

Improving Concrete Quality

THURSDAY, MARCH 15, 2018, ATLANTA, GA



PURPOSE AND BACKGROUND

Improved concrete quality has far reaching benefits—in improved performance, reduced time and costs, a lower environmental footprint of concrete and an overall improvement in the quality of concrete construction. However, it is hard to find a course focused on the subject of improving concrete quality. Based on quality surveys and award submissions, it has been observed that the industry does not commonly track quantifiable quality indicators and, as a result, the return on quality investments is not well understood. Improving Concrete Quality, a book authored by one of the instructors, addresses these issues. That book, as well as other NRMCA resources provides the basic content for the course.



WHAT WILL YOU LEARN?

- How do you know if you have good quality? What should be your quality metric?
- How to become more profitable through better quality?
- What are all the key statistical calculations you need to know in concrete?
- How to control the mixing water content in concrete?
- How to deal with temperature and delivery time variations?
- What is the most effective way to ensure that your material ingredients are of good quality?
- How to improve batching accuracy, mixing uniformity?
- How to identify non standard testing and curing? How to improve testing quality?
- Tests a producer should do, internal audits and many more...

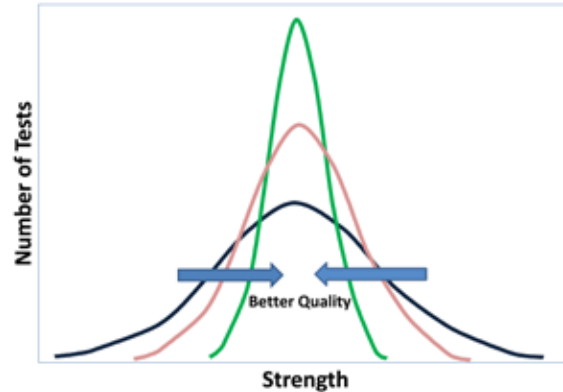
WHO SHOULD ATTEND?

This course will be of significant value to concrete producers that will come away with readily implementable steps to manage variability and attain a more consistent product, thereby seeing performance benefits and cost savings. Concrete ingredient material suppliers will benefit by understanding the needs of their customers and to develop information on variability that can help their quality systems. The course will be of interest to contractors and testing laboratories. The course will help testing labs measure and improve testing quality. Design professionals can benefit from this course by recognizing the opportunity for improved quality in concrete construction and the evolution to performance-based specifications.

TEXT/HANDOUTS – PUBLICATIONS WORTH \$350+

- NEW Improving Concrete Quality book
- Printout of the presentations
- NRMCA QC Manual Section 1
- Quality Management System for Ready Mixed Concrete Companies
- NRMCA Quality Award, Survey and Certification Information

- Variables that Influence Concrete Compressive Strength
- Code and Standards Requirements for Acceptance Testing – Presentation with notes and checklist
- NRMCA/ASCC Pre-Construction Checklist
- Related Technology in Practice topics
- Related Specification in Practice topics and P2P Presentation



INSTRUCTORS

Kevin A. MacDonald, FACI, is president and principal, Beton Consulting Engineers LLC, Mendota Heights, MN, with specific expertise in the production and performance of concrete. He is a licensed professional engineer in Minnesota and Ontario, Canada, and is a fellow of ACI. MacDonald co-chairs ACI subcommittee 130-B, Production/Transport/Construction; ACI committee 306, Cold Weather Concreting; chairs the NACE task group; and the TAC awards task group and is an active member of several ACI committees. He is the current president of the ACI Minnesota chapter and serves on the Steering Committee of the Aggregate & Ready Mix Association of Minnesota. He is an active member of ASTM Committees C01, Cement; C09, Concrete and Concrete Aggregates; and C15, Manufactured Masonry Units; the American Society of Civil Engineers (ASCE) and Professional Engineers Ontario. He has published a number of papers dealing with the durability of concrete and is a recipient of the ASCE Charles Pankow Award for Innovation for work on high-performance concretes with 98% reclaimed materials. MacDonald received his master's degree and Ph.D. in engineering materials from the University of Windsor where he has won many awards for academic achievement.

