimize the corrosion is being restrained due to toxicity towards the environment. The emergence of “green” chemistry has led to the use of plant extracts and fruit wastes which have proven to be good corrosion inhibitors. This paper aims to provide insight into carrying out further investigation under this research theme for accurate inhibition efficiency measurement. In oil and gas industries, the corrosion issue has always been of great importance, with consequences similar result to those of natural disaster. Corrosion normally occurs in oil and gas pipelines. Since the pipelines play the role of transporting oil and gas from the wellheads to the processing facilities, they are exposed to the continuous threat of corrosion, from the date of commissioning up to decommissioning or abandonment. the rough estimation of the aggregate yearly cost of corrosion is $1.372 billion, which is the total of surface pipeline and facility costs ($589 million), down–hole tubing costs ($463 million), as well as capital expenses ($320 million). .((Rahuma, M.N., 2014