



UTC Project Information	
Project Title	EXAMINING THE POTENTIAL OF THERMOPLASTIC FRP TAPES INSIDE HIGHLY EXOTHERMIC OVERLAYS AS A NEW MATERIAL FOR RAPID BRIDGE DECK PROTECTION.
University	University of Oklahoma
Principal Investigator	Shreya Vemuganti
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Funding Source(s) and Amounts Provided (by each agency or organization)	IBT-ABC-UTC funds :\$ 32,500 Match funds : \$32,500
Total Project Cost	\$ 65,000
Agency ID or Contract Number	69A3552348322
Start and End Dates	January 1, 2025 - Active
Brief Description of Research Project	Some scenarios for concrete bridge deck repair involve inadequate bond between overlay and bridge deck leading to various distresses, including slippage, delamination, longitudinal joints failure, fatigue cracking, and rutting. Inadequate bond does not allow the cross-section act as a single monolithic unit (Figure 3). This is detrimental to structural integrity and causes major problems associated with bridge deck failures. Detecting and repairing this damage is often costly and time-consuming due to the inaccessibility of the underlying concrete for direct inspection. To maintain durability over its design life, special attention should be given to the protection of bridge decks to prevent serious damage to the concrete and structural reinforcement. It is of vital importance to develop solutions and investigate alternatives that can not only improve adhesion between overlay and underlying concrete decks and maintain the necessary strength requirements but also reduce maintenance cost throughout its service lifetime.
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 <ul style="list-style-type: none">• Reports• Project website	https://abc-utc.fiu.edu/examining-the-potential-of-thermoplastic-frp-tapes-inside-highly-exothermic-overlays-as-a-new-material-for-rapid-bridge-deck-protection/