PREFACE

In the last 12 years, the American Concrete Institute (ACI) and the Canada Center for Mineral and Energy Technology (CANMET), in association with several Brazilian institutions, have made a diligent effort to disseminate high-performance concrete technology in Brazil and in the Latin American countries.

Previous ACI/CANMET international conferences have been held in Brazil as follows:

- The first ACI/CANMET International conference was held in Florianópolis, Santa Catarina State, in 1996, but in this case it was not possible produce an ACI Special Publication.
- In 1999, ACI and CANMET, in association with São Paulo University and Rio Grande do Sul Federal University, sponsored the second conference. The conference was held in Gramado, Rio Grande do Sul State, and the proceedings were published as ACI SP-186.
- