Physical Tester – Basics of Cement Testing
3- TO 4-DAY PROGRAM FOR UP TO 10 PARTICIPANTS

Program Content:

- **Sampling & Control Tests for Cement**
  Why do we test?
  When do we test?
  How do we test?

- **Fundamentals of Cement Testing**
  Classroom and hands-on training for standard paste and mortar tests
  Tips not clearly addressed in test methods
  Understanding test results

- **Use & Maintenance of Equipment**
  Expectations of cement & mortar lab staff
  Calibration of equipment
  Impact of poorly maintained equipment

- **ASTM Standards & Specifications**
  These test methods will be included in the classroom and hands-on sessions:
  - Compressive Strength of Mortar per ASTM C109
  - Autoclave Expansion per ASTM C151
  - Normal Consistency of Cement per ASTM C187
  - Time of Set per ASTM C191 and ASTM C266
  - Air Content of Mortar per ASTM C185
  - Flow Determination of Mortar per ASTM C1437
  - False Set of Paste C451 and Mortar C359
  - Blaine Fineness per ASTM C204
  - Fineness by the 45-μm (#325) Sieve ASTM C430

- **Testing for Optional ASTM Requirements**
  - Sulfate resistance
  - False set
  - Drying shrinkage
  - Mortar expansion (ASR)

- **Other Cementitious Materials**
  - Blended cement
  - Fly ash
  - Slag cement
  - Silica fume

Who should attend:
Laboratory staff who tests cement and cementitious materials, including new laboratory staff members, QA/QC supervisors/managers, lab supervisors, project managers, or anyone interested in the basics of testing cementitious materials.

Instructor:
Michael Morrison is Manager, Certification Program Development, for ACI. He has 35 years of experience in the cement and concrete industry, with 18 years of experience supervising or performing physical tests of cement and cementitious materials and has trained more than 150 physical testers.

Seminar handouts:
- Special Program Binder with notes and all required ASTM standards assembled by the instructor
- At the conclusion of the seminar, one copy of ACI's Cement Tester Training Video and one copy of PCA's Design and Control of Concrete Mixtures will be provided for the laboratory.

Membership:
Participation in this program includes a 1-year membership in ASTM Committee C01, Cement.

Optional:
A written and performance examination is available upon request.