Karthik Obla, Ph.D., P.E., FACI, is vice president, technical services at NRMCA. With nearly 25 years of experience in concrete technology, he is responsible for NRMCA's concrete producer quality initiatives as well as various educational and technical programs. He supports NRMCA's P2P initiative and directs the activities of the NRMCA Research Laboratory. A fellow of ACI and a winner of ACI's Young Professional Achievement Award and ASTM Award of Appreciation from the Sustainability Committee, Dr. Obla is an active member of various ACI, ASTM, and TRB technical committees. He has served as chair for ASTM 09.49—Pervious Concrete, and ACI 232—Fly Ash and Natural Pozzolans. He has published a book on concrete quality and a chapter in a book on concrete sustainability and has over 75 technical articles in journals. He holds a B. Tech in civil engineering from IIT (BHU) Varanasi, India and a M.S. and Ph.D. from the University of Michigan, Ann Arbor. He is a licensed professional engineer in the state of Maryland and has served as vice-president and president for the ACI San Antonio Chapter.

IMPROVING CONCRETE QUALITY

Thursday, March 15, 2018, ATLANTA, GA

COURSE SCHEDULE:

7:30 am	Registration
8:00 am	Overview of Quality Department
8:15 am	Quantifying Impact of Quality Systems
8:45 am	Statistical Concepts for Monitoring Quality
9:30 am	Monitoring & Controlling Water Content in Mixtures
10:15 am	Break
10:30 am	Quantifying Variability of Ingredient Materials
11:30 am	Quantifying Variability Associated with Manufacturing
12:30 pm	Lunch
1:30 pm	Quantifying Variability Associated with Testing – Monitoring Test Data
2:15 pm	Producer Product Testing to Minimize Variability
2:45 pm	What to do with acceptance test data – Case study of 3 projects
3:15 pm	Impact of Specifications on Quality
3:30 pm	Break
3:45 pm	The Quality-Sustainability Link
4:00 pm	Quality Management System (developing a Quality Plan NRMCA Quality Certification Program)

COURSE LOCATION:

Associated Builders and Contractors of Georgia, Inc.,
8975 Roswell Road, Atlanta, GA 30350

SUGGESTED NEARBY HOTEL :

BAYMONT INN & SUITES-ROSWELL

1500 Market Blvd, Roswell, GA 30076

Phone: 770-992-7200 | Fax: 770-993-7133

Rate for a King or Queen Standard is \$94

SHUTTLE SERVICE: To and from ABC offices from 7am to 5pm.

PARKING: Parking at the ABC offices is free and there are plenty of spaces available. You should enter the lot through the main entrance.

CLOSEST AIRPORT: Hartsfield-Jackson Atlanta International Airport (ATL) is the closest airport to the training site (approx. 28 miles from ABC).

AIRPORT SHUTTLE INFO: Transportation to and from airport can be made with Super Shuttle (800) 258-3826 or www.supershuttle.com. Shuttle reservation must be made a minimum of 24 hours in advance for either direction. A taxi from the airport to the Roswell area will cost approximately \$80. Our recommendation is to rent a car.

ALTERNATIVE TRANSPORTATION: If you do not want to rent a car, you can take the train (MARTA) from the airport to the North Spring MARTA station where the Baymont Inn & Suites Roswell GA shuttle can pick you up. To request the shuttle pickup from the North Springs Station you will have to call the hotel directly at 770-992-7200.

CANCELLATION POLICY

All cancellations after 02/21/18 will not be refunded. Cancellations must be made in writing to NRMCA Meetings Dept., 900 Spring Street, Silver Spring, MD 20910 or by fax to (301) 565-8200. NRMCA reserves the right to cancel the conference. If that should occur, NRMCA will notify registrants by 02/21/18 and refund the entire registration fee but not unused airline tickets, hotel reservation fees or other travel related expenses.

REGISTRATION FORM: Improving Concrete Quality

Thursday, March 15, 2018, ATLANTA, GA

(Register using the attached registration form or online at www.nrmca.org/Education/Seminars/improving_concrete_quality.htm)

Name: _____

Title: _____

Company: _____

Address: _____

City: _____

State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____

REGISTRATION FEE

\$295

PAYMENT METHOD

Check (make check payable to NRMCA)

Mail registration form and check to:

SunTrust Bank, c/o NRMCA

P.O. Box 79433

Baltimore, MD 21279

VISA MasterCard American Express

Card Number: _____

Expiration Date: _____ CVC#: _____ 

Name on Credit Card (print): _____

Signature: _____

REGISTER ONLINE: www.nrmca.org/Education/Seminars/improving_concrete_quality.htm

OR FAX THIS REGISTRATION FORM TO:
MEETINGS DEPT., NRMCA
(301) 565-8200



This course earns **8 credits** toward a CCPf designation in the Concrete Technology career track. CCPf, standing for Certified Concrete Professional, is the highest professional designation in the industry. For more information, visit www.nrmca.org/steps.

