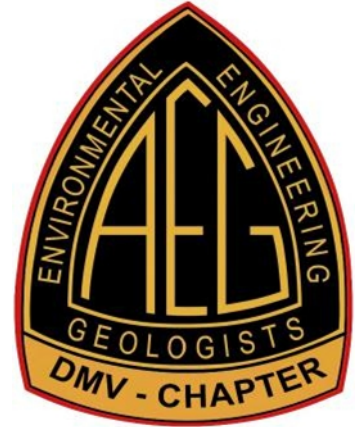
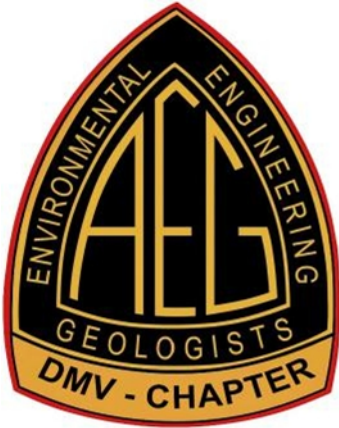


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Notice of Meeting

Thursday, October 23, 2025

Presentation Category:
Petrography

Topic:

Application of Petrography to Highway Materials

Presenter:

Steven J. Stokowski, CPG, PG
Stone Products Consultants

Abstract

Although many highway professionals consider petrographic analysis primarily for concrete failure investigations, it has broad applicability to all materials encountered in highway construction. Modern petrographic investigations resolve performance problems and characterize raw materials to prevent poor performance. Petrography identifies the materials used in all components of highways: soil and rock cuts and fills, slopes, foundations, pavements, bridges, tunnels, and incidental construction.

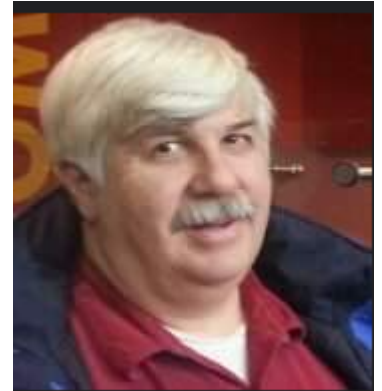
We sometimes forget that a highway consists of more than just bridges and pavements constructed of cement and bituminous concrete. Historic and modern building materials, including brick, dimension stone, renders, and terracotta, can develop problems that petrographic analysis will resolve. Mineralogic analyses, including petrography, determine if natural and engineered pozzolans and geopolymer binders are suitable as concrete binders. Polymer asphalt is also routinely investigated using fluorescence microscopy.

In the as-built highway, petrography can resolve problems ranging from expansive or acid-generating fill to the performance of pavement surface layers and bridges. A relatively new problem has arisen with the usage of crushed concrete as a granular base, which often leaches lime that reforms as calcite in pavement drains. Another relatively new area of investigation is of bituminous concrete, where the mica content of manufactured sand, the absorption of asphalt into aggregate, the presence of dust layers on aggregate, the compactability during construction, and the degree of RAP/virgin AC homogenization are measured.

About the Presenter:

Steven J. Stokowski, CPG, PG Senior Geologist, Petrographer

Steve's primary professional interests are Aggregates and Petrography. He has a MS in Geology from the South Dakota School of Mines and Technology and a BS in Geology from nearby George Washington University. Steve is Chair of AEG Atlanta, past Chair of AEG BWH, Treasurer of the AIPG Atlanta Section, past Chair of SME DC and of the Industrial Minerals and Aggregates Division of SME, the 2014 recipient of the Herbert C. Hoover Award from the Washington DC Section of SME, and active in other professional societies. He is Registered or Certified as a Geologist by AIPG and in Georgia, Maine, Virginia and other states.



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<https://www.aeg-bwh.org/ticketpurchase>

Meeting Information

Date/Time:

**Thursday, October 23, 2025
6:00-8:30 PM**

Location:

**Amphora Diner Deluxe
1151 Elden Street
Herndon, VA 20170**

Cost (dinner and meeting):

Members:	\$40
Non-members:	\$45
Retiree Members:	\$30
Students:	\$20
Virtual Meeting	\$10

Agenda:

6:00-6:45 PM	Social
6:45-7:30 PM	Dinner
7:30-8:30 PM	Presentation
7:30-8:30 PM	Presentation (Virtual Attendees)

Virtual (Hybrid) Meeting Attendance (via Zoom)

(Virtual attendees will be sent a meeting attendance link via email prior to the meeting presentation).

