



Advances in Ultra-High Performance Concrete for Upgrading and Repairing Aging Structures

CALL FOR COLLABORATION

FIU Global is posting this Call for Collaboration in an effort to facilitate new collaborations between academic and scientific programs at FIU and interested parties in Colombia. We welcome responses from any academic and non-academic parties with mutual interests. For any questions in regard to this initiative, or the network member or partner status, please contact us at global@fiu.edu.

FIU: [OSS SCHOOL OF CONSTRUCTION, INFRASTRUCTURE AND SUSTAINABILITY PROJECT: ADVANCES IN ULTRA-HIGH PERFORMANCE CONCRETE FOR UPGRADING AND REPAIRING AGING STRUCTURES

INFORMATION AND INSTRUCTIONS

Overview

Ultra-high performance concrete (UHPC) is an advanced material with superior mechanical properties including compressive strength of five times conventional concrete and high tensile strength and durability. At FIU, a non-proprietary version of UHPC is developed aimed at reducing the material cost. To accelerate the development and implementation of UHPC in Colombia, this call for collaboration seeks to join the effort and develop a Colombian version of UHPC which can contribute to the growth of Colombian construction industry

ADVANCES IN ULTRA-HIGH PERFORMANCE CONCRETE FOR UPGRADING AND REPAIRING AGING STRUCTURES has the following main areas of focus:

1. Development of non-proprietary UHPC mix for Colombian Construction Market





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- 2. Application of the developed mix in upgrading aging infrastructures
- 3. Application of the developed mix in repairing deficient structural elements

We identified research areas of interest by the Ministry of Science, Technology, and Innovation in Columbia in areas such as "adaptation and mitigation to climate change" and "sustainable urban and rural environments". Thus, the goal of this Call for Collaboration is to offer an opportunity to collaborate with Colombian Universities in the development of non-proprietary UHPC mix for the Colombian construction market.

Collaboration Scope

Topics/expertise of interest include:

- Structural Engineering
- Material Engineering
- Construction Management
- Bridge Engineering

Topics/Expertise not of interest at this time include:

N.A.

Resources/Funding

FIU: ABC-UTC, funded by U.S. Department of Transportation (USDOT), funds several research projects in the area of ultra-high performance concrete.

Collaborator: Collaborators will be able to provide training and workshops to Columbian collaborators in the area of UHPC. No USDOT funds will be awarded to the external partner as part of this Call for Collaboration at this time.

Project Contact





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