PROPERTIES AND TESTING OF REFRACTORIES

August 13, 14 & 15, 2024

A Three-Day Course Sponsored by the Edward Orton Jr. Ceramic Foundation and The American Ceramic Society

https://ceramics.org/professional-resources/career-development/short-courses/properties-and-testing-of-refractories

COURSE DESCRIPTION:

This course is an intensive combination of classroom lectures and laboratory demonstrations that address most of the significant properties of refractories, both theoretically and experimentally. The morning lectures will emphasize common refractory testing techniques and microstructural-property relationships for all classes of refractories. The afternoon laboratory sessions are designed to give the participants experience with common refractory tests. The individual sessions are titled in the accompanying outline of the daily topics.

WHO WILL BENEFIT FROM THIS COURSE:

Engineers, managers, contractors, purchasing agents, furnace operators, maintenance supervisors, and technicians who are involved in the manufacturing, marketing, research and development, or consumption of refractory materials will find this course beneficial. A high level technical or engineering background is not essential to take this course, although technical professionals will find the subject matter informative and useful.

COURSE OBJECTIVES:

The objectives of this course are to introduce the participants to the fundamentals of common refractory testing techniques and the microstructural-property relationships for all classes of refractories. The laboratory sessions are designed to provide the participants with direct experience in fabricating test specimens and the application of standard ASTM test methods.

Day 1
- Thermal Properties
- Mechanical Properties
- Corrosion Properties
- Thermo-Mechanical Properties
- Standard Test Methods
- Laboratory Session

Day 2
- Silica Refractories
- Alumino-Silicate Refractories
- Basic Refractories

Day 3
- Special Refractories
- Standard Test Methods
- Laboratory Session

- Non-Oxide Refractories
- Composite Refractories
- Monolithic Refractories
- Insulating Refractories
- Standard Test Methods
- Laboratory Session
**Morning Sessions**: Hilton Garden Inn, Columbus/Polaris; 8535 Lyra Dr, Columbus, OH 43240

**Afternoon Sessions**: Edward Orton Jr. Headquarters; 6991 S Old 3C Rd Hwy, Westerville, OH 43082

Distance between hotel and Orton: 3.8 miles

**HOTEL SITE:**
- To book your hotel room at the Hilton Garden Inn, click on this [link](#).

**AIRPORT:**
- [John Glenn Columbus International Airport (CMH)](https://www.cmh.org)