



## Corrosion propagation monitoring legacy samples and forensic analysis on selected samples.

### Principal Investigator:

Francisco Presuel-Moreno, PhD, Professor, Florida Atlantic University, (954) 924-7236, fpresuel@fau.edu

### *Project Goal:*

The goal of this project is to better understand the corrosion propagation stage of carbon steel rebar embedded in concrete containing supplementary cementitious materials. On samples in which the rebar is corroding.



### **Objectives:**

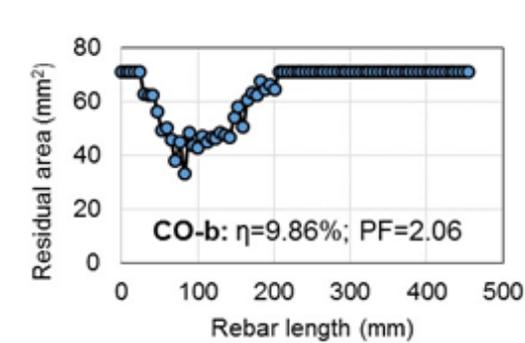
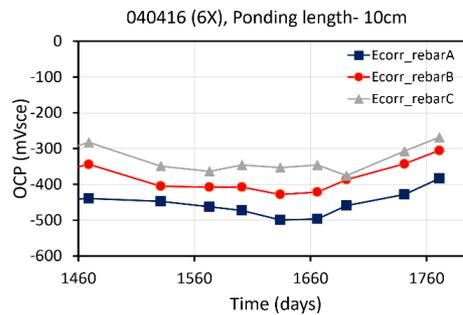
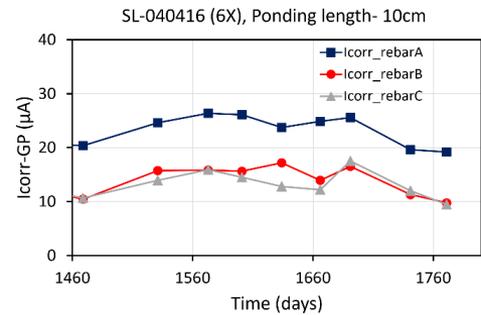
- (1) Evaluate corrosion current trends on lab specimens and outdoor specimens. Mass loss will be estimated using Faraday's law for lab specimens;
- (2) Evaluate the corrosion extend on rebars obtained from terminated samples as part of the forensic analysis. The pitting factor and the average corrosion-induced mass loss of steel rebars will be determined.



# Corrosion propagation monitoring legacy samples and forensic analysis on selected samples.

## Principal Investigator:

Francisco Presuel-Moreno, PhD, Professor, Florida Atlantic University, (954) 924-7236, fpresuel@fau.edu



Typical corrosion current and rebar potential evolution during year 1 monitoring



Selected outdoor samples showing cracks (red lines next to cracks). Several samples will be selected for forensic analysis



Expected results from the forensic analysis (shown images are from a previous study)