## An ACI Technical Publication



Shear in Structural Concrete

Editors: Denis Mitchell and Abdeldjelil Belarbi





# Shear in Structural Concrete

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## The Concrete Convention and Exposition March 25-29, 2018 Salt Lake City, UT, USA

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#### Preface

This Symposium Volume reports on the latest information related to shear in structural Concrete. The volume contains 14 papers that were presented at the ACI Convention held in Salt Lake City on March 27, 2018. The symposium was sponsored by ACI/ASCE Committee 445 "Shear and Torsion". This event honored Professor Michael P. Collins (University of Toronto) whose enormous contributions in the development of rational behavioral models for shear and torsion of structural concrete have been paramount.

The papers cover different aspects related to shear in structural concrete including: the size effect in shear for both structural concrete and reinforced masonry; developments of the Modified Compression Field Theory; aspects of shear strengthening using FRP strips; the role of experimental measurements in understanding shear behavior; accounting for shear deformations; sustained loading effects on shear in members without transverse reinforcement; crack-based assessment of shear; key aspects in the design of concrete offshore structures, behavioral models for coupling beams; finite element modeling of punching shear in slabs; and seismic design for shear.



Professor Michael P. Collins

Sincere acknowledgements are extended to all authors, speakers and reviewers as well as to ACI staff for making this symposium a success.

Editors: Denis Mitchell (ACI 445) Abdeldjelil Belarbi (Chair of ACI 445)

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