

# **Superplasticizers and Other Chemical Admixtures in Concrete**

Proceedings  
Twelfth International Conference  
Beijing, China

October 2018

**Jiaping Liu  
Ziming Wang  
Terence C. Holland  
Jing Huang  
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American Concrete Institute

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Editors:

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*Always advancing*

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# Preface

In May 1978, the Canada Centre for Mineral and Energy Technology (CANMET), in association with the American Concrete Institute (ACI) sponsored a three-day conference in Ottawa, ON, Canada on the use of superplasticizers in concrete. Selected papers from the conference were published as ACI SP-62.

In 1981, CANMET again in association with the ACI, sponsored a second three-day International conference in Ottawa on the use of the superplasticizers in concrete. Proceedings of the conference were published as ACI SP-68. The purpose of the third international conference in Ottawa in 1989 was to review the progress made since the meetings in 1978 and 1981, and to bring together representatives of the chemical admixtures, cement, and concrete industries to exchange information and delineate new areas of needed research. The scope of this conference was expanded to include chemical admixtures other than superplasticizers. Proceedings of the conference were published as ACI SP-119.

In October 1994, CANMET in association with the ACI and several other organizations sponsored the fourth conference in Montreal, QC. Canada. The objective of this conference was to bring attention to new developments in chemical admixture since the last conference in 1989. Proceedings of the conference were published as ACI SP-148.

In October 1997, the Committee for the Organization of CANMET/ACI International Conference, (ACI Council), in association with the ACI and several cement and concrete organizations in Italy, sponsored the fifth conference in Rome, Italy. The conference was aimed at transferring technology in the fast -moving field of chemical admixtures. The proceedings of the conference were published as ACI SP-173.

In October 2000, Committee for the Organization of CANMET/ACI International Conferences, (ACI Council), in association with several organizations in Canada and France, sponsored the sixth conference in Nice, France. More than 50 papers from more than 20 countries were received and reviewed by the ACI review panel, and 37 were accepted for publication in the proceedings of the conference. The proceedings were published as ACI SP-195

In October 2003, The Committee for the Organization of CANMET/ACI International Conferences (ACI Council) in association with several organizations in Canada and Germany, sponsored the seventh conference in Berlin, Germany. The conference attracted more than 275 delegates and proceedings of the conference consisting of 39 papers, were published as ACI SP-217.

In October 2006, the Committee for the Organization of CANMET/ACI International Conferences, (ACI Council), sponsored the eighth conferences in Sorrento, Italy. More than 60 papers from more than 25 countries were received, and peer reviewed by the CANMET/ACI review panel in Budapest, and 36 were accepted for publication as ACI SP-239.

In October 2009, the Committee for the Organization of International Conferences (COIC) (formerly CANMET/ACI International Conferences) sponsored the ninth ACI International Conference in Seville, Spain. More than 50 papers from more than 20 countries were received and peer reviewed, and 35 were accepted for publication in the proceedings of the conference. The proceedings were published as ACI SP-262.

In October 28 to 31 2012, COIC sponsored the Tenth International Conference on Superplasticizers and Other Chemical Admixtures in Concrete in Prague, Czech Republic. More than 70 papers from all over the world were peer reviewed, and 33 were accepted

for publication in the proceedings of the conference. The proceedings were published as ACI SP-288.

In July 10-13, 2015, the COIC in association with ACI sponsored the Eleventh International Conference on Superplasticizers and Other Chemical Admixtures in concrete in Ottawa, Canada. More than 60 papers from the world over were peer reviewed, and 28 were accepted for publication in the proceedings of the conference. Also, additional papers were presented at the conference that were published in the Supplementary Papers Volume.

In October 28-31, 2018, the Chinese Ceramic Society and the China Academy of Building Research (CABR), Beijing China, in association with ACI, sponsored the Twelfth International Conference on Superplasticizers and other Chemical Admixtures in Concrete in Beijing China. More than 80 papers from all over the world were received and peer reviewed. A total of 36 refereed papers were accepted for publication in the proceedings of the conference. The proceedings were published by the ACI as SP 329. Also, 54 additional papers were presented at the conference, and were published in the Supplementary Papers Volume.

The organizers of the conference were the Chinese Ceramic Society, Beijing and the Committee for the Organization of International Conferences (formerly CANMET/ACI Conferences).

Thanks are extended to the members of the technical papers review panel that met in Hainan island, China from March 4 to 10, 2018. The panel members were selected from Canada, China, Italy, Norway, Switzerland, the U.K. and the U.S.A. Without their dedicated effort and work, it would not have been possible to publish the proceedings for distribution at the conference. Co-operation of the authors in accepting the reviewers' suggestions and in revising the draft manuscripts accordingly are greatly appreciated.

Guidance and great support for organization of the conference from Dr. V. M. Malhotra, Prof. Changwen Miao, the Honorary Chairpersons of the conference, are sincerely appreciated.

