



6<sup>th</sup> 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> <b>Fundamentals of PCE Technology</b>		Oral Presentations I Chair: Prof. Lei Lei	
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,  Jeknavorian Consulting Services, US  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> <i>Invisible heroes: The Transformative Power of Polyether Polymers in Con- struction and Beyond</i>	
10:50–11:20	COFFEE BREAK	10:50–11:15	Roenko A.V., Dr. Andrew Malinin et al., EvroSintez/Moscow State Univ., RU HPEG vs. EPEG: Impact of PCE Syn-	
11:20–11:40	Dr. Seungtaek Oh & Y.G. Ju Silkroad, South Korea Admixtures for Concrete in Cold &	11:15–11:40	thesis on Concrete Performance  COFFEE BREAK	
11:40–12:00	Dr. M. Dekiouk & U. Gehrke BUSS ChemTech AG, CH Production of Alkoxylate Precursors for PCEs – Safe and Efficient Process	11:40–12:10	Dr. Roberta Alfani, Patrick Azar et al., <u>Ecocem Materials, FR</u> ACT Technology – Potential of  ECOCEM's Low Clinker Binders for  Sustainable Construction	
12:00-13:00	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  (Max. 100 participants)	12:40–13:00 13:00–14:00	Dr. Yunhui Fang, KZJ New Materials, CN Structural Regulation & Performance Study of Fast Dispersing PCEs LUNCH BREAK	

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## Thursday, 24 July 2025

# Oral presentations II Chair: Prof. Nattapong Makaratat

14:00–14:25	Dr. C.E. Diesendruck & Dr. A. Mezhov, <u>Technion – Israel Inst. of Tech., IL</u> <u>Synthetic and Natural Poly-</u> <u>phosphates as Superplasticizers</u>
14:25–14:50	Dr. Xiuxing Ma, KZJ New Materials, CN Molecular Design of Long- and Ultra- Long Acting PCEs for Slump Retention
14:50–15:15	Qing Shen, Prof. Zhenping Sun et al., Tongji University, CN Influence of PCE Phosphate Content on Cement Paste Rheology
15:15–15:40	Dr. M.Y. Yardimci, Dr. B. Aslan et al., Dokuz Eylul Uni./Kalekim Lyksor, TR

**Activated Materials** 

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Development of a Novel Silane-Functionalized PCE for Alkali-

15:40–16:10 COFFEE BREAK

## **PROGRAM**

## Thursday, 24 July 2025

# Oral presentations III Chair: Dr. Gerhard Albrecht

16:10–16:30 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  16:30–16:55 Dr. Manuel Ilg,  BASF Trostberg, DE  Selective Control of the Formation of  Ettringite in Ternary Binders  16:55–17:15 Jiaxin Chen & Prof. Johann Plank,  Technische Universität München, DE		
BASF Trostberg, DE Selective Control of the Formation of Ettringite in Ternary Binders  16:55–17:15 Jiaxin Chen & Prof. Johann Plank, Technische Universität München, DE		
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16:55–17:15 Jiaxin Chen & Prof. Johann Plank, <u>Technische Universität München, DE</u>		
Technische Universität München, DE		
Do PCEs adsorb preferentially on OPC or Calcined Clay?		
47.45.47.00		
17:15–17:30 Dr. Sakprayut Sinthupinyo,		
SCG Cement Co.,Ltd., TH		
Improving Concrete Sustainability		
with Biochar and Polycarboxylate		
Ether (PCE)		
17:30–17:45 Dr. Xiuxing Ma,		
KZJ New Materials, CN		

Presentation of China Concrete Admixture Museum in Xiamen – History and Technology Innovations

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19:00–22:00 CONFERENCE DINNER

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PROGRAM		PROGRAM		
Friday, 25 July 2025		Friday, 25 July 2025		
Oral presentations IV Chair: Prof. Ziming Wang			<b>Oral presentations V</b> Chair: Dr. Roberta Alfani	
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> <b>Design of a New Clay-Resistant Additive</b> Dr. Tong Lu, Prof. Ziming Wang et al., <u>Jiangsu ARIT/Beijing Uni. of Tech., CN</u>	
09:30-10:10	Prof. Johann Plank, <u>Technische Universität München, DE</u> Decarbonization of the Global  Cement Industry – Concepts,  Problems and Solutions	12:20–12:45	Optimizing PCE Structure & Performance Through Process Control  Dr. M. Cruickshank, Dr. R. Alfani et al.,  Ecocem Materials, FR  Role of Superplasticizers on Pore  Solution of Eco-Efficient Cements	
10:10-10:35	Dr. Vipasri Kanchanason et al.,  SCG Cement Co.,Ltd., TH  Effect of PCE on Workability of LC3 from Thailand	12:45–13:00	Xinyue Wang & Prof. Johann Plank <u>Technische Universität München, DE</u> <u>Slump Retention in High CC Cements</u>	
10:35-11:00	Sungjin Jung & Prof. Juhyuk Moon, Seoul National University,, KR Enhanced Hydration Reaction of LC3: Particular Emphasis on Calcined Clay Reactivity	13:00–14:00 Chai	Oral presentations VI ir: Dr. Sakprayut Sinthupinyo	
11:00-11:30	COFFEE BREAK	14:00–14:25	In Kuk Kang & Prof. Jae Hong Kim, KAIST, KR Automated Exp. Evaluation of Cement Dispersant on Rheological Properties	
		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  Apple Chemie India Pvt. Ltd, IN  PCE for Enhancing Concrete Durability: The Indian Perspective	
	7	15:10-15:40	COFFEE BREAK	

#### **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, Thailand
Dr. Roberta Alfani, Ecocem, France
Prof. Dr. Ziming Wang, BUT, China
Dr. Oh Seungtaek, Silkroad, S. Korea
Dr. Alexey Yalymov, Sika, Russia
Dr. Vivek Naik, Apple Chemie, India

17:30 **Closure** 

#### **Posters**

- Preparation of Shrinkage-Reducing PCE
- Preparation&Performance of Viscosity-Modified PCE
   Dr. Y. Fang, Y. Lin, X. Zhang, KZJ New Materials, CN

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Viscosity-Reducing PCE: Preparation and Performance in Concrete

Dr. Jiaji Chen, CNBM Zhongyan Technology, CN

### **GENERAL INFORMATION**

#### **AIM OF THE CONFERENCE**

PCE 2025 will highlight the role of PCE superplasticizers in the ongoing "green" transition of the cement industry, focusing on low-carbon binders and netzero cements holding 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

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## **ORGANIZER**





Prof. Dr. Johann Plank

# **CO-ORGANIZERS**





Prof. Dr. Nattapong Makaratat





Prof. Dr. Lei Lei

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