This is a list of provisional titles for which abstracts have been received and will soon be updated with the list of manuscripts received. As with the previous Calcium Aluminate Conferences, these manuscripts are being peer reviewed prior to acceptance for publication. This list will be updated soon as it is no longer fully up to date. Some titles have changed and we have some additional papers. The titles are grouped provisionally according to subject matter, but the order shown here may not reflect the mode of presentation, the conference programme and the order in the published Proceedings.

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ternary solid solution of CA - SrA - BaA</td>
<td>Herbert PÖLLMANN</td>
<td>University of Halle, Germany</td>
</tr>
<tr>
<td>Synthesis and properties of calcium rare earth aluminates</td>
<td>Chimednorov OTGONBAYAR and Herbert PÖLLMANN</td>
<td>University of Halle, Germany</td>
</tr>
<tr>
<td>F- and SO$_4$- containing calcium sulfoaluminate  3CaO•3Al$_2$O$_3$•xCaF$_2$•(1-x)CaSO$_4$ with 0 ≤ x ≤ 1</td>
<td>Sabrina GALLUCCIO and Herbert PÖLLMANN</td>
<td>University of Halle, Germany</td>
</tr>
<tr>
<td>Investigation of the effects of fuel types on gehlenite and mayenite phases and performance of calcium aluminate cements</td>
<td>Berrak AVÇIOĞLU and Metehan SEVEROĞLU</td>
<td>Çimsa Cement Research and Application Center, Turkey</td>
</tr>
<tr>
<td>Temperature programmed reduction (TPR) and oxidation (TPO) of cementitious materials</td>
<td>Stefan STÖBER, Herbert PÖLLMANN</td>
<td>University of Halle, Germany</td>
</tr>
<tr>
<td>Phase composition and hydration behaviour of a high silica calcium aluminate cement</td>
<td>Ingrid MIKANOVIC$^1$, Dubravka MARETIC$^2$, Ronny KADEN$^1$ and Günther WALENTA$^1$</td>
<td>$^1$Calucem GmbH, Germany, $^2$Calucem d.o.o, Croatia and $^3$University of Halle, Germany</td>
</tr>
<tr>
<td>An investigation of the chemical distribution of minor elements in high alumina cements by a multidisciplinary approach</td>
<td>Marco CANTALUPPI$^2$, Fiorenza CELLA$^2$, Wojciech KAGAN$^2$, Nicoletta MARINONI$^2$ and Fernando CAMARA$^2$</td>
<td>$^1$University of Milan, Italy and $^2$Górka Cement SP. Z O.O, Poland</td>
</tr>
<tr>
<td>New calcium aluminate cements with advanced performance and reduced CO$_2$ footprint</td>
<td>Ronny KADEN$^2$, Ingrid MIKANOVIC$^1$, Dubravka MARETIC$^2$, Günther WALENTA$^1$ and Stefan STÖBER$^1$,</td>
<td>$^1$Calucem GmbH, Germany, $^2$Calucem d.o.o, Croatia</td>
</tr>
<tr>
<td>The effects of cooling parameters on performance properties of calcium aluminate clinker</td>
<td>Melike SUCU and Metehan SEVEROĞLU</td>
<td>Çimsa Cement Research and Application Center, Turkey</td>
</tr>
<tr>
<td>Investigation of the relationship between mineralogical content and rapid hardening property of calcium aluminium cement</td>
<td>Murat AYDIN, Metehan SEVEROĞLU and Suphi URAL</td>
<td>Çimsa, Turkey and Çukurova University, Turkey</td>
</tr>
</tbody>
</table>
HYDRATION

Synthesis and characterization of ss CAH$_{10}$ – SrAH$_{10}$
Herbert PÖLLMANN
University of Halle, Germany

Time-resolved investigation of Calcium Aluminate Cement hydration in mix with CaCO$_3$
Julian GOERGENS, Tanja MANNINGER and Friedlinde GOETZ-NEUNHOEFFER
Friedrich Alexander University, Erlangen, Germany

Calorimetry studies on blending of calcium aluminate cement with ground granulated blast furnace slag
Yun BAI$^1$, Shaoyan LI$^1$ and Raman MANGABHAI$^2$
$^1$University College London, London, UK, $^2$Mangabhai Consulting, UK

