



6th International Conference on Polycarboxylate Superplasticizers (PCE 2025)

23 – 25 July 2025

Tentative Program

www.pce-conference.org

Hosted by









PROGRAM		PROGRAM	
Wednesday, 23 July 2025		Thursday, 24 July 2025	
Workshop		09:30	Opening and Welcome Prof. J. Plank and Prof. N. Makaratat
09:15-09:50	Prof. Johann Plank, <u>Technische Universität München, DE</u> Fundamentals of PCE Technology		Oral Presentations I Chair: N.N.
09:50–10:20	Dr. Ara Jeknavorian, Jeknavorian Consulting Services, US Use of Nanosilica to Improve the Air- Void Quality of Air-entrained	09:50–10:20	Dr. Ara Jeknavorian, <u>Jeknavorian Consulting Services, US</u> Essential Role of PCE for De- carbonized Concrete
10:20–10:50	Prof. Lei Lei, Hunan University, CN Compositional analysis of PCE Superplasticizers	10:20–10:50	Dr. Gerhard Albrecht, <u>Technical Consulting Service, JP</u> Invisible heroes: The transformative power of polyether polymers in construction and beyond
10:50–11:20	COFFEE BREAK	10:50–11:15	Roenko A.V., Dr. Andrew Malinin et al., EvroSintez/Moscow State Univ., RU
11:20–11:40	Dr. Seungtaek Oh & Y.G. Ju Silkroad, South Korea Presentation of Company &	11:15–11:40	HPEG vs. EPEG: Impact of PCE Synthesis on Concrete Performance COFFEE BREAK
11:40–12:00	Concrete Experiments Dr. M. Dekiouk & U. Gehrke	11:40-12:10	Dr. Roberta Alfani, Patrick Azar et al., <u>Ecocem Materials, FR</u> ACT Technology – potential of
	BUSS Chemtech AG, CH Production of Alkoxylate Precursors for PCEs in a safe and efficient		ECOCEM's Low Clinker Binders for Sustainable Construction
12:00–13:00	process unit LUNCH BREAK	12:10–12:40	Prof. Lei Lei, <u>Hunan University, CN</u> Next-Generation PCE for AAS Binders
13:00–18:00	Departure to Concrete Laboratory of CPAC / Siam Cement Group Demonstration of Optimized PCE Technology and 3D Printing using Calcined Clay Cement	12:40-13:00	Dr. Z. Wang, Dr. Yunhui Fang et al., KZJ New Materials, CN Structural Regulation & Performance of Green Low-Carbon PCEs
	(Max. 100 participants)	13:00-14:00	LUNCH BREAK
	3		4

PROGRAM		PROGRAM	
Thursday, 24 July 2025		Thursday, 24 July 2025	
Oral presentations II Chair: N.N.		Oral presentations III Chair: N.N.	
14:00–14:25 14:25–14:50	Dr. C.E. Diesendruck & Dr. A. Mezhov, Technion – Israel Inst. of Tech., IL Synthetic and Natural Poly- phosphates as Superplasticizers Dr. X. Zhang, Dr. Yunhui Fang et al., KZJ New Materials, CN Preparation & Performance of Viscosity-Modified New PCEs	16:10–16:30 16:30–16:55	Dr. X. Wang, Prof. Ziming Wang et al., Jiangsu ARIT/Beijing Univ. of Tech., CN Molecular Design of Degradable Polycarboxylate Superplasticizer – Decoupling Dispersion from Retardation Dr. Manuel Ilg, BASF Trostberg, DE Selective Control of the Formation of Ettringite in Ternary Binder Jiaxin Chen & Prof. Johann Plank, Technische Universität München, DE Do PCEs adsorb preferentially on OPC or Calcined Clay? Dr. Sakprayut Sinthupinyo, SCG Cement Co.,Ltd., TH Improving Concrete Sustainability with Biochar and Polycarboxylate
14:50-15:15	Qing Shen, Prof. Zhenping Sun et al., Tongji University, CN Influence of PCE Phosphate Content on Cement Paste Rheology	16:55–17:15	
15:15–15:40	Dr. M.Y. Yardimci, Dr. B. Aslan et al., <u>Dokuz Eylul Uni./Kalekim Lyksor, TR</u> <u>Silane-Functionalized PCE: A Novel</u> <u>Superplaticizer for Alkali-Activated</u> <u>Materials</u>	17:15–17:30	
15:40–16:10	COFFEE BREAK	17:30–17:45 19:00–22:00	Ether (PCE) D. Kosenko, A. Wetzel, Prof. B. Middendorf, University of Kassel, DE PCE adsorption and flow properties in AAM as a function of phase development CONFERENCE DINNER
		19:00-22:00	CONFERENCE DINNER

