

Performance of Galvanized - Steel and Copper Grounding Electrodes Using Bentonite and Coconut Husk Ashes as an Additives Material to Grounding System

Abstract

Natural enhancement material often uses to improve performance of the soil resistivity in grounding system. Due to the different soil condition, focus for effective grounding go to the soil itself. Soil resistivity, moisture content and surrounding environment contribute to the impedance of the grounding. The usage of material to enhance the grounding can be considering important to maintain the grounding system performance. There are several techniques used to treat the soil using chemical substance known as grounding enhancement material. This technique produces low resistivity to the grounding electrode however the soil become contaminated. This paper will discuss about the performance of coconut husk ashes and bentonite as natural enhancement material and method being used to evaluate the results.