The support of CABR for the administrative work associated with the review of the papers, and the conference is gratefully acknowledged. Also, acknowledged is their support for the publication of the proceedings (ACI SP 329).

*Prof. Ziming Wang, Secretary General of the Conference*

*Prof. Jiaping Liu and Prof. Johann Plank, Chairpersons, Scientific Committee of the Conference*

*Dr. Terence C. Holland, Chairperson, Paper Review Panel*

*Prof. Jing Huang, Vice Director of the Organizing Committee*

*Editors*

*The Twelfth International Conference on Superplasticizers and Other Chemicals Admixtures, Beijing, China, October 28-31, 2018.*

# Contents

|   |            |  |  |
|---|------------|--|--|
| <b>Preface</b>  | <b>iii</b> |  |  |
| <b>SP-329-01</b>  | <b>1</b>   |  |  |
| <b>Influences of Star-Shaped Polycarboxylate Superplasticizers with Different Arm Lengths on Their Performances in Cement Paste</b> |            |  |  |
| by Xiao Liu, Guanghong Lai, Qian Xu, Jianan Guan, Ziming Wang, and Huiqun Li  |            |  |  |
| <b>SP-329-02</b>  | <b>19</b>  |  |  |
| <b>Investigation on Water Retention Property and Microstructure of Fresh State Cement Mortars Using <sup>1</sup>H Low-Field NMR</b> |            |  |  |
| by Yanliang Ji, Zhenping Sun, and Xiaoxing Jiang  |            |  |  |
| <b>SP-329-03</b>  | <b>31</b>  |  |  |
| <b>Study on Polycarboxylate Superplasticizer with Slump Retention Capacity</b>  |            |  |  |
| by Zhenping Sun, Lelin Wu, Yanliang Ji, Xu Yang, Yuansong Sun, and Chao Chen  |            |  |  |
| <b>SP-329-04</b>  | <b>41</b>  |  |  |
| <b>Amphoteric Superplasticizers for Cements Blended with a Calcined Clay</b>  |            |  |  |
| by Marlene Schmid, Nancy Beuntner, Karl-Christian Thienel, and Johann Plank   |            |  |  |
| <b>SP-329-05</b>  | <b>55</b>  |  |  |
| <b>PCE Superplasticizers Used as Dispersants in Oil Well Cementing</b>  |            |  |  |
| by B. Yu, M. Moumin, and J. Plank   |            |  |  |
| <b>SP-329-06</b>  | <b>67</b>  |  |  |
| <b>Nucleation and Growth of C-S-H – PCE Used as Strength Enhancer in Cement</b>   |            |  |  |
| by Vipasri Kanchanason and Johann Plank   |            |  |  |
| <b>SP-329-07</b>  | <b>77</b>  |  |  |
| <b>Novel Admixtures to Reduce the Stickiness of Low W/C Concretes</b>   |            |  |  |
| by Manuel Ilg and Johann Plank  |            |  |  |
| <b>SP-329-08</b>  | <b>89</b>  |  |  |
| <b>A New Type of Superplasticizer Possessing Dendrimeric Structure</b>  |            |  |  |
| by Manuel Ilg and Johann Plank  |            |  |  |
| <b>SP-329-09</b>  | <b>103</b> |  |  |
| <b>Research on Synthesis and Performances of Phosphate-Based Polycarboxylate Superplasticizer</b>                                   |            |  |  |
| by ShanShan Qian, SuPing Cui, ChunYang Zheng, ZiMing Wang, and Yan Yao  |            |  |  |
| <b>SP-329-10</b>  | <b>117</b> |  |  |
| <b>Study on Properties and Mechanism of Liquid Alkali Free Set Accelerating Admixture for Sprayed Concrete</b>                      |            |  |  |
| by Ying Qiu, Guo-Xin Chen, Ye-Ran Zhu, Xiu-Sheng Tang, and Zheng Cui  |            |  |  |
| <b>SP-329-11</b>  | <b>127</b> |  |  |
| <b>The Troubled Relationship Between PCEs and Cement in the Presence of Swelling Clays</b>  |            |  |  |
| by Giorgio Ferrari, Mariele Gamba, Francesco Surico, Gilberto Artioli, Maria Chiara Dalconi, and Luca Valentini                     |            |  |  |

