

2nd International Conference on Polycarboxylate Superplasticizers PCE 2017

27 - 28 September 2017, Munich, Germany

www.pce-conference.org

Hosted by



œ

Δ





PROGRAM

PROGRAM

Wednesday, September 27, 2017

Wednesday, September 27, 2017

MW 0350 Egbert-von-Hoyer-Hörsaal

MW 0350 Egbert-von-Hoyer-Hörsaal

WORKSHOP

WORKSHOP

09:30–10:15	Prof. Johann Plank	
	Chemistry of PCE Superpla	sticizers

16:15–16:30 COFFEE BREAK

10:15–11:15 Dr. Lei Lei

16:30–18:00 Lab Tour to

Characterization of PCE Superplasticizers

Center For Advanced PCE Studies
Demonstration of Synthetic and
Analytical Instrumentation

11:15-11:45 COFFEE BREAK

18:30 **GET-TOGETHER @ Gasthof Neuwirt Garching**

11:45–12:30 Prof. Johann Plank

Industrial Production of PCE Polymers

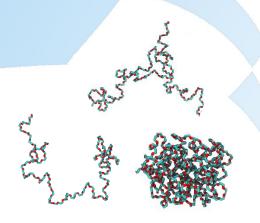
12:30–14:00 LUNCH BREAK

14:00–15:30 Dr. Ara Jeknavorian

Defoaming Technologies for Polycarboxylate-based Superplasticizers

15:30–16:15 Prof. Johann Plank

Application Aspects of PCEs



Date: 11.09.2017

PROGRAM

PROGRAM

Thursday, September 28, 2017

Thursday, September 28, 2017

MW 1801 Ernst-Schmidt-Hörsaal

MW 1801 Ernst-Schmidt-Hörsaal

09:00	Opening
-------	---------

09:30-10:00

Oral presentation II Chair: Dr. Lei Lei

09:10 Welcome and organizational details Prof. Johann Plank / Dr. Lei Lei

11:00–11:20 Dr. Christian Trieflinger, <u>BASF, D</u>

Stabilizing Cement Based

Formulations Against Segregation

& Bleeding

Oral presentation I Chair: Prof. Johann Plank

Dr. Ara Jeknavorian

11:20–11:40 Dr. Robert Baumann, <u>Dow, CH</u>

Jeknavorian Consulting Services, US

Overview of the Concrete

Applications enabled by

Polycarboxylate-based Admixtures

Clay Tolerant Concrete
Superplasticizers

Polycarboxylate-based Admixtures and Proposal for future direction for PCE technology development

11:40–12:00 Dr. Jun Ren, <u>CABR, CN</u>

10:00–10:20 Jürg Weidmann, Sika, CH

Analysis of Influencing Factors and Mechanism of Delayed Plasticizing

PCE with Well-defined Structures as Powerful Concrete Superplasticizers for Alkali-activated Binders

Effect of Polycarboxylate
Superplasticiser in Cement Paste

10:20–10:40 Dr. Verena Feldmann, Clariant, D

Prof. Ozge Akbulut Sabanci University, TR

5

Polyglycols and Polyetheramines as

Design and Synthesis of a PCEbased Superplasticizer for Calcium Aluminate Cement

Macromonomers for PCEs

12:20–14:00 LUNCH BREAK

12:00-12:20

10:40-11:00 COFFEE BREAK & POSTER SESSION

P	R(7	G	R	Δ	V	1
		_	_		_	ıv	

Thursday, September 28, 2017

MW 1801 Ernst-Schmidt-Hörsaal

PROGRAM

Thursday, September 28, 2017

MW 1801 Ernst-Schmidt-Hörsaal

Oral presentation III Chair: Dr. Gerhard Albrecht

14:00–14:20 Claudio Limone, Cemex, CH
Kinetic Modelling of the Synthesis
of Polycarboxylate Ether Via Acrylic
Copolymers Partial Esterification

14:20–14:40 Ting Li, <u>CBMA, CN</u>

Preparation and Performance

of Super Slow-released

Polycarboxylate Superplasticizer

14:40–15:00 Iñaki Emaldi

<u>University of the Basque Country, ES</u> **Understanding the Effect of the** *Microstructure of MEPG-PCEs on Ordinary Portland Cement (OPC)*

15:00–15:30 Prof. Jianmin Zhu

<u>Liaoning Oxiranchem Inc., CN</u>

Current Situation and Development

Trend of Polycarboxylate Ether

Macromonomer in China

15:30–16:00 COFFEE BREAK & POSTER SESSION

6

Oral presentation IV Chair: Dr. Ara Jeknavorian

16:00–16:20 Dr. Julia Stroh, <u>BAM, D</u>

Direct Insight into the Admixture

Activity During Cement Hydration

Using Levitated Droplets

16:20–16:50 Prof. Johann Plank, <u>TUM, D</u>

Future Perspectives of PCE

Technology

16:50–17:00 Award Ceremony for Dr. Gerhard Albrecht, BASF

17:00-17:10 Closure

19: 00 CONFERENCE DINNER
@ Hofbräuhaus München

POSTER

G. Ferrari, V. Russo, M. Gamba, G. Artioli, M. C. Dalconi, L. Valentini, <u>IT</u>

The Fatal Attraction between PCEs and Swelling Clays

A. Ramírez-Caro, B. Mota, E. Artemeva, J. Pauli, W. Schmidt, U. Resch-Genger, <u>D</u>

A Spectroscopic Study of the Superplasticizer Effect on Early Cement Hydration

J. Stecher, J. Plank, <u>D</u>

Polyphosphate Comb Polymers – A Novel Kind of
Concrete Superplasticizer Exhibiting Unique
Properties

