Bureau of Research

Pragna Shah

TRB Sessions Attended by Pragna Shah

- The Innovation Culture: Building New Bridges Between Research and Practice
- Asphalt Concrete Cracking: Testing, Modeling, and Field Studies
- U.S. DOTs Safety Data Initiative: Visualizing and Using Data for Safety
- State DOT Innovation Programs: Identifying New Technologies and Practices from the Front Lines
- Visibility of Signs and Roadway Markings
- Exhibits: Provide free training
- Beyond Research: From Innovation to Economic Growth

- **Truck Mounted Flagger**
  - Automated Flagger Assistance Device
    - Three color variable message boards
    - Automated stop/slow paddle
    - Flashing red/yellow signal
  - Benefits
    - Safety: Eliminates the need for a flagger on the ground
    - Time Savings: In setting up and moving between work zones
    - Cost Savings: Increases productivity in poor weather

Key Takeaways:

- Success of safety projects relies on the input and experience of front-line employees
- With consistent implementation of innovation, we can make better infrastructure and safer environment
- Training is available from FHWA grants
- New technologies are out there
- Critical role for data
- States need to communicate with each other and with national agencies – Peers learn best from peers.

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Giri Venkiteela, PhD

TRB 2019

Giri Venkiteela
Bureau of Research

TRB STANDING COMMITTEES

Standing Committee on Polymer Concretes, Adhesives, and Sealers (AHD40)-**Member**

Standing Committee on Concrete Bridges (AFF30)-**Member**

Standing Committee on Corrosion (AHD45)- **Member and Research Coordinator**

PRESENTATIONS

NJDOT research projects presentations

1. Lectern Session 1194-Corrosion Protection of Metallic Structures and Marine

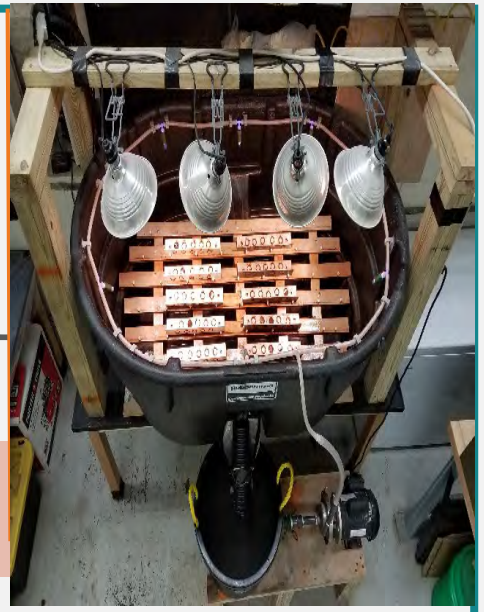
Presentation 19-00490 –Giri Venkiteela, NJDOT

- ❑ A New Protocol for Evaluating the Durability of Coatings Used for Reducing Corrosion of Steel Structures

2. Lectern Session 1462 -Evaluation of Transportation Structures Using Non-Destructive Testing Methods

Presentation 19-00490 –Behnoush Golchinfar, Stevens University

- ❑ Steel Material Degradation Assessment via Vibro-Acoustic Modulation Technique



Other presentations attended

1. Novel Techniques for Reinforcing Cementitious Materials
2. Pothole Repairs and Patch Performance
3. Sustainability in Construction and Infrastructure
4. Visibility of Signs and Roadway Markings
5. Poster Sessions

