



UTC Project Information	
Project Title	CORRELATING IN-SITU RAPID CONCRETE DURABILITY TEST WITH STANDARIZED METHODS VIA PORE STRUCTURE ANALYSIS
University	Florida International University
Principal Investigator	Linfei Li
PI Contact Information	linli@fiu.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	IBT-ABC-UTC funds :\$37,500 Match funds : \$37,500
Total Project Cost	\$ 75,000
Agency ID or Contract Number	69A3552348322
Start and End Dates	January 1, 2025 - Active
Brief Description of Research Project	<p>This project seeks to evaluate the concrete durability through the development and optimization of a novel, non-destructive, rapid in-situ testing method known as the Water Pressure Drop Test (WPDT). Traditional methods for assessing concrete durability, such as the rapid chloride penetration test (RCPT), bulk resistivity, and rapid freeze-thaw tests, require extensive sample preparation, precise laboratory conditions, and significant time investments, often making them impractical for field use. In contrast, the WPDT enables the assessment of concrete durability on site in as little as 20 minutes, eliminating the need for sample damage or prolonged saturation processes. This innovative approach offers a cost-effective and efficient solution for real-time evaluation, addressing the critical challenges faced by the construction and infrastructure industries.</p>
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The outcomes will be tracked and reported once they are identified.
Impacts/Benefits of Implementation (actual, not anticipated)	The impacts will be tracked and reported once they are identified.

Web Links

- Reports
- Project website

<https://abc-utc.fiu.edu/repair-and-upgrade-of-steel-culverts-using-sprayable-ultra-high-performance-concrete-uhpc/>