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| **UTC Project Information** | |
| Project Title | MPC-412 – Fatigue Strength of CFRP-repaired Reinforced Concrete Bridge Girders under Service Temperature |
| University | Colorado State University |
| Principal Investigator | Hussam Mahmoud |
| PI Contact Information | Associate Professor  Phone: (970) 491-6605  Email: hussam.mahmoud@colostate.edu |
| Funding Agencies | USDOT, Research and Innovative Technology Administration |
| Agency ID or Contract Number | DTRT12-G-UTC08, Modification No. 1 |
| Project Cost | $130,000 |
| Start and End Dates | January 1, 2013- December 31, 2013 |
| Project Duration | 1 Year |
| Brief Description of Research Project | The objectives of this project are as follows   1. Collect experimental data on the fatigue response of CFRP-repaired RC girders under various service temperatures. 2. Develop finite element models for fatigue life predictions of the girders. 3. Recommend best repair practice for increasing the fatigue life of the repaired girders. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | The study was just concluded. An effort will be placed on promoting the application of this repair on CDOT bridges. |
| Impacts/Benefits of Implementation  (actual, not anticipated) | Using this retrofit approach, we are able to prelong the service life of RC bridges that are subjected to deterioration and fatigue cycles. The added fatigue life could be doubled or tripled, which would result in significant cost savings. |
| Web Links   * Reports * Project Website | https://www.ugpti.org/resources/reports/details.php?id=949 |