Hydration kinetics of CA$_2$-CA-filler mixes analysed by in-situ XRD and pore solution composition
Andreas KOHLER, Juergen NEUBAUER and Friedlinde GOETZ-NEUNHOEFFER
Friedrich Alexander University, Erlangen, Germany

Setting shrinkage measurement during cement hydration
Stefan KUIPER$^1$, Geert WAMS$^1$, Alexandra SPIES$^1$, Dagmar SCHMIDTMEIER$^2$, Sebastian KLAUS$^2$ and Andreas BUHR$^2$
Almatis BV, The Netherlands, Almatis GmbH, Germany

Deeper insight into hydration kinetics of calcium aluminate cement: results
Friedlinde GOETZ-NEUNHOEFFER, Florian HUELLER and Juergen NEUBAUER
Friedrich Alexander University, Erlangen, Germany

Hydration modelling
Herve FRYDA
Imerys Aluminates Research Center, France

The effect of temperature on the formation of the structure of the hydrated calcium aluminate cement with microsilica
Valentin ANTONIIVIČ, Renata BORIS, Rimvydas STONYS and Jurgita MALAIŠKIENĖ
Vilnius Gediminas Technical University, Vilnius, Lithuania

SPECIFICATIONS AND TEST METHODS

Modifications to test methods and review of specifications for calcium aluminate cement: A North American perspective
Anthony F. BENTIVEGNA$^1$, Jason H. IDEKER$^2$ and Thano DRIMILAS$^3$
$^1$Jensen Hughes, Chicago, Illinois, USA, $^2$Oregon State University, Corvallis, Oregon, USA, $^3$The University of Texas at Austin, Austin, Texas, USA
ADMIxTURES

Specific biopolymers as accelerator for alumina cement
Alexander ENGBERT and Johann PLANK
Technical University Munich, Germany

The effect of calcium nitrate and microsilica on the property of calcium aluminate cement
Hong-xia WANG, Gui-zhi DIAO, Guang-hua LIU, Hong-xia WANG, Guang-wei LIU and Danielle VAN NES
1CBMA, Beijing, China, 2State Key Laboratory of Green Building Materials, China, 3Kaifeng Qiming Refractory Materials Co., Ltd. China and 4Caltra Netherland B.V. Netherlands

New insights in Li salt mechanisms
Herve FRYDA
Imerys Aluminates Research Centre, France

Effect of Li2CO3 on early CA-cement hydration in mix with CaCO3: Hydrate and liquid phase analysis
Tanja MANNINGER, Friedlinde GOETZ-NEUNHOEFFER
Friedrich Alexander University, Erlangen, Germany

Hydration control of CAC using alkali carboxylic compounds
Herbert PÖLLMANN
University of Halle, Germany
**BLENDED SYSTEMS**

The influence of CA addition on the hydration kinetics of C₃S dominated mixtures  
**Juergen NEUBAUER, Jörg NEHRING and Friedlinde GOETZ-NEUNHOEFFER**  
Friedrich Alexander University, Erlangen, Germany

Quantification of phase compositions of complex mixtures of CAC with OPC, anhydrite and metakaolinite  
**Herbert PÖLLMANN and Sabrina GALLUCCIO**  
University of Halle, Germany

Effect of metakaolin on binders based on Portland cement, calcium aluminate cement, and calcium sulphate  
**Sarra EL HOUSSEINI, Karen SCRIVENER and Barbara LOTHENBACH**  
¹EPFL, Lausanne, Switzerland, ²Empa, Dübendorf, Switzerland

Investigation of calcium aluminate cement - Portland cement - anhydrite in ternary system and determination of ratio of calcium aluminate cement to Portland cement  
**Bahadır ÖZTÜRK, Ayten ÇAPUTÇU, Metehan SEVEROĞLU and Berrak AVCIOĞLU**  
Çimsa Cement Research and Application Center, Turkey

Use of high ettringite producing ternary blend systems for use in thermochemical energy storage  
**Aaron J STRAND and Matthew ADAMS**  
New Jersey Institute of Technology, Newark, New Jersey, USA

