# Advances in Concrete Bridges: Design, Construction, Evaluation and Rehabilitation

Held at the Concrete Convention and Exposition 2018

ACI SP 333

Salt Lake City, Utah, USA 25-29 March 2018

# **Editors:**

Yail J. Kim John J. Myers Antonio Nanni

ISBN: 978-1-7138-0801-5

### Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2018) by American Concrete Institute All rights reserved.

Printed with permission by Curran Associates, Inc. (2020)

For permission requests, please contact American Concrete Institute at the address below.

American Concrete Institute 38800 Country Club Drive Farmington Hills, MI 48331 USA

Phone: (248) 848-3700 Fax: (248) 848-3701

BKStore@concrete.org

### Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

## **TABLE OF CONTENTS**

SP-333-1: A Numerical Analysis Methodology for the Strengthening of Deep Cap Beams1-18 Authors: Rafael A. Salgado and Serhan Guner
SP-333-2: Surrogate Modeling for Self-Consolidating Concrete Characteristics Estimation for Efficient Prestressed Bridge Construction
SP-333-3: On the Application of Basalt-Fiber Reinforced Polymer (BFRP) Bars to Prestressed Slab Elements Typical of the Precast Concrete Industry
SP-333-4: Monitoring and Rehabilitation of Damaged Bridge Beam of Middle Ring Road in Shanghai
SP-333-5: Seismic Experiments and Analysis of Repaired Bridge Columns Using CFRP Donut
SP-333-6: Pedestrian Bridge as Clarifying Example of FRP-RC/PC Design96-118 Authors: Marco Rossini, Saverio Spadea, Antonio Nanni
SP-333-7: Shear Tests on Prestressed Concrete Continuous Beams
SP-333-8: Concrete Beams with Fully Corroded Steel Repaired with CFRP Laminates
SP-333-9: Rational Fuzzy Logic Condition Rating Model of Reinforced Concrete Bridge Decks Using Nondestructive Testing and Visual Inspection