

Educational Workshop on Concrete Science & Advanced Methods for
Evaluation of Concrete -
November 13-15, 2017 Schedule

| Module | Topic | Start | End |
|---------------------|---|-------|-------|
| Day 1 - November 13 | | | |
| | Registration-Coffee | 8:00 | 8:30 |
| 0 | Welcome and Introductions | 8:30 | 8:55 |
| 1 | Testing Cores | 8:55 | 9:55 |
| 2 | Rebound Hammer | 9:55 | 10:25 |
| | Coffee Break | 10:25 | 10:40 |
| 3 | Pullout Test (LOK-Test, CAPO-Test) | 10:40 | 11:20 |
| 4 | Pull-off Test | 11:20 | 11:40 |
| | Demonstrations (Pullout, Pull-off) | 11:40 | 12:40 |
| | Lunch | 12:40 | 13:40 |
| 5 | In-Place Strength-Case Study | 13:40 | 14:05 |
| 6 | Maturity Method | 14:05 | 15:00 |
| | Coffee Break | 15:00 | 15:15 |
| 7 | Reinforcement Location (Covermeter GPR) | 15:15 | 16:40 |
| | Demonstration (Covermeter and GPR) | 16:40 | 17:25 |
| | Feed back session | 17:25 | 17:35 |
| Day 2 - Novemebr 14 | | | |
| | Review session | 8:15 | 8:30 |
| 8 | Introduction to Stress Waves | 8:30 | 9:15 |
| 9 | Ultrasonic Pulse Velocity | 9:15 | 9:55 |
| | Demonstrations (UPV, Surfer) | 9:55 | 10:15 |
| | Coffee Break | 10:15 | 10:30 |
| 10 | Impact-Echo Method | 10:30 | 11:20 |
| 11 | Impulse-Response Method | 11:20 | 11:55 |
| 12 | Ultrasonic-Echo Method (MIRA) | 11:55 | 12:35 |
| | Lunch | 12:35 | 13:35 |
| | Demonstrations (I-E, I-R, MIRA) | 13:35 | 14:35 |
| 13 | Principles for Durability, Water Penetration | 14:35 | 15:15 |
| | Coffee Break | 15:15 | 15:30 |
| 14 | Corrosion Basics, Chlorides, Carbonation | 15:30 | 16:15 |
| | Demonstrations (GWT, RCT) | 16:15 | 16:45 |
| | Feed back session | 16:45 | 16:55 |
| Day 3 - November 15 | | | |
| | Review session | 8:15 | 8:30 |
| 15 | Chloride Profile & Service Life Estimation | 8:30 | 9:15 |
| | Demonstrations (Profile Grinder) | 9:15 | 9:30 |
| 16 | Half-cell Potential, Resistivity & Corrosion Rate | 9:30 | 10:15 |
| | Coffee Break | 10:15 | 10:30 |
| 17 | Rapid Chloride Ion Penetration and Conductivity | 10:30 | 11:00 |
| | Demonstrations (GalvaPulse, PROOVE'it, Merlin) | 11:00 | 11:40 |
| 18 | Autogenous Shrinkage and Cracking Potential | 11:40 | 12:25 |
| | Lunch | 12:25 | 13:25 |
| 19 | Thermal Control | 13:25 | 13:55 |
| 20 | Air-void Analyzer | 13:55 | 14:30 |
| 21 | Concrete Rheology Measurement | 14:30 | 15:15 |
| | Demonstration (AVA, ICAR Rheometer) | 15:15 | 15:45 |
| 22 | Summary - Presentation of Certificates | 15:45 | 16:05 |
| | Feed back session | 16:05 | 16:15 |