Day 1

8:00  Welcome To PCA  Michelle Wilson  PCA

8:30  CONSTRUCTION PROCEDURES - A GLOBAL PERSPECTIVE  Michelle Wilson  PCA

General Overview
QA/QC
ASTM C 94, ACI 301 Specifications- what has been promised?

10:00  BREAK

10:15  FRESHLY MIXED CONCRETE PROBLEMS  George Seegebrecht  CCE

- Slump loss  - Control of air content
- Workability  - Construction & design errors
- Setting time and mixing temp.  - Erratic batching errors
- Stickiness and harshness  - Segregation
- Cement/admixture compatibility  - Yield
- Bleeding

12:00  LUNCH

1:00  THERMAL CONTROL OF CONCRETE  John Gajda  MJ2 Consulting

- Effects of High Temperatures
- Mass Concrete
- Methods of Thermal Control

2:30  BREAK

2:45  TROUBLESHOOTING CONCRETE FLOOR CONSTRUCTION  Scott Tarr  NorthStarr Concrete

- Floor Flatness Tolerances
- Minimizing Drying Shrinkage
- Curling
- Abrasion Resistance

4:30  EVALUATION & ADJOURN
Day 2

8:00 THE CONDITION SURVEY & CAUSES OF DISTRESS- Michelle Wilson
  • How to Conduct an Investigation
    - Field Kit,
    - Selection of samples, -good vs. bad

10:00 BREAK

10:15 THE CONDITION SURVEY – Part 2 Michelle Wilson
  • Hardened Problems
    - Low Strength
    - Scaling and Spalling
    - Disintegration
      chemical
      biological
    - Honeycombing
    - Bug Holes
    - Cold Joints
    - Blisters
    - Crazing
    - Dusting

12:00 LUNCH

1:00 CRACKING IN CONCRETE Matt D'Ambrosia
  MJ2 Consulting
  - Plastic
    Drying Shrinkage
    Settlement
  - Hardened
    Drying Shrinkage
    Thermal Stresses
    Non-structural
  - Prevention
    Mix Design
    Jointing and Details

2:30 BREAK

2:45 FREEZE THAW DAMAGE George Seegebrecht

3:30 CORROSION Matt D'Ambrosia

4:30 EVALUATION & ADJOURN
Troubleshooting: Solutions to Concrete Field Problems

Day 3

8:00 IN-PLACE EVALUATION METHODS
In-place strength (pullout and pull-off tests)
Uniformity (rebound hammer and pulse velocity)
Location of defects (impact-echo, impulse response, ultrasonic echo)
Corrosion assessment (half-cell potential and corrosion rate)

Nick Carino
Consultant

10:00 BREAK

10:15 IN-PLACE EVALUATION METHODS (Cont.)
Demonstrations

Claus Petersen
Germann Instruments

12:30 LUNCH

1:30 PETROGRAPHIC REPORT

Victoria Jennings
MJ2 Consulting

3:00 EVALUATION

3:15 ADJOURN