Association for
Preservation Technology
Technical Committee for Modern Heritage

Concrete Conservation, Repair, & Reinvestment Training

Wednesday, April 12, 2023 12:30-5pm Eastern

Wednesday, April 19, 2023 12:30-5pm Eastern

(Two Parts)

Virtual Seminar & Panel Discussion

Continuing Education Credits:

4 CEUs/AIA LUs each training sessions (8 CEUs total)

This training brings together leading practitioners to share their expertise in technically sound, cost-effective approaches for addressing concrete deficiencies and reinvesting wisely for the extended life and improved performance of concrete facades. Topics include how concrete buildings of the 1950s-80s were constructed and intended to function; assessment and treatment of concrete façade infiltration, deterioration and failure; best practices for undertaking facade repairs to perform well while respecting original design intent; and strategies for ensuring quality control and minimizing project risks.

Attendees will learn:

- How concrete buildings of the 1950s-1980s were constructed and intended to function.
- Causes and assessment of concrete facade infiltration, deterioration, failure and other deficiencies.
- Best practices for undertaking facade repairs to perform well while respecting original design intent.
- How to ensure compatibility between new and existing materials.
- How to choose among intervention options for correcting concrete deficiencies, degradation, and discoloration.
- Scope of work and specification writing tips for ensuring quality control and minimizing project risks.

Register for this event:

REGISTER NOW

APT Members: $150

Non-Members: $200

Emerging Professionals Members: $75

Emerging Professionals Non-Members: $100

Students: $50

Schedule of Speakers

Wednesday, April 12th
12:30-5:00 Eastern

Welcome - Kelly McLeod, Co-Chair, APT Technical Committee for Modern Heritage

Overview: Concrete Project Planning & Quality Control - Paul Gaudette, Wiss Janney Elsner Principal & Fellow, American Concrete Institute: Practitioner's perspective. Caroline Alderson, and Walter Tersch, U.S. General Services Administration: Federal Acquisition

Concrete Metaphysics - David N. Fixler, FAIA, Architecture Planning Preservation

Mid-Century Modernist Concrete Facades: Deterioration, Assessment, and Repair Design - Matthew Bronski, P.E. Senior Principal, Simpson Gumpertz and Heger

Repair of Modernist Concrete Facades: Repair Process and Matching - Paul Gaudette, Principal, Wiss, Janney, Elstner Associates, Inc.: Case Studies of repair process and matching

Session 1 Wrap up: Top Take Aways and Lessons Learned

Wednesday, April 19th
12:30-5:00 Eastern

Precast Surfaces, Coupling Technology and Design - Jack Pyburn, Architect and Principal, Lord Aeck Sargent

Applicability of Cathodic Protection to Historic Concrete Structures - Gina Crevello, Echem Consultants

Team Approach to Executing a Facade Study - Christy Johnson, Senior Project Manager, Oculus Inc.

Paints for Concrete - Norman Weiss, Adjunct Professor of Historic Preservation, Columbia University

Session 2 Wrap up: Top Take Aways and Lessons Learned

Each presentation will be followed by a 15-minute break

Speaker Biographies:

Paul Gaudette, FACI, is a Principal at Wiss, Janney, Elstner Associates, Inc. Since joining WJE almost forty years ago, Mr. Gaudette has participated in the evaluation and development of recommendations for repair of modern and historic concrete structures and other distress conditions, selection of coatings for exterior facades, design of anchorage details; water penetration testing, preparation of repair drawings and specifications, and field observation during construction. Mr. Gaudette has authored numerous papers on repair of modern and historic concrete and is co-author of Preservation Briefs 15: Preservation of Historic Concrete published by the National Park Service. Paul has also co-authored a chapter on reinforced concrete in Twentieth-Century Building Materials. Mr. was lead instructor for eight two-day workshops on repair of historic concrete for the APTI. He is a fellow of the for the American Concrete Institute (ACI) and also an instructor to the Seminar Series, Concrete Repair Basics, and the two-day Concrete Repair Workshop.