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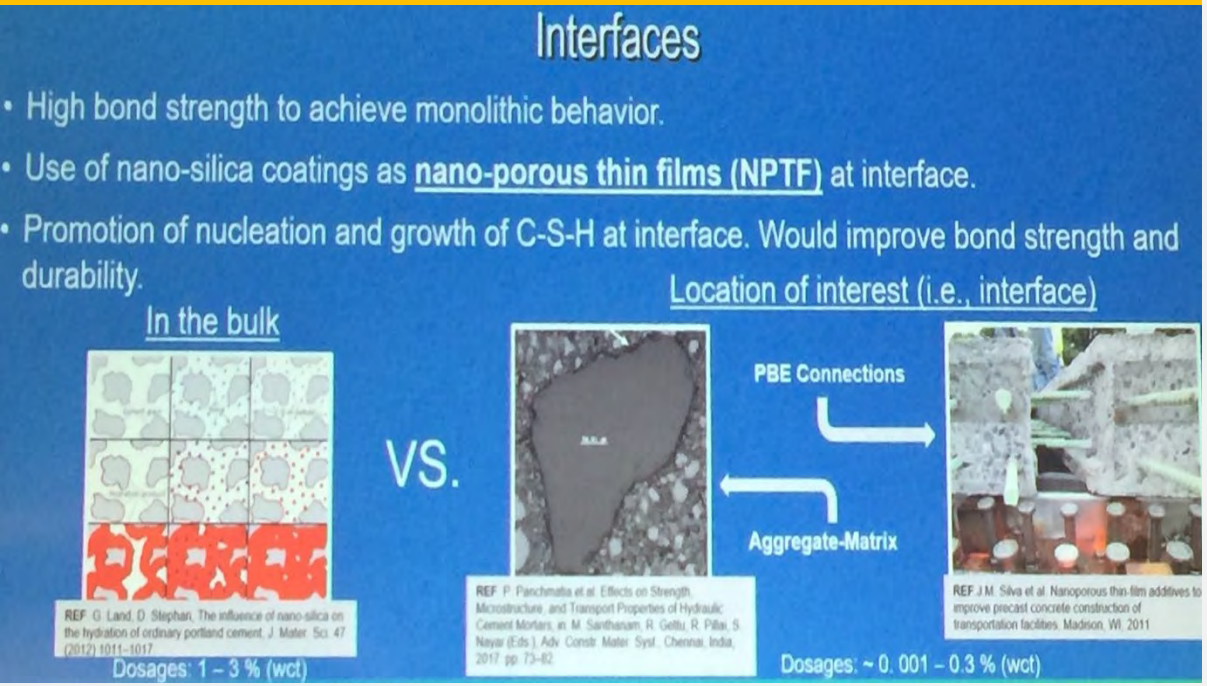
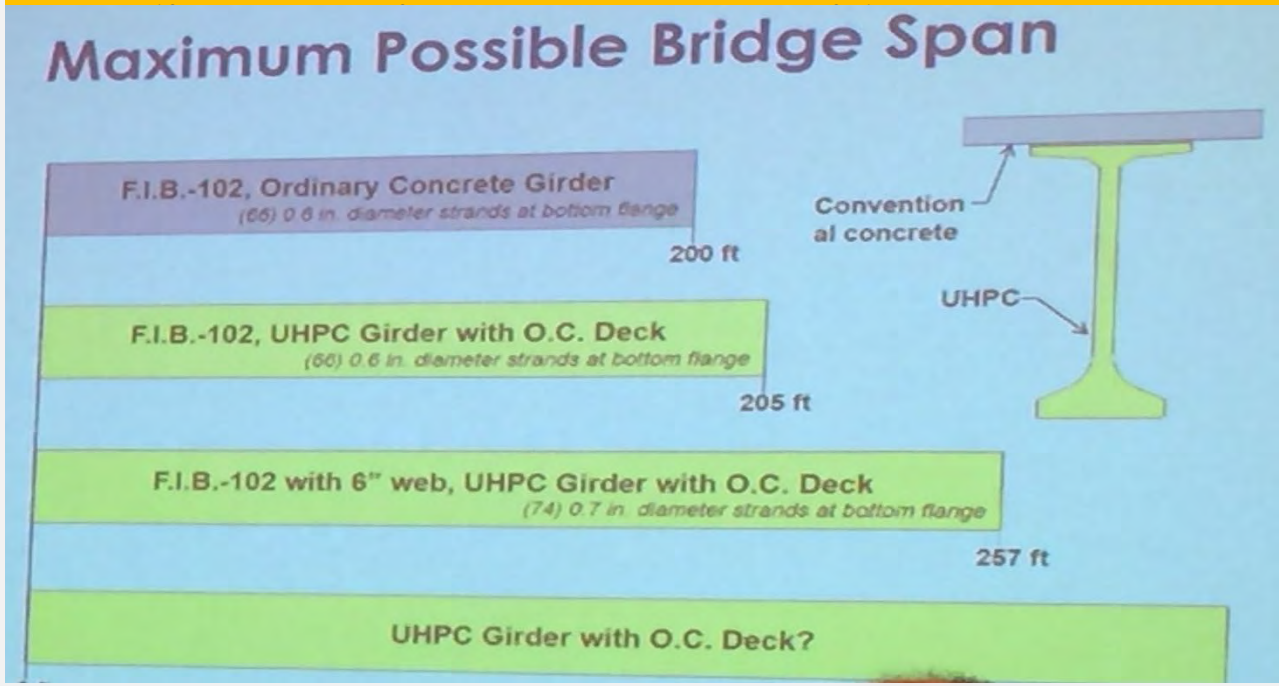
Nano-Silica Coatings to Improve the Tensile Bond Strength of Cementitious Grouts



Development of UHPC Structural Design Guidance- FHWA



TAKEAWAYS

- Corrosion committee- A systematic approach is needed for better quantify the corrosion in infrastructures
- Other DOTs are very interested to work with NJDOT on corrosion paint testing
- Concrete bridge committee- *Hot Topics: ABC, UHPC, Composite Materials, etc*. FHWA looking for partnership in implementing Development of UHPC Structural Design Guidance
- Pothole repair is a major issue that require extensive research. TRB 2019 presentations showed various tools and materials for better repair of potholes
- Pooledfund study platform can bring States together to solve various common issues.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