- SP-329-12 143**  
**Hindered Calcium Hydroxide Nucleation and Growth as Mechanism Responsible for Tricalcium Silicate Retardation in Presence of Sucrose**  
 by Patrick Juilland and Emmanuel Gallucci
- SP-329-13 155**  
**Impact of Different Type of Calcium Sulfate on Early Ettringite Formation in Presence of Different PCE**  
 by Lukas Frunz, Patrick Juilland, Emmanuel Gallucci, and Jörg Zimmermann
- SP-329-14 165**  
**Impact of Different PCE Architectures on Flow Performance Depending on Precipitated Ettringite**  
 by Y. Chen, S. Wang, P. Juilland, L. Frunz, and J. Zhu
- SP-329-15 175**  
**Alteration of Superplasticizers Molecular Composition during Adsorption on Cement Hydrates**  
 by Anatoly I. Vovk
- SP-329-16 185**  
**Overview of Defoaming Technologies for Polycarboxylate-Based Superplasticizers**  
 by Ara A. Jeknavorian
- SP-329-17 201**  
**Alternative Setting Retarders for Portland Cement Clinker**  
 by Harald Justnes
- SP-329-18 213**  
**Effects of the Adsorption Characteristics of PCE on C<sub>3</sub>S Hydration**  
 by Ming Liu, Jing Chen, Yuxin Gao, Guangjun Zheng, and Jiaheng Lei
- SP-329-19 225**  
**Definition of a PCE Family that Increases Performances when a Workability Retention Agent (WRA) is Added**  
 by Angela Rozzoni and Michaël Dolci
- SP-329-20 237**  
**Graphite Nanoplatelets and Graphene Oxide Influence on C-S-H Formation**  
 by P. Gronchi, S. Bianchi, L. Brambilla, and M. Goisis
- SP-329-21 257**  
**Study on the Molecular Structure, Adsorption and Hydration Properties of Different Typed Polycarboxylate Superplasticizers**  
 by Yunhui Fang, Yuliang Ke, Xiaofang Zhang, and Geli Li
- SP-329-22 267**  
**Influence of Non-adsorbed Polymers on Fluidity of Cement Paste**  
 by Kazuki Matsuzawa, Daiki Shimazaki, Hirokatsu Kawakami, and Etsuo Sakai
- SP-329-23 279**  
**Development of Ultra-Low Temperature Anti-Freezing Pumping Admixture**  
 by Fei Xiao, Yongwei Wang, Jinhuan Lv, Jie Zhang, and Tongwei Lu
- SP-329-24 291**  
**Anionic Gemini Surfactants as Novel Air Entraining Agents**  
 by Min Qiao, Jian Chen, Nanxiao Ga, Qianping Ran, and Jiaping Liu
- SP-329-25 305**  
**Polymer Physics and PCE Superplasticizers Revisited**  
 by Yanwei Wang, Xin Shu, Yong Yang, Qianping Ran, and Jiaping Liu

- SP-329-26      319**  
**Conformational Properties of Polycarboxylate Superplasticizers in Solution and at Liquid/Solid Interfaces Explored by All-Atom Molecular Dynamics Simulations**  
 by Hongxia Zhao, Yanwei Wang, Yong Yang, Xin Shu, Jiaping Liu, and Qianping Ran
- SP-329-27      333**  
**Rheological Properties of Cement Pastes Incorporating Polycarboxylate Superplasticizers Containing Different Hydrophobic Groups**  
 by Xin Shu, Yanwei Wang, Yong Yang, Xiumei Wang, Qian Zhang, Hongxia Zhao, Qianping Ran, and Jiaping Liu
- SP-329-28      349**  
**Effect of the Side Chain Hydrophobicity on the Properties of Shrinkage-Reducing Polycarboxylate Superplasticizers**  
 by Nanxiao Gao, Qianping Ran, and Min Qiao
- SP-329-29      363**  
**Research on Low Temperature and Early Strength of Cementitious Grout for Sleeve Coupler of Reinforcement Splicing**  
 by Jinming Wang, Kaiyu Wang, Yongwei Wang, Yongsheng Liu, and Jie Zhang
- SP-329-30      373**  
**CSA-Based Mortars Manufactured with Tartaric Acid-Based Retarder**  
 by Luigi Coppola, Denny Coffetti, and Elena Crotti
- SP-329-31      389**  
**Synthesis of Core-Shell CS/APCS Particle via Electrostatic Self-Assembly**  
 by Dongmin Wang and Chunlong Huang
- SP-329-32      403**  
**Effect of D-gluconate on Nucleation and Growth of Synthetic Calcium Silicate Hydrate (C-S-H)**  
 by Jirawan Siramanont and Paul Bowen
- SP-329-33      415**  
**On the Mechanism of Using Carbon Dioxide as a Beneficial Concrete Admixture**  
 by Sean Monkman, Kathryn Grandfield, and Brian Langelier
- SP-329-34      429**  
**Influence of the Aqueous Phase of Cement Paste on the Rheology in the Presence of PCE**  
 by Wolfram Schmidt, Sarah Leinitz, Berta Mota, and Claudia Crasselt
- SP-329-35      445**  
**Study on the Polymerization Kinetics of Methyl Allyl Polyethylene Glycol with Acrylic Acid**  
 by Ziming Wang, Yang Zhang, Jingying Peng, and Dongjie Yin
- SP-329-36      459**  
**Advances in Admixtures and In-Transit Concrete Management Systems for Sustainable Construction**  
 by Josephine Cheung, Elizabeth Burns, Joshua Curto, and Nathan Tregger