Impact of freeze-thaw cycling on bond interface of high ettringite producing cement systems  
**Matthew ADAMS, Noah THIBODEAUX and John A. REIF Jr**  
New Jersey Institute of Technology, Newark, New Jersey, USA

Exploring the ternary binder diagram for set on demand concrete  
**Lex REITER, Timothy WANGLER and Robert J FLATT**  
ETH Zurich, Zurich, Switzerland

Blended Calcium Aluminate Cements for digital fabrication with concrete  
**Arnesh DAS, Lex REITER and Robert J FLATT**  
ETH Zurich, Zurich, Switzerland

Stability of Ettringite in Blended Systems with CAC-PC-C$  
**Jason H IDEKER, Anika SARKAR**  
Oregon State University, Corvallis, Oregon, USA

Impact of hemihydrate & anhydrite combination on phase evolution and performance in self-levelling compound containing new generation CAC 50  
**Ronny KADEN, Ingrid MIKANOVIC, A. REIL, Markus SCHMIDT, Dubravka MARETIC, and Günther WALENTA**  
¹Calucem GmbH, Germany, ²Calucem d.o.o, Croatia

Influence of sulphate source on hydration kinetics and phase formation of CAC-rich and OPC-rich ternary binders  
**Elsa QOKU and Thomas BIER**  
TU Bergakademie Freiberg, Freiberg, Germany

Hydration mechanism of amorphous calcium aluminaes in ettringite systems  
**Herve FRYDA**  
Imerys Aluminates Research Center, France
**DIVERSE APPLICATIONS**

**Applicability of calcium aluminat cement based material under deep sea conditions**  
Keisuke TAKAHASHI¹, Mari KOBAYASHI¹ and Yuichiro KAWABATA²  
¹Ube Industries, Ltd., and ²Port and Airport Research Institute, Japan

**Characterization of different types of bauxite, their effect on calcium aluminat cement phase quantity and investigation of refractory properties**  
Metehan SEVEROĞLU and Berrak AVCİOĞLU  
Çimsa Cement Plant – Çimsa Cement Research and Application Centre, Turkey

**Towards understanding the ageing behaviour of SLU formulations: Impact of prehydration on individual components and role of admixtures**  
Florian HARTMANN, Alexander ENGERT and Johann PLANK  
Technical University Munich, Germany

**Performance of rapid-repair (ettringite-based) concrete in a harsh marine environment**  
Ted MOFFATT¹, Michael D. A. THOMAS², Racheal LUTE² and Kevin FOLLIARD²  
¹UNB Fredericton Campus, Canada, ²The University of Texas at Austin, Texas, USA

**Research about properties of cost effective structural heat resistant concrete using HAC and EAF slag aggregates**  
Mohammad JR Hossein ABADI¹, Ahmad EMAMI² and Mariyam MOBARAKEH³  
¹Najaf Abad Azad University, Iran, ²Iran Refractory Cements and ³Aghigh University of Geotechnics, Iran

**The use of CAC for the remediation of a Pb contaminated soil: The role of sulfates**  
Silvia CONTESSI¹, Loris CALGARO², Maria Chiara DALCONI¹, Enrico GARBIN¹, Giorgio FERRARI³ and Gilberto ARTIOLI¹  
¹University of Padova, Padova, Italy, ²Ca’ Foscari University of Venezia, Venezia, Italy, ³Mapei S.p.A., Milano, Italy

**Calcium Aluminate for digital construction and 3D printing**  
Herve FRYDA  
Imerys Aluminates Research Center, France

**Interaction of molten slag with calcium aluminat cement mortar**  
Fernando F. DE MENDONÇA FILHO and Oğuzhan ÇOPUROĞLU  
Delft University of Technology, Delft, The Netherlands

**Amorphous flash calcined alumina – effect on shrinkage and set of Portland cement**  
Ludo. C. VAN NES BLESSING  
Caltra bv, The Netherlands
**ASPECTS OF DURABILITY**

**Electric resistivity testing method to assess conversion in calcium aluminate cement concrete systems**  
*Marwa KORAYEM, Aaron J STRAND and Matthew ADAMS*  
New Jersey Institute of Technology, Newark, New Jersey, USA

**Impact of conversion on permeability in calcium aluminate cement concrete systems**  
*Marwa KORAYEM and Matthew ADAMS*  
New Jersey Institute of Technology, Newark, New Jersey, USA

