

Shenghua Wu, Ph.D, P.E., LEED AP

Associate Professor of Civil, Coastal, and Environmental Engineering Director, Interdisciplinary Center for Sustainable Engineering (ICSE) Gulf-Coast Center for Addressing Microplastics Pollution (GC-CAMP)

23 H-Index

\$7.8 M Research Funding

67 Research Articles

Research Interests

Sustainable Construction Materials Pavement Engineering Interdisciplinary Collaboration Asphalt Technology

Solid Waste Reuse

Environmental Justice, STEM Education

Experimental Capabilities

Low-Carbon Emission Materials Testing 100% Reclaimed Asphalt Pavement Design and Construction

Warm Mix Asphalt, Cold Mix Asphalt Microplastics Measurement



(Left) Pavement design and construction; (Right) Field core extraction for evaluation.



Forensic investigation of roadway's long-term field performance.

Dynamic Shear Rheometer (DSR) set-up for asphalt binders' various performance characterizations.

2021 **Journal of Cleaner Production** "Repurposing Waste Plastics into Cleaner Asphalt Pavement Materials..."

2022

Journal of Transportation Engineering

"Case Study on Forensic Evaluation of Field Performance of 100% Reclaimed Asphalt Pavement Cold Mix with Rejuvenator in a Low Volume Road"

2020 Construction and Building **Materials**

"Characteristics of Waste Tire Rubber (WTR) and Amorphous Poly Alpha Olefin (APAO) Compound Modified Porous Asphalt Mixtures"

2023 Road Materials and **Pavement Design**

"State of the Art Review on the Incorporation of Fibres in Asphalt Pavements"

2024 **Advances in Civil Engineering Materials**

"Evaluation of High-Temperature Rheological and Aging Characteristics in Asphalt Binders Modified with Recycled HDPE & PP"