PROGRAM		PROGRAM	
Friday, 25 July 2025		Friday, 25 July 2025	
Oral presentations IV Chair: N.N.			Oral presentations V Chair: N.N.
09:00-09:30	Dr. Ara Jeknavorian, Jeknavorian Consulting Services, US A Review of Synergistic Interactions between Polycarboxylates and other Chemical Admixtures	11:30–11:55 11:55–12:20	Dr. R. Tanimoto, T. Nakano et al., <u>Kao Corporation, JP</u> Design of a New Clay-Resistant Additive Ye Pan, Prof. Zhenping Sun et al., Tangii University, CN
09:30–09:55	Dr. L. Tong, Prof. Ziming Wang et al., Jiangsu ARIT/Beijing Uni. of Tech., CN Optimizing PCE Structure & Performance Through Process Control	12:20–12:45	Tongji University, CN Synergy of PCE&Retarder in MK Cement Dr. M. Cruickshank, Dr. R. Alfani et al., Ecocem Materials, FR Role of Superplasticizers on Pore
09:55-–10:15	Shuang Zou, Prof. Zhenping Sun et al., Tongji University, CN Temperature-Controlled Molecular Structure of Vinyl Ether PCE: Implications on Dispersion Perfor-	12:45–13:00	Solution of Eco-Efficient Cements Xinyue Wang & Prof. Johann Plank Technische Universität München, DE Slump Retention in High CC Cements
	mance and Cement Hydration	13:00–14:00	LUNCH BREAK
10:15–10:35	Dr. Vipasri Kanchanason et al., <u>SCG Cement Co.,Ltd., TH</u> <i>Effect of PCE on workability of LC3</i>		Oral presentations VI Chair: N.N.
10:35–11:00	from Thailand Sungjin Jung & Prof. Juhyuk Moon, Seoul National University,, KR Enhanced hydration reaction of LC3:	14:00–14:25	In Kuk Kang & Prof. Jae Hong Kim, KAIST, KR Automated Exp. Evaluation of Cement Dispersant on Rheological Properties
11:00–11:30	particular emphasis on calcined clay reactivity COFFEE BREAK	14:25–14:50	Dr. Alexey Yalymov, Sika LLC, Moscow, RU PCE Cluster In Sika Russia: Growth History, Unique Facilities and Products
		14:50–15:10	Dr. Vivek Naik <u>Apple Chemie India Pvt. Ltd, IN</u> <u>PCE for Enhancing Concrete Durability:</u> <u>The Indian Perspective</u>
	7	15:10–15:40	COFFEE BREAK 8

PROGRAM

Friday, 25 July 2025

Oral presentations VII *Chair: Prof. Johann Plank*

15:40–16:10 Presenting the

Young Researcher Award Awardee: Dr. Manuel Ilg BASF Trostberg, DE

16:10–16:30 Prof. Johann Plank,

Technische Universität München, DE

What comes next? The Future of

PCE Technology

16:30-17:30 Panel discussion

Decarbonization of the cement industry – How does this transition affect admixtures?

Panelists:

Prof. Dr. Johann Plank (Moderator)
Mr. Manasit Sarigaphuti, SCG
Dr. Roberta Alfani, Ecocem France
Dr. Oh Seungtaek, Silkroad S. Korea
Dr. Alexey Yalymov, Sika Russia
Dr. Vivek Naik, Apple Chemie India

17:30 **Closure**

GENERAL INFORMATION

AIM OF THE CONFERENCE

PCE 2025 will highlight the role of PCE superplasticizers the ongoing "green" transition of the cement industry, focusing on low-carbon binders and netzero cements with SCMs. The program features advancements in PCE synthesis, global applications, expert insights, and opportunities for discussions on market trends and innovations.

REGISTRATION FEE

PCE 2025 Conference

690 € (regular price)

23 – 25 July 2025

300 € (student price)

Note: All local Thai participants, please register through our partner TCA.

INFORMATION BEFORE AND AFTER THE CONFERENCE

Prof. Dr. Johann Plank

Technische Universität München Lichtenbergstr. 4

85748 Garching bei München, Germany

Email: pce.conf@gmail.com

Tel.: +49 89 289 13170

ORGANIZER





Prof. Dr. Johann Plank

CO-ORGANIZERS





Prof. Dr. Nattapong Makaratat





Prof. Dr. Lei Lei

DIAMOND SPONSORS

Leader of construction materials

SILKROAD

SILKROAD C&T

South Korea



Kalekim Lyksor Kimya San. A.S.

Turkiye

GOLD SPONSORS



Ecocem Materials Ltd

France



Siam Cement Group
Thailand

marlachemicals

Marlateks Tekstil Teknolojisi A.S.

Turkiye

OTHER SPONSORS



KZJ New Materials, China

Schleibinger Geräte **Building Materials Testing Systems**

Schleibinger Geräte Teubert u. Greim **GmbH**, Germany



Testing Bluhm & Feuerherdt GmbH, Germany



Kniele GmbH, Germany

EXHIBITORS

Leader of construction materials



SILKROAD C&T

South Korea



Kalekim Lyksor Kimya San. A.S.
Turkiye



Testing Bluhm & Feuerherdt GmbH,
Germany



Schleibinger Geräte

Building Materials Testing Systems

Kniele GmbH, Germany

Schleibinger Geräte Teubert u. Greim GmbH, Germany