

Material Health and Historic Architecture

Course Description

- This presentation is intended to guide and inform discussion among designers and product manufacturers.
- We follow four famous global architectures – Egypt's pyramids, Myanmar's Buddhist temples, France's Eiffel Tower, and in the US, Eero Saarinen's General Motors Technical Center – monumental projects all - and ask--
 - *What are the materials of health concern in these buildings?*
 - *How could these projects be built without the materials used?*
 - *What are the tenants of green chemistry?*
 - *Where is green chemistry taking us?*

Learning Objectives

- Understand the types of construction for four monumental architectures
- Relate the role of building materials - dirt, stone, wood, and metal – to the role of polymers, textiles, paints and sealants, to the function of building durability
- Learn chemicals of concern for example building projects and itemize potential health hazards and risks
- Speculate on building changes with green chemistries
- Apply lessons learned to modern construction objectives and popular building rating systems