

# An ACI Technical Publication

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## 11th ACI/RILEM INTERNATIONAL CONFERENCE ON CEMENTITIOUS MATERIALS AND ALTERNATIVE BINDERS FOR SUSTAINABLE CONCRETE

Editor:  
Arezki Tagnit-Hamou

SP-349



American Concrete Institute  
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# 11th ACI/RILEM INTERNATIONAL CONFERENCE ON CEMENTITIOUS MATERIALS AND ALTERNATIVE BINDERS FOR SUSTAINABLE CONCRETE

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## PREFACE

In July 1983, the Canada Centre for Mineral and Energy Technology (CANMET) of Natural Resources Canada, in association with the American Concrete Institute (ACI) and the U.S. Army Corps of Engineers, sponsored a five-day international conference at Montebello, Quebec, Canada, on the use of fly ash, silica fume, slag and other mineral by-products in concrete. The conference brought together representatives from industry, academia, and government agencies to present the latest information on these materials and to explore new areas of needed research. Since then, eight other such conferences have taken place around the world (Madrid, Trondheim, Istanbul, Milwaukee, Bangkok, Madras, Las Vegas, and Warsaw). The 2007 Warsaw conference was the last in this series.

In 2017, due to renewed interest in alternative and sustainable binders and supplementary cementitious materials, a new series was launched by Sherbrooke University (UdeS); ACI; and the International Union of Laboratories and Experts in Construction materials, Systems, and Structures (RILEM). They, in association with a number of other organizations in Canada, the United States, and the Caribbean, sponsored the 10th ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete (ICCM2017). The conference was held in Montréal, QB, Canada, from October 2 to 4, 2017. The conference proceedings, containing 50 refereed papers from more than 33 countries, were published as ACI SP-320.

In 2021, UdeS, ACI, and RILEM, in association with Université de Toulouse and a number of other organizations in Canada, the United States, and Europe, sponsored the 11th ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete (ICCM2021). The conference was held online from June 7 to 10, 2021. The conference proceedings, containing 53 peer reviewed papers from more than 14 countries, were published as ACI SP-349.

The purpose of this international conference was to present the latest scientific and technical information in the field of supplementary cementitious materials and novel binders for use in concrete. The new aspect of this conference was to highlight advances in the field of alternative and sustainable binders and supplementary cementitious materials, which are receiving increasing attention from the research community.

To all those whose submissions could not be included in the conference proceedings, the Institute and the Conference Organizing Committee extend their appreciation for their interest and hard work.

Thanks are extended to the members of the international scientific committee to review the papers. Without their dedicated effort, the proceedings could not have been published for distribution at the conference. The cooperation of the authors in accepting reviewers' suggestions and revising their manuscripts accordingly is greatly appreciated.

The assistance of Chantal Brien at the Université de Sherbrooke is gratefully acknowledged for the administrative work associated with the conference and for processing the manuscripts, both for the ACI proceedings and the supplementary volume.

Arezki Tagnit Hamou, Editor

Chairman, eleventh ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete (ICCM2021).  
Sherbrooke, Canada  
2021

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