Monday, 04.06.2018

10:00 Start of registration
12:30 Lunch

13:30 Opening of the Workshop
Winnefeld F., Empa, Dübendorf (CH)

Session 1 – Clinkering
Chair: A. Telesca

13:40 Keynote: Clinkering of calcium sulfoaluminate clinkers: polymorphism of ye’elimite
de la Torre A.G., University of Malaga (ESP)

14:20 On the heat of formation of ye’elimite using density functional theory ab-initio
calculations
Pisch A., University of Grenoble (FRA)

14:40 The stabilisation of α’ dicalcium silicate in calcium sulfoaluminate clinker
Elhoweris A., Gulf Organisation for Research and Development, Doha (QAT)

15:00 Phase singularities in C-S-A-F-s-(H) systems
Palou M.T., Slovak Academy of Sciences, Bratislava (SLK)

15:20 The potential of microscopy for the investigation of the CSA clinker microstructure
Mutke S., Wilhelm Dyckerhoff Institute, Wiesbaden (GER)

15:40 Coffee break

Session 2 - Clinkering
Chair: J. Skibsted

16:10 Characterisation and hydration of ye’elimite containing cements - effect of iron
Bullerjahn F., HeidelbergCement Technology Center, Leimen (GER)

16:30 Use of bauxitic industrial by-products for the production of belite-calcium sulfoaluminate
clinker
Kompouri D., National Center for Scientific Research Demokritos, Athens (GRE)

16:50 Ternesite-calcium sulfoaluminate cement prepared with phosphogypsum: Synthesis,
characterization and hydration
Huang Y., Chongqing University (CHN)

17:10 Synthesis and characterization of calcium sulfoaluminate cements produced by different
chemical gypsums
Telesca A., University of Basilicata, Potenza (ITA)

Flash presentations (2 min) of selected poster contributions

Poster Nr.

17:30 Molten salt synthesis of ye’elimite
Hanein T., University of Sheffield (UK)

CL-1

The β->γ transformation of Ca₃SiO₄
Saidani S., University of Limoges (FRA)

CL-2

Calcium sulfoaluminate cement clinker influence on the hydration of
Portland-limestone cement
Ma S., Nanjing Technical University (CHN)

HY-1
### Impact of addition of commercial inorganic salts on CSA cement performance
Marchi M., HeidelbergCement I.lab, Bergamo (ITA)

### Optimize ettringite formation as a way to reduce environmental footprint
Berger S., Kerneos, Vaulx-Milieu (FRA)

### 5 year of experience of an European technical approved CSA cement
Gastaldi D., Buzzi Unicem, Casale Monferrato (ITA)

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<tr>
<th>18:00</th>
<th>Poster session with reception</th>
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<td>Posters without flash presentation:</td>
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<td><strong>Poster Nr.</strong></td>
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<td>HY-2</td>
<td>Impact of addition of commercial inorganic salts on CSA cement performance</td>
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<td>HY-3</td>
<td>Optimize ettringite formation as a way to reduce environmental footprint</td>
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<td>DA-1</td>
<td>5 year of experience of an European technical approved CSA cement</td>
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| **19:30** | BBQ at Centre Loewenberg |
International Workshop on Calcium Sulfoaluminate Cements
Murten, Switzerland, June 4-6, 2018, Final program, Version 2018-05-22

Tuesday, 05.06.2018

Session 3 - Clinkering  
Chair: A. Pisch

08:00  **Keynote:** Progress and future perspectives of CSA cements in China  
Sui T., Sinoma Research Institute, Beijing (CHN)

08:40  Characterization of calcium sulfoaluminate cement components and hydration reactions by $^{19}$F, $^{27}$Al and $^{29}$Si MAS NMR spectroscopy  
Skibsted J., Aarhus University (DEN)

09:00  An alternative method of producing alite calcium sulfoaluminate cement  
Hanein T., University of Sheffield (UK)

09:20  Evaluation of properties of alite-calcium sulfoaluminate (A/CSA) cement produced from asian ash  
Robl T., University of Kentucky, Lexington, KY (USA)

09:40  Coffee break

Session 4 - Hydration  
Chair: J. Moon

10:10  Advanced synchrotron studies of ye`elimite-based cement pastes  
Aranda M.A.G., ALBA Synchrotron, Barcelona (ESP)