**Decoupling the effects of hydrate mineralogy and porosity resulting from conversion on calcium aluminate cement corrosion resistance**  
*W. LIU, A.W.H. CHEUNG and Marjorie VALIX*  
The University of Sydney, NSW 2006, Australia

**Investigation of mechanical, durability, thermal and microstructural properties of calcium aluminate cement based mortars containing mineral admixtures**  
*Murat TUYAN*  
Izmir Democracy University, Karabaglar/Izmir, Turkey

**Aggregate impacts on chemistry, conversion, and strength in calcium aluminate cement concrete**  
*Matthew P. ADAMS*¹ and *Jason H. IDEKER*²  
¹New Jersey Institute of Technology, Newark, New Jersey, USA, ²Oregon State University, Corvallis, Oregon, USA

**A presentation on the durability of 50-year-old concrete using alumina cement in Japan**  
*Taiichiro MORI*¹, Daiki SHIMAZAKI¹, Y SASAGAWA¹ and Etsuo SAIKAI²  
¹Denka Co., Ltd., Japan, ²Tokyo institute of Technology Institution, Tokyo, Japan

**Influence of relative humidity exposure on the microstructure of hardened calcium aluminate cement paste**  
*Sandra WAIDA, Mirco WAHAB and Thomas BIER*  
TU Bergakademie Freiberg, Freiberg, Germany
### SEWERAGE APPLICATIONS

**On the thermodynamic modelling of converted and non-converted CAC and their resistance to biodeterioriation in sewer**  
Alexandra BERTRON  
University of Toulouse, INSA, Toulouse, France

**Towards a better understanding of biodegradation mechanisms of calcium aluminate based cementitious materials in sewer conditions**  
Matthieu PEYRE-LAVIGNE, A. ABOULELA, A BUIGNIER, Cédric PATAPY and Alexandra BERTRON  
University of Toulouse, INSA, Toulouse, France

**On the resistance of CAC materials to biogas systems**  
Alexandra BERTRON  
University of Toulouse, INSA, Toulouse, France

**Microbial activity in calcium aluminate based materials**  
Eva KRÄNZLEIN, Paul BRUMM, N SHAHEEN and Thomas BIER  
TU Bergakademie Freiberg, Freiberg, Germany

**The performance of 70-year old concrete sewer pipe with a calcium aluminate cement-based lining**  
Moses KILISWA  
University of KwaZulu Natal, South Africa

**Development of a calcium aluminate cement (CAC) based engineered cementitious composites (ECC) with relatively low fibre content**  
Wei FAN¹, Z. ZHUGE², X. MA², C.W.K. CHOW² and N. GORJIAN²  
The University of South Australia, Australia, SA Water Corporation, Australia

**Comparative Acid Resistance of a one-part geopolymer and calcium aluminate cement mortar**  
C. SEEDAO, M.E. FISHER and Marjorie VALIX  
The University of Sydney, NSW 2006, Australia

**CAC based-based binder for microbiologically induced corrosion resistant concrete and mortars**  
Markus SCHMIDT¹, Ingrid MIKANOVIC², Dubravka MARETIC², Ronny KADEN¹, Günther WALENTA¹, Danilo PASSALACQUA³, Francesco SURICO³, Fiorenza CELLA³ and Davide SALVIONI³  
¹Calucem GmbH, Germany, ²Calucem d.o.o, Croatia, ³Mapei S.p.A., Milano, Italy

**Conversion free CAC based-based binder for microbiologically induced corrosion resistant concrete in sewer applications**  
Markus SCHMIDT¹, Ingrid MIKANOVIC², Dubravka MARETIC², Ronny KADEN¹, Günther WALENTA¹  
¹Calucem GmbH, Germany, ²Calucem d.o.o, Croatia

**Effect of Class F fly-ash on the corrosion resistance of calcium aluminate cement mortar**  
Z. HUANG, MS, MD NOOR and Marjorie VALIX  
The University of Sydney, NSW 2006, Australia

**Host structure requirements to promote adhesion of calcium aluminate cement mortar**  
Y.J. IN and Marjorie VALIX  
The University of Sydney, NSW 2006, Australia