

EXPERIMENTAL STUDY ON NATURAL CONSTITUENT CONCRETE AGAINST CORROSION

Corrosion is the chemical process which majorly affects the functional requirements of structures. The corrosion mainly targets the steel reinforcement present in the structural member, due to the oxidation process the corrosion takes place through concrete with the help of moisture. So the way for intrusion of corrosion into steel layer is concrete. So this project aims to check internal structure of the concrete before and after addition of natural constituents. The natural constituents may be anything. After addition of that constituent, it is a duty to check the penetration of water molecules as well as other toxic gases which leads corrosion. Before invention of cement there by lot of structures had to be constructed in our world. Those structures are very much stable now even though they are subjected to heavy natural disasters. But now the growth of science is very much appreciable. But the durability of the structure by using the science is not appreciable. An engineer has designed structures for minimum of 30 years. But unfortunately that structures fails due to corrosion followed by minor crack, major crack, peel out of concrete, loss of stability of reinforcement and finally the structure fails. He designed perfectly based on the moments and shears. It fails even though very high quality of material is used in that structure .the main reason behind this science failure is , except cement remaining constituents are got out from nature and in that constituents there by no addition of chemical ingredients manually. But the cement is artificially made chemical. If natural material mixes with artificially material then definitely the life time of that mixer is questionable. So in order to avoid these situation this project research some additional natural constituent into cement to reduce the chemical presence in concrete as well as hope to generate the restriction on corrosion intrusion path.