SME Society for Mining, Metallurgy & Exploration®

Washington DC Section

The Washington DC Section of SME proudly presents

Hendrik G. van Oss - Cement and the environment - An inconvenient chemistry.

Abstract: Hydraulic cements are the binding agents in concrete and most mortars and stuccos. Cements of one form or another have been used for millennia but modern hydraulic cements date to the late 18th century with Portland cement patented in 1824 and the first commercial production in the USA in 1875. Today, world output exceeds 4 billion metric tons. The manufacture of portland cement, especially the intermediate product called clinker, is a highly heat-intensive process. The carbon dioxide emissions from the fuels required to produce clinker and from the calcination of limestone total ~ 0.7 ton per ton of portland cement. After thermal power plants, the world cement industry is the largest industrial emitter of carbon dioxide. Cement plants, however can efficiently and safely consume large quantities of alternative fuels and raw materials, including many forms of wastes, and have been described as ideal drivers of industrial ecosystems.

Date:	Wednesday Jan 9, 2019
Time:	Social Hour 11:30 - 12:00 am Section Business/Luncheon 12:00 - 2:30 pm
Location:	Maggiano's Little Italy At Tysons Galleria 2001 International Drive Mclean, Virginia 22102
Metro Access:	Silver Line Tysons Corner Station next to Route 123
Buffet Luncheon:	
Soup:	Creamy Tomato Basil
3 Salads:	Caesar, Orzo Pasta, Italian Tossed
3 Sandwiches:	Fazio's Italian Hero Roast Beef (Blue Cheese & Mixed Greens) Grilled Vegetables with Lemon & Spicy Basil Mayo
3 Deserts:	Triple chocolate Cookies Vera's Lemon Cookies Seasonal Whole Fruit
Cost:	$ 25 for DC Section Members and Guests
RSVP:	Please reply by email to George K. Schuler at gkschuler@verizon.net by Friday January 4, 2019

Biography: Hendrik van Oss, an economic geologist, recently retired from the U.S.G.S.'s National Minerals Information Center after 23 years, where he was the commodity specialist for cement, ferrous slags and coal combustion byproducts. Before joining the USGS, he was a country specialist in the International Minerals Division of the U.S. Bureau of Mines for 7 years, where he covered the mining industries of Turkey and various countries in Africa. Prior to that, he spent a decade an exploration geologist for various gold mining companies in the western United States. He holds Bachelor's and Master's degrees in geology from Lafayette College and Dartmouth College, respectively.