PERSONNEL QUALIFICATIONS

Karla A. Salahshour | Associate Principal

EDUCATION

- The University of Texas at Austin
  - Bachelor of Science, Architectural Engineering, 2010
  - Master of Science, Civil Engineering, 2012

PRACTICE AREAS

- Petrography
- Laboratory Evaluations
- Construction Materials
- Historic Preservation
- Masonry
- Flooring and Underlayments
- Pavement Investigation

REGISTRATIONS

- ICRI Concrete Slab Moisture Testing Technician
- Professional Engineer in AZ, IN, KS, MD, NM, OH, and PA

PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- Association for Preservation Technology International (APTI)
- ASTM International
- International Concrete Repair Institute (ICRI)
- Society of Concrete Petrographers

TECHNICAL COMMITTEES

- ACI 221 - Aggregates
- ACI 232 - Fly Ash in Concrete
- ACI 523 - Cellular Concrete

CONTACT

ksalahshour@wje.com
216.642.2300
www.wje.com

EXPERIENCE

Karla Salahshour specializes in the evaluation and characterization of historic and modern building materials. Her work in WJE's Cleveland materials laboratory focuses on the petrographic examination of concrete, mortar, grout, brick, stucco and plaster, natural and manufactured stone, and other construction materials. Ms. Salahshour investigates the causes of distress in construction materials, characterizes cementitious materials, and evaluates durability concerns in hardened concrete as part of laboratory evaluations.

Ms. Salahshour also conducts field evaluations that often grade into laboratory testing, such as evaluating distress in concrete slabs and pavements and evaluating the performance of flooring and coating systems as well as investigating distressed reinforced concrete structures. Her field experience includes the investigation of stone cladding panels, mass masonry structures, terra cotta facades, EIFS and stucco systems, and terrazzo.

REPRESENTATIVE PROJECTS

Petrography

- Carvins Cove Dam - Roanoke, VA: Examination of deteriorated concrete due to alkali-silica reaction
- Blue Racer Natrium Plant - Natrium, WV: Examination of fire-damaged concrete
- Medical Center - Beachwood, OH: Investigation of lightweight cellular concrete
- Yale University, Welsh Hall - New Haven, CT: Examination of stone masonry
- Denso Facility - Livonia, MI: Examination of a pigmented metallic shake

Laboratory Evaluations

- Dulles Airport - Washington, D.C.: Evaluation of failed terrazzo flooring systems
- Ahuja Medical Center - Beachwood, OH: Investigation of terra cotta rain screen panels
- Ohio State University, McCorkle Aquatic Pavilion - Columbus: Investigation of delaminated ceramic pool tiles
- Gilmore Academy Natatorium - Gates Mills, OH: Investigation of pool coating blisters
- InfoCision Stadium - Akron, OH: Investigation of rail post pocket grout
- Providence Point - Scott Township, PA: Examination of aggregate base course

Historic Preservation

- Washington National Cathedral - Washington, D.C.: Examination of mortar
- Hoover Dam - Henderson, NV: Evaluation of terrazzo plaza
- Edison Monument Tower - Menlo Park, NJ: Investigation of mosaic concrete repairs
- Union Theological Seminary - New York, NY: Examination of cast stone spires
- Perry's Victory and International Peace Memorial - Put-In-Bay, OH: Observations of efflorescence cleaning and mortar repointing
- Salk Institute for Biological Studies - La Jolla, CA: Evaluation of original concrete for restoration

Flooring and Underlayments

- Manufacturing Facility - Solon, OH: Investigation of static dissipative floor coating failure
- Urgent Care Facility - Kent, OH: Investigation of abrasion and impact damage on flooring material
- Medical Center - Beachwood, OH: Evaluation of substrate slab moisture
- Rice University - Houston, TX: Investigation of floor blisters
- Corning Museum of Glass - Corning, NY: Evaluation of floor densifiers and sealers
- Houston Methodist Hospital - Nassau Bay, TX: Investigation of blistered terrazzo flooring

Pavement Investigation

- Dallas-Fort Worth International Airport - TX: Examination of concrete apron
- Los Angeles International Airport - CA: Investigation of concrete runway
- Colorado Springs Airport - CO: Investigation of D-cracking in pavement
- Indianapolis International Airport - IN: Investigation of concrete surface distress
- Denver International Airport - CO: Investigation of concrete deterioration and evaluation of concrete repairs
- Honda Plant - OH: Evaluation of roller-compacted concrete
- Nova Place - Pittsburgh, PA: Investigation of porous pavement distress