PRELIMINARY PROGRAM OF THE THIRTY FIFTH
INTERNATIONAL CONFERENCE ON CEMENT MICROSCOPY
SPONSORED & ORGANIZED BY INTERNATIONAL CEMENT MICROSCOPY ASSOCIATION (ICMA)
The Embassy Suites Hotel-O’Hare, Rosemont, Illinois, 60028, U.S.A.
April 28 – May 1, 2013

SUNDAY, APRIL 28, 2013

2:00 – 4:00 P.M. Registration – The Embassy Suites Hotel-O’Hare, Rosemont, IL
5:00 – 6:00 P.M. Wine & Cheese Reception
Hosted by ICMA & Past Committee Officers

MONDAY, APRIL 29, 2013

8:00 – 9:00 A.M. Registration – The Embassy Suites Hotel-O’Hare, Rosemont, IL
9:00 – 9:15 A.M. Welcome Address
Arturo G. Nisperos
General Chairman
9:15 – 9:30 A.M. Remarks
Greg Scott
President, Portland Cement Association (PCA)
Keynote Speaker
9:30 – 9:35 A.M. Program Introduction
Lou Jany
Program Committee Chairman
9:35 – 10:05 A.M. Advances in Particle Characterization: Benefits and Application
K. Luke and A. Silva
Trican Well Service Ltd.
Calgary, Alberta, Canada
10:05 – 10:20 A.M. BREAK
10:20 – 10:50 A.M. Quantification of the M1 and M3 Polymorphs of C₃S (Alite) in Clinker
T. Witze, T. Fuellmann, J.L. Anderson
PANalytical
Westborough, Massachusetts, U.S.A.
10:50 – 11:20 A.M. Preliminary Investigations of Essential Oils as Corrosion Inhibitors in Steel Reinforced Cementitious Systems

J. Hajar and A. Sakulich
Department of Civil & Environmental Engineering
Worcester Polytechnic Institute
Worcester, Massachusetts, U.S.A.

G. Keohane and J. Schiffman
Department of Chemical Engineering
University of Massachusetts-Amherst
Amherst, Massachusetts, U.S.A.

11:20 – 11:50 A.M. Example of Mutual Benefits of XRD-Rietveld and SEM Image Analysis for Hydrated Cement Paste Quantification

X. Cieren and S. Meulenyzer
Lafarge Centre de Recherche (LCR)
St. Quentin Fallavier, France

11:50 – 1:00 P.M. LUNCH BREAK

1:00 – 5:00 P.M. Combined Bus Tour to Famous Landmarks & Architectural Buildings of the City of Chicago and Tour to Portland Cement Association (PCA) & Construction Technology Laboratories (CTL) Facilities, Skokie, Illinois

5:00 – 6:00 P.M. End of Tours, Return to The Embassy Suites Hotel-O’Hare

TUESDAY, APRIL 30, 2013

8:00 – 9:00 A.M. Registration & Welcome

9:00 – 9:10 A.M. Introduction of Exhibitors
Exhibit Coordinator, Chairman

9:10 – 9:40 A.M. Hydration Control of Portland Cement and Calcium Aluminate Cement Using Different Earth Alkali Benzoate Hydrates

H. Poellmann, P. Sturm, R. Kaden and S. Stober
University of Halle/Saale
Halle, Germany
9:40 – 10:10 A.M.  
**API Standard Class G Cement and Its Inconsistencies in Slurry Thickening Times**

J. S. Lota  

S. R. Farris,  
Keele University, Birchall Centre, Staffordshire, England, U.K.  
(Now at Babcock International group, Forss, Caithness, Scotland, U.K.)

K. Luke  
Trican Well Service Ltd., Calgary, Alberta, Canada

10:10 – 10:25 A.M.  
**BREAK**

10:25 – 10:55 A.M.  
**Determination of Water to Cementitious (W/CM) Binder Ratios By the Use of the Fluorescent Microscopy Technique in Hardened Concrete Samples: Part III**

T. Sibbick, S. Garrity, and C. LaFleur  
W. R. Grace & Company, Cambridge, Massachusetts, U.S.A.

10:55 – 11:25 A.M.  
**Optimization of Chloride Quantification in Cementitious Mortar Using Energy-Dispersive X-ray Microanalysis**

J. Pacheco and O. Copuroglu,  
Faculty of Civil Engineering and Geosciences  
Delft University of Technology, Delft, The Netherlands

R. B. Polder  
Building Materials  
TNO, The Netherlands

11:25 – 11:55 A.M.  
**Petrographic Examination of Iron-Ore and Colemanite Aggregates Used in Radiation Shielding Concrete**

S.Y. Lee, A. Daugherty, and D. Broton  
CTL Group, Skokie, Illinois, U.S.A.

11:55 – 1:00 P.M.  
**BREAK**

1:00 – 3:00 P.M.  
**PANEL DISCUSSION: Application of Microscopy in Relation to Energy Consumption in Cement Plants**

Dr. Donald Campbell, Workshop Coordinator
3:00 – 3:15 P.M.                      BREAK

3:15 – 3:45 P.M.                      Evaluation of Mortar Microstructures in Ancient Roman Concrete
                                        From Ostia, Italy with PETROG Software

                                        J.L. Wehby
                                        Research Laboratory for Archaeology and the History of Art
                                        University of Oxford, U.K.

                                        M.D. Jackson
                                        Department of Civil & Environmental Engineering
                                        University of California, Berkeley, California, U.S.A.

3:45 – 4:15 P.M.                      Surface Greening and Microstructural Alteration of Blast Furnace Slag
                                        Concrete – A Case Study

                                        O. Copuroglu and W.J. Bouwmeester-van den Bos
                                        Faculty of CiTG, Materials & Environment
                                        Delft University of Technology, Delft, The Netherlands

4:15 – 4:45 P.M.                      Ettringite: A New Synthesis Approach

                                        A. Lo Presti, T. Cerulli, A. Biancardi, E. Moretti, and D. Salvioni
                                        Mapei, S.p.A. R&D Central Laboratory
                                        Milan, Italy

4:45 – 5:15 P.M.                      Relative Evaluation of Microstructure and Phase Composition of Clinker
                                        Sintered With Bituminous Coal and Pet Coke

                                        A. Sadangi, K. Suresh, and S. Chowdhury
                                        Ultra Tech Cement Ltd.
                                        Aditya Birla Science & Technology Center
                                        Mumbai, India

WEDNESDAY, MAY 1, 2013

9:00 – 9:05 A.M.                     Welcome

9:05 – 9:35 A.M.                     Nanopetrography Technics Contribution to the Behaviour of Trace
                                        Elements Into Clinkers
F. Amin and E. Moudilou  
CTG, Italcementi Group  
Cedex, France

P. Le Coustumer  
University of Bordeaux  
Bordeaux, France

9:35 – 10:05 A.M.  
A Phenomenon of Heterogeneous Coloration in a Self-Leveller: Not Only an Aesthetic Problem

A. Lo Presti, T. Cerulli, D. Salvioni, E. Carlini, and S. Carra  
Mapei, S.p.A. R&D Laboratory  
Milan, Italy

10:05 – 10:35 A.M.  
Comparison of Hardened Concrete Air-Void Test Results from Rapid Air 457 and Flatbed Scanner Automated Analysis Equipment

S. Nezami and K. Peterson  
Department of Civil Engineering  
University of Toronto  
Toronto, Ontario, Canada

K. J. Totty and R. Sibbick  
W. R. Grace & Company  
Cambridge, Massachusetts, U.S.A.

10:35 – 10:50 A.M.  
BREAK

10:50 – 11:20 A.M.  
Petrographic Evaluation of Deleterious Materials in Aggregates Used for Airfield Pavements in Accordance With UFGS Specification

S. Y. Lee, V. Jennings, and A. Daugherty  
CTL Group, Skokie, Illinois, U.S.A.

11:20 – 11:50 A.M.  
Petrographic Characterization of the Deterioration Products in Concrete Containing Sulfide Bearing Aggregates: A Particular Case of Internal Sulfate Attack

A. Rodrigues, B. Fournier, and J. Duchesne  
Centre de Recherche sur les Infrastructures en Beton (CTIB)  
Department of Geology and Geological Engineering  
University of Laval  
Quebec, Canada
11:50 – 1:00 P.M.  LUNCH BREAK

1:00 – 1:30 P.M.  Influences of Different Sulfonic Acids and Salts on the Hydration Behaviour of Cement Pastes

S. Stoeber and H. Poellmann
University of Halle/Saale
Halle, Germany

1:30 – 2:00 P.M.  Chloride Concentration Profile Collection With An Environmental Scanning Electron Microscope and X-ray Energy Dispersive Spectrometry

G.C. Anzalone and L. L. Sutter
Michigan Tech Transportation Institute
Houghton, Michigan, U.S.A.

2:00 – 2:30 P.M.  Microstructural Features of Concrete from Some Bridges in the South Island in New Zealand, in Relation to Concrete Durability

A. Shayan
Department of Civil Engineering
Swinburne University of Technology
Vermont, South Victoria, Australia

2:30 – 2:45 P.M.  BREAK

2:45 – 3:15 P.M.  Supplemental Cementitious Material for Use in Oilwell Slurries at Temperatures Up to 250°F.

T. Dealy
Halliburton Energy Services
Duncan, Oklahoma, U.S.A.

3:15 – 3:45 P.M.  Using Microscopy to Optimize the Manufacture of Oil Well Clinker

P. Du Toit and K. Feiner
Lafarge Cement Technical Center
Industrial Performance Europe and American (IPEA)
Vienna, Austria
3:45 – 4:15 P.M. Chemical and Microstructural Changes Associated with Alkali-Silica Reaction in Mortar

X. Hou
Formerly with Department of Civil & Environmental Engineering
University of Illinois, Urbana, IL, U.S.A.
Currently with Wiss, Janney, Elstner Associates, Inc.
Northbrook, Illinois, U.S.A.

J. H. Shin
Formerly with Department of Civil & Environmental Engineering
University of Illinois, Urbana, IL, U.S.A.
Currently with Hanyang University, Seoul, Korea

L.J. Struble
Department of Civil & Environmental Engineering
University of Illinois, Urbana, Illinois, U.S.A.

R.J. Kirkpatrick
Formerly with Department of Geology
University of Illinois, Urbana, Illinois, U.S.A.
Currently with Michigan State University,
East Lansing, Michigan, U.S.A.

4:15 – 4:25 P.M. Closing Remarks
Arturo G. Nisperos
General Chairman

6:00 – 8:00 P.M. ICMA HOSTED RECEPTION