**ABSTRACT**

As a motto of framing the strategies to minimise the deterioration in steel reinforced concrete structures as well as the fact that the work carried out with polymers are rare and scanty, polyesters namely Poly (Glycerol azealate) (PGAZ) and 4-(1-(4-methoxy phenyl) cyclo hexyl)phenyl 9-oxodecanoate (MPOD) were synthesised and evaluated for rebar corrosion in simulated concrete pore solution (SCP) for the first time at selected concentrations of 10, 100, 1000 ppm levels with an aid of electrochemical impedance and potentiodynamicpolarisation techniques. Nyquist plots favoured increased Rct values suggesting the formation of barrier. Tafel plots represented cathodic inhibition. The experimental datas were best fitted with Langmuir adsorption isotherm facilitating monolayer adsorption. Both the methods employed were in good agreement with each other favouring maximum inhibition efficiency of 71.81% for MPOD and minimum of 57.64% for PGAZ primarily due the difference in aromatic sites as revealed in mechanism.