Norman R. Weiss is a technical specialist in the analysis and preservation of traditional building materials. Trained as an analytical chemist, he is recognized for his activities in the field of masonry cleaning and repair. He has worked on hundreds of stone, brick, and terra cotta buildings, principally in North America. Among his best-known projects are the west front of the U.S. Capitol, New York's Trinity Church, and Frank Lloyd Wright's concrete masterpieces, Fallingwater and the Guggenheim Museum. His current research is on the consolidation of limestone and marble, and the development of novel lime-based mortars, grouts and paints. He has taught at Columbia University since 1977 and is a frequent lecturer for preservation societies and masonry industry organizations throughout the United States. Prof. Weiss is Vice President of MCC Materials, Inc.

Matthew Bronski, P.E., is a Senior Principal at Simpson Gumpertz & Heger Inc. (SGH), where he has practiced for the past 27 years. He is the Practice Leader for Preservation Technology across all five SGH offices nationwide. Matthew has led SGH's exterior rehabilitation design and/or assessment projects efforts on numerous significant mid-century modernist buildings, including buildings designed by Hilario Candela, Eduardo Catalano, Philip Johnson, Paul Rudolph, Eero Saarinen, Josep Luis Sert, Skidmore Owings and Merrill (SOM), and Frank Lloyd Wright. He has published over a dozen technical papers and articles on building facade and envelope issues and has served as a guest lecturer in historic preservation or architecture courses at numerous universities. He holds an undergraduate degree in engineering (Tulane), and graduate degrees in architecture (Penn) and historic preservation (Penn). In 2009, he became only the second engineer in 113 years to receive the prestigious Rome prize.

Gina Crevello is the Principal of Echem Consultants. She was professionally trained at Columbia University's Graduate School of Architecture Planning and Preservation in architectural materials conservation. Upon completing her MSc, she completed the Post Graduate Certificate in Conservation of Historic Buildings and Sites as the program's first certificate graduate. She has 24 years of experience in building diagnostics with 16 years of experience in electrochemical assessments, treatments, and corrosion science. She exclusively focuses on corrosion failures of steel frame and reinforced concrete structures and material degradation. This work includes corrosion diagnostics, non-destructive testing, life cycle assessments, durability engineering, and electrochemical remediation. Ms. Crevello has been involved with the majority of installed Impressed Current Cathodic Protection Systems on landmark structures in the US to date. Her work includes iconic structures, such as the Guggenheim Museum and the United States Holocaust Memorial Museum. Gina is a past president of APT, has served on APT's Board of Directors for APTI and as co-chair for the Training and Education Committee.

David Fixler, FAIA, LEED AP co-founder of APT's Committee on Modern Heritage and a former principal at EYP, is an architect specializing in heritage conservation and adaptive re-use, with particular focus on modern properties. His past projects include Alvar Aalto's Baker House and Eero Saarinen's Kresge Auditorium and Chapel – all at MIT, Louis Kahn's Richards Laboratories at the University of Pennsylvania, and the United Nations Headquarters in New York. David has taught and lectured around the world, his work and writings have been published internationally, and he has helped organize and lead numerous conferences on a wide range of topics. A Peer Review Architect for the United States General Services Administration, he serves in a leadership capacity in organizations such as APTI, the Society of Architectural Historians, and both Docomomo International and Docomomo-US

Jack Pyburn, FAIA, is a principal and preservation architect with Lord Aeck Sargent in Atlanta, Georgia. Jack is a member of the DOCOMOMO/US Board of Directors and a former chair of the AIA/Historic Resources Committee. He is a member of the Advisory Board of the National Center for Technology and Training and the Tuskegee University School of Architecture. He has taught preservation courses at the Georgia Tech College of Architecture, Kennesaw State University, and the University of Georgia. Jack has lectured widely on preservation and architectural precast concrete. His preservation projects have been recognized by the American Institute of Architects, the National Trust for Historic Preservation, the National Park Service, and state-wide preservation organizations.

Christy Johnson AIA, NCARB is a Senior Project Manager with Oculus, Inc. As lead team coordinator for the prime Architect/Engineer, she has worked closely with GSA project managers, facilities management teams, building access specialists, material engineers and others to see complex and challenging concrete facade studies and repair projects through to successful completion.

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Committee co-chairs:
Caroline Alderson, FAPT
Kelly Sutherlin McLeod, FAIA