

Board of Direction

President
Khaled Awad

Vice Presidents
David A. Lange
Randall W. Poston

Directors
JoAnn P. Browning
Cesar A. Constantino
Frances T. Griffith
H. R. Trey Hamilton
R. Doug Hooton
Joe Hug
Kimberly Kayler
William M. Klorman
Neven Krstulovic-Opara
Tracy D. Marcotte
Antonio Nanni
Roberto Stark

Past President Board Members
Michael J. Schneider
Sharon L. Wood
William E. Rushing Jr.

Executive Vice President
Ron Burg

Technical Activities Committee

H. R. Trey Hamilton, Chair
Michael C. Brown
JoAnn P. Browning
Catherine E. French
Harry A. Gleich
Fred R. Goodwin
Larry Kahn
Neven Krstulovic-Opara
Kimberly Kurtis
Tracy D. Marcotte
Michael Stenko
Bruce A. Suprenant
Andrew W. Taylor

Staff
Publisher
John C. Glumb

Engineering
Managing Director
Michael L. Tholen

Managing Editor
Jerzy Z. Zemajtis

Staff Engineers
Katie A. Amelio
Robert M. Howell
Khaled Nahlawi
Marc M. Rached
Matthew R. Senecal
Steve S. Szoke
Gregory M. Zeisler

Publishing Services
Manager
Barry M. Bergin

Editors
Carl R. Bischof
Tiesha Elam
Kaitlyn J. Hinman
Kelli R. Slayden

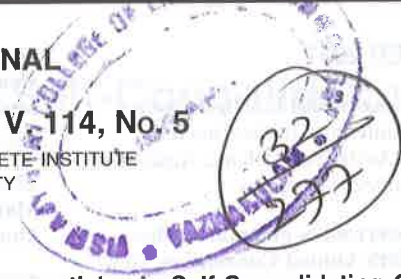
Editorial Assistant
Angela R. Matthews



ACI MATERIALS JOURNAL

SEPTEMBER-OCTOBER 2017, V. 114, No. 5

A JOURNAL OF THE AMERICAN CONCRETE INSTITUTE
AN INTERNATIONAL TECHNICAL SOCIETY



- 691 Use of Copper Slag Microparticles in Self-Consolidating Concrete**, by Iman Afshoon and Yasser Sharifi
- 701 Investigation on Impacts of Municipal Solid Waste Incineration Bottom Ash on Cement Hydration**, by Jinwoo An, Jinyoung Kim, and Boo Hyun Nam
- 713 Effect of Temperature on Chloride Diffusion in Saturated Concrete**, by B. Touil, F. Ghomari, A. Bezzar, A. Khelidj, and S. Bonnet
- 723 Influence of Alkali-Silica Reaction Reactivity on Corrosion in Reinforced Concrete**, by David Trejo, Vandad Mazarei, Jason H. Ideker, and O. Burkan Isgor
- 733 Study on Field Thermal Curing of Ultra-High-Performance Concrete Employing Heat of Hydration**, by L. A. Sbia, A. Peyvandi, I. Harsini, J. Lu, S. Ul Abideen, R. R. Weerasiri, A. M. Balachandra, and P. Soroushian
- 745 Influence of Cement on Properties of Fly-Ash-Based Concrete**, by Zhang Hongen, Jiang Feng, Wang Qingyuan, Tang Ling, and Shi Xiaoshuang
- 755 Comparative Study of Concrete Panels' Fire Resistance**, by A. Gil, F. Pacheco, R. Christ, F. Bolina, K. H. Khayat, and B. Tutikian
- 763 Durability of Cementitious Composites Mixed with Various Portland Limestone Cement-Cements**, by Aidi Marzouki and André Lecomte
- 775 Experimental Study on Cyclic Tensile Behavior of Concrete under High Stress Level**, by Xudong Chen, Jingwu Bu, and Lingyu Xu
- 783 Complete Stress-Strain Behavior of Ecological Ultra-High-Performance Cementitious Composite under Uniaxial Compression**, by Zhiyong Liu, Weiwei Chen, Wenhua Zhang, Yunsheng Zhang, and Henglin Lv
- 795 Effect of Element Distribution on Strength in Fly Ash Geopolymers**, by Chamila Gunasekara, David W. Law, Sujeeva Setunge, Iko Burgar, and Robert Brkljaca
- 809 Compatibility of Shrinkage-Reducing and Air-Entraining Admixtures**, by Benjamin Pendergrass, David Darwin, Muzai Feng, and Rouzbeh Khajehdehi
- 819 Discussion**
Effects of Air Void Clustering on Concrete Compressive Strength. Paper by Jan Vosahlik, Kyle A. Riding, Asad Esmaily, Randall Billinger, and Heather McLeod
CAPO-TEST to Estimate Concrete Strength in Bridges. Paper by Andrzej T. Moczko, Nicholas J. Carino, and Claus Germann Petersen

Discussion is welcomed for all materials published in this issue and will appear ten months from this journal's date if the discussion is received within four months of the paper's print publication. Discussion of material received after specified dates will be considered individually for publication or private response. ACI Standards published in ACI Journals for public comment have discussion due dates printed with the Standard.

ACI Materials Journal
Copyright © 2017 American Concrete Institute. Printed in the United States of America.

The *ACI Materials Journal* (ISSN 0889-325X) is published bimonthly by the American Concrete Institute. Publication office: 38800 Country Club Drive, Farmington Hills, MI 48331. Periodicals postage paid at Farmington, MI, and at additional mailing offices. Subscription rates: \$168 per year (U.S. and possessions), \$177 (elsewhere), payable in advance. POSTMASTER: Send address changes to: *ACI Materials Journal*, 38800 Country Club Drive, Farmington Hills, MI 48331.

Canadian GST: R 1226213149.

Direct correspondence to 38800 Country Club Drive, Farmington Hills, MI 48331. Telephone: +1.248.848.3700.
Website: <http://www.concrete.org>.