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ABSTRACT



PRESENTATION



PAPER



MICROWAVE ACTIVE THERMOGRAPHY (MIRT) FOR REBARS DETECTION AND EVALUATION IN REINFORCED CONCRETE STRUCTURES

This study will propose the utilization of active infrared thermography with microwave excitation for the identification and assessment of reinforcement bars in concrete structures. In the first stage, an numerical modelling approach will be presented. Prepared numerical model is composed

of a microwave source, a broadband antenna and a concrete structure with a selected arrangement of reinforcing bars. Numerical modeling will be used to determine the optimal measurement methodology. The numerical results will be then validated through an experimental approach.