Development of RF sensors for structural health monitoring applications in marine environment

Context
Development of RFID chipless based sensors for monitoring the degradation of concrete infrastructures localized in marine environment. The interrogation of the embedded wireless passive sensor will be made through marine drones.

Objectives
Development of RF resonators to provide frequency shift sensing capabilities associated with steel depassivation or chloride ingress in concrete.
Development of high quality factor resonator for an enhancement of the method sensitivity
Design of associated antennas for dedicated applications

References


Development of wireless and passive corrosion sensors for material degradation monitoring in coastal zones and immersed environment