L. Jiang, X. Kong, <u>CN</u>

The effect of bivalent cations on the Performance of Polycarboxylate Superplasticizers in Fresh
Cement Paste

M. Ilg, J. Plank, <u>D</u>

Non-ionic small molecules as flow-enhancers for cementitious systems prepared at low w/c ratios

D. A. Belov, D. M. Kuzmenkov, Y. V. Velugo, <u>BY</u> Comparative effectiveness of polycarboxylate superplasticizers on cement-sand paste using Belarusian-made cements

J. Plank, M. Schönlein, <u>D</u> **Study on the early crystallization of C-S-H in the presence of polycarboxylate superplasticizers**

8

SOCIAL PROGRAM

Wednesday, September 27, 2017 18:30

Get-together
Gasthof Neuwirth
Münchener Str. 10
85748 Garching, Germany
Price per person € 15
(booking required upon registration)



Thursday, September 28, 2017 19:00

Conference Dinner
"Hofbräu Haus"

Platzl 9

80331 München, Germany

Price per person € 20 (Including 19% VAT)
(booking required upon registration)

9



GENERAL INFORMATION

VENUE

Workshop & Conference

Department of Mechanical Engineering (Maschinenwesen)

Eberhard von Kuenheim-Building Boltzmannstr.15 85748 Garching, Germany www.mw.tum.de

INFORMATION BEFORE AND AFTER THE CONFERENCE

Dr. L. Lei Secretary of PCE 2017

Technische Universität München Lehrstuhl für Bauchemie Lichtenbergstr. 4 85748 Garching bei München Germany

www.pce-conference.org

Email: info@pce-conference.org

Tel.: +49 89 289 13161 Fax.: +49 89 289 13152

GENERAL INFORMATION

INFORMATION AND REGISTRATION DURING THE CONFERENCE

The conference office will be located in the foyer of the Eberhard von Kuenheim-Building (Department of Mechanical Engineering).

Opening hours:

Tuesday, September 26, 2017 16:00 - 18:00 Wednesday, September 27, 2017 8:00 - 17:00 Thursday, September 28, 2017 8:00 - 17:00

Tel: +491627198592

E-mail: mylinh.vo@bauchemie.ch.tum.de

REGISTRATION FEE

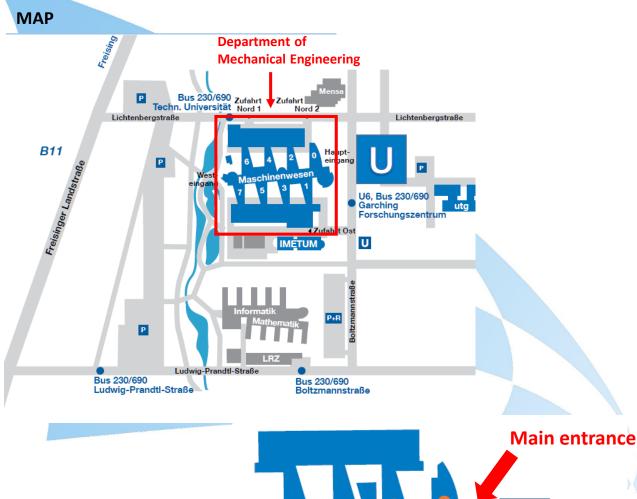
PCE Workshop	180 € (regular price)		
(Sept. 27, 2017)	100 € (student price)		
Full-day Conference	260 € (regular price)		
(Sept. 28, 2017)	150 € (student price)		

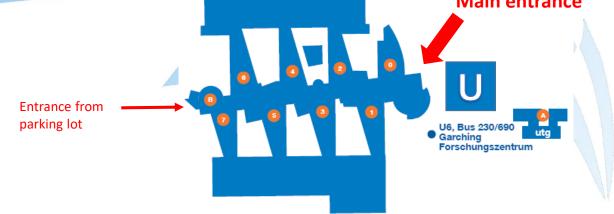
All fees include 19 % VAT

Online e-mail registration will close on Friday 22 September at 18:00 (local Munich time). After this date you will need to register at the On-Site Registration Desks at Department of Mechanical Engineering. Upon On-Site registration, payment by cash is possible only.

Cancellation: Requests for cancellation made prior to August 28, 2017 will be subject to a € 50 processing fee. Cancellations received after August 28, 2017 will not receive a refund.

U





12 13

Conference Building

SPONSORS

EXHIBITORS





























