NCPTT Mortar Examination Workshop
August 12-14, 2014
Natchitoches, Louisiana

Schedule for August 12-14

**Tuesday**
9:00 – 10:30

**Lecture**
Welcome (NCPTT)
Introduction
   Architectural conservation
   Guidelines for Practice
   Standards
Overview of workshop
   Lectures
   Lab sessions
   Site visits
Terminology
   Types of mortar joints
   Brick bonds
The role of mortar
   Accommodates movement
   Weather resistant
   Contributes to appearance
   Replaceable material
Unit masonry
   Brick, natural stone, terra cotta, etc.

10:30 – 10:45

**Break**

10:45 – 12:30

**Lecture**
Mortar components
   Binders, including clay, lime, Natural Cement, Portland cement
   Aggregate, including sand and other aggregate
   Mortar mixes
Curing processes
   Simple cements
   Complex cements

12:30 – 1:30

**Lunch**

1:30 – 3:15

**Lab Session**
Lab safety (NCPTT)
Stereomicroscope use
Examination of mortar samples
Writing descriptions

3:15 – 3:30

**Break**
3:30 – 4:30  **Lab Session**  
Pulverizing samples  
Use of electronic and triple beam balances  
Acid digestion

4:30 – 5:00  Wrap up and Q&A

**Wednesday**

9:00 – 9:30  **Lab session**  
Check on mortar testing  
Oven drying components may be required

9:30 – 10:15  **Lecture**  
Problems with mortars  
- Erosion and other weathering  
- Soluble salts  
- Inappropriate mixes  
- Inappropriate installation  
Discussion of similar materials  
- Plaster and stucco, concrete, patching materials, etc.

10:15 – 11:15  **Lab session**  
Sieve analysis of sand (if sand is dry)  
Examination of similar materials

11:15 – 11:30  **Break**

11:30 – 12:30  **Lecture**  
Lab reports  
- Evaluating test data  
- Providing recommendations  
- Specifications for repointing

12:30 – 1:30  **Lunch**

1:30 – 5:00  **Site visits (NCPTT)**  
Magnolia Plantation  
Melrose Plantation
Thursday

8:30 am – 9:00  **Lab Session**
Finish mortar examination
Clean-up

9:00 – 10:30  **Lecture**
Instrumental Methods
Petrographic examination
X-ray diffraction analysis
SEM/EDS
Case studies
Heidemann Ranch
UT projects

10:30 – 10:45  **Break**

10:45 – 11:30  **Wrap up and Q&A**