



# OREGON ACI SEMINAR MAY 2<sup>nd</sup>, 2017

## TROUBLESHOOTING CONCRETE CONSTRUCTION



With: **Kim Basham, PhD, PE, FACI**

**TUESDAY** **CROWNE PLAZA HOTEL**  
**MAY 2<sup>ND</sup>** **14811 KRUSE OAKS DR**  
**7:00<sup>AM</sup> – 4:00<sup>PM</sup>** **LAKE OSWEGO, OR 97035**

Engineers receive 6 PDH's  
for Attending Seminar  
Contractors receive 6 CEU's  
for Attending Seminar

**\$295.<sup>00</sup>**  
**Per Attendee**

**SPACE IS LIMITED TO 100 SEATS, SO BE SURE TO REGISTER EARLY!!**

**TAKE  
10% OFF  
FOR OACI  
CORPORATE  
MEMBERS!**

**7:00<sup>AM</sup> – 7:30<sup>AM</sup>**

**REGISTRATION**

### **AM SESSION**

**7:30<sup>AM</sup> – 8:00<sup>AM</sup>**

*Continental Breakfast will be provided*

**8:00<sup>AM</sup> – 9:15<sup>AM</sup>**

**Evaluating Low Concrete Strength (75 min)**

*Field vs. Lab Cured, Evaluating Strengths, Non-destructive Testing (NDT) for Strength*

**9:15<sup>AM</sup> – 9:30<sup>AM</sup>**

**BREAK**

**9:30<sup>AM</sup> – 10:30<sup>AM</sup>**

**Troubleshooting Concrete Cracks (60 min)**

*Why Concrete Cracks, Intrinsic vs. Structural Cracks, Restrained-shrinkage Cracks*

**10:30<sup>AM</sup> – 10:45<sup>AM</sup>**

**BREAK**

**10:45<sup>AM</sup> – 11:30<sup>AM</sup>**

**Troubleshooting Concrete Cracks, continued (45 min)**

*Controlling Cracks: Concrete Shrinkage, Jointing & Reinforcement*

**11:30<sup>AM</sup> – 12:30<sup>PM</sup>**

**LUNCH**

*A Full Lunch will be provided*

### **PM SESSION**

**12:30<sup>PM</sup> – 1:30<sup>PM</sup>**

**Troubleshooting Formwork and Surface Finishes (60 min)**

*Formwork Pressures, As-cast Finishes - Smooth Form vs. SF-1.0, SF-2.0 & SF-3.0, Imperfections vs. Defects*

**1:30<sup>PM</sup> – 1:45<sup>PM</sup>**

**BREAK**

**1:45<sup>PM</sup> – 2:45<sup>PM</sup>**

**Troubleshooting Steel-troweled Floors (60 min)**

*Aggregate Shadowing, Window of Finishability, Premature Finishing, Air-Entrainment, Surface Delaminations, Crusting*

**2:45<sup>PM</sup> – 3:00<sup>PM</sup>**

**BREAK**

**3:00<sup>PM</sup> – 3:55<sup>PM</sup>**

**Troubleshooting Scaling of Exterior Slabs (55 min)**

*Durable Concrete, Air Entrainment, Premature Finishing, Steel-troweling vs. Floating & Brooming, Overworking the Surface*

**3:55<sup>PM</sup> – 4:00<sup>PM</sup>**

**Closing Remarks**

# ABOUT THE SPEAKER:



**Kim Basham, PhD, PE, FACI**  
**KB Engineering, LLC**  
*Senior Structural Engineer*

## EDUCATION

*B.S. and M.S. in Structural Engineering from Virginia Polytechnic Institute & State University and a Ph.D. in Civil Engineering from the University of Wyoming.*

## ACTIVITIES AND EXPERIENCE

Dr. Basham is a member of the ACI 306 – Cold Weather Concrete Committee, ACI 302 – Concrete Floor and Slab Construction, and ACI 347 – Formwork Construction of the American Concrete Institute; American Society of Civil Engineers; The Concrete Society, American Society of Concrete Contractors; and International Concrete Repair Institute. He is a certified Trainer and Examiner for the Concrete Field Testing Technician, Concrete Flatwork Technician & Flatwork Finisher, and Concrete Lab I programs sponsored by ACI. Dr. Basham has taught structural analysis, concrete and masonry design, and concrete material courses at Virginia Military Institute, the University of Wyoming, and the University of Colorado at Denver. He has been an instructor in many concrete seminars and short courses directed towards architects, engineers, and contractors across the United States and abroad. He has published over 150 articles, coauthored *Excavation Safety* published by the Aberdeen Group, and been a contributing writer for *Concrete Contractor* magazine. Dr. Basham has also served as an expert witness in numerous litigation and arbitration cases concerning concrete construction, materials, and engineering.

Prior to KB Engineering, Dr. Basham worked as a structural engineer with Concrete Engineering Specialists LLC, Structural Services Inc. and a concrete/construction engineer with Baker Concrete Construction Inc. Prior to joining Baker, Basham was the Engineering Director for World of Concrete and Contributing Editor for *Concrete Construction* magazine. He was also the Director of Engineering for CTC-Geotek, Inc. and an Assistant Professor of Civil Engineering at the University of Wyoming and the Virginia Military Institute. Dr. Basham specializes in structural analysis, concrete design, mix designs, concrete specifications and preconstruction, formwork, shoring and reshoring, temporary structures, mass concrete placements, concrete forensic investigations, structural evaluations, condition surveys, destructive and nondestructive testing, concrete repair, concrete construction techniques, and concrete technology and research.

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**Please complete the registration form below (can be filled out in Adobe Acrobat or printed and completed).**

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Choose Amount of Payment:  **\$295** Non-Member  **\$265.<sup>50</sup>** (\$295 Less 10%) OACI Corporate Member  **\$265.<sup>50</sup>** (\$295 Less 10%) OACI Individual Member

Corporate membership: \$500 yearly fee\*, unlimited use for all members of your organization.

\*Individual membership: \$90 yearly fee\*, for personal use only.

Add-On Option:  **\$200** Vendor Tabletops Available (Space is limited)

**\*To Register for an OACI Membership Please Visit: [www.OregonACI.org](http://www.OregonACI.org)**

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