10:30  Hydration of a calcium sulfoaluminate clinker with ternesite  
Carmona-Quiroga P.M., Instituto de Ciencias de la Construcción Eduardo Torroja, Madrid (ESP)

10:50  Modelling of the hydration and performance evolution of BYF cement  
Zajac M., HeidelbergCement Technology Center, Leimen (GER)

11:10  The effect of metakaolin and limestone on the hydrate phase assemblages and hydration kinetics of calcium sulfoaluminate – metakaolin – limestone blends  
Pedersen M.T., Aarhus University (DEN)

11:30  CSA and slag: towards CSA composite binders  
Bertola F., Buzzi Unicem, Casale Monferrato (ITA)

11:50  Study of nucleation and growth processes of ettringite in supersaturated diluted solutions  
Poupelloz E., University of Burgundy, Dijon (FRA)

12:10  Lunch

Session 5 - Hydration  
Chair: M. Palou

13:10  The influence of Li$_2$CO$_3$ on the development of the water content in the Al-hydroxide-gel of ye`elimite binders  
Jansen D., University of Erlangen-Nürnberg, Erlangen (GER)

13:30  Study of calcium sulfoaluminate cements and Portland cement blends  
Bolaños-Vásquez I., National University of Colombia, Medellin (COL)

13:50  Hydration kinetics in a high OPC ternary CSA system  
Wolf J.J., University of Erlangen-Nürnberg, Erlangen (GER)

14:10  A possible alternative to alkali activation in low clinker cementitious materials  
Boscaro F., ETH Zürich (CH)

14:30  Strategies to extend calcium sulfoaluminate cement concrete working time  
Burris L.E., Ohio State University, Columbus, OH (USA)
International Workshop on Calcium Sulfoaluminate Cements
Murten, Switzerland, June 4-6, 2018, Final program, Version 2018-05-22

14:50 Coffee break

Session 6 - Properties  
Chair: F. Götz-Neunhoeffer

15:20 Design of self dessicating binders using calcium sulfoaluminate cement: influence of the cement composition and calcium sulfate source  
Farcy O., CEA Marcoule, Bagnols-sur-Cèze (FRA)

15:40 Further insights into calcium sulfoaluminate cement expansion  
Hargis C.W., University of North Florida, Jacksonville, FL (USA)

16:00 Early-age expansion of ordinary Portland cement-calcium sulfoaluminate cement blends  
Chaunsali P., Massachusetts Institute of Technology (MIT), Cambridge, MA (USA)

16:20 Announcements conference dinner

17:15 Departure by bus to Murten

18:00 Reception and conference dinner on a ship of the “Drei Seen Schiffahrtsgesellschaft AG” on Lake Murten

Wednesday, 06.06.2018

Session 7 - Properties  
Chair: C.W. Hargis

08:30 Keynote: Potential of calcium sulfoaluminate cements for stabilization / solidification of radioactive waste  
Cau Dit Coumes C., CEA Marcoule, Bagnols-sur-Cèze (FRA)

09:10 Rapid hardening high-belte calcium sulfoaluminate (HB-CSA) cement: A low CO\textsubscript{2} cement  
Zhou J., Hebei University of Technology, Tianjin (CHN)

09:30 CSA-based fast hardening concretes  
Fourmentin M., Sigma Béton, L’Isle d’Abeau (FRA)

09:50 Improved workability of CSA cement by polymer encapsulation  
Siriwatwechakul W., Thammasat University, Pathum Thani (THA)

10:10 Coffee break

Session 8 - Durability and Application  
Chair: T. Matschei

10:40 Corrosion behaviour of carbon steel in CSA: principles and methods  
Lorenzi S., University of Bergamo (ITA)

11:00 Further insights in the carbonation resistance of calcium sulfoaluminate cement mortars  
Winnefeld F., Empa, Dübendorf (CH)

11:20 Accelerated foamed concrete based on CSA cement  
vан Nes Blessing L., Caltra B.V., Mijdrecht (NED)

11:40 Belitic calcium sulfoaluminate cement in America: a 60-year history of development, chemistry, and applications  
Bescher E., University of California, Los Angeles, CA (USA)

12:00 Closure of the Workshop  
Winnefeld F., Empa, Dübendorf (CH)

12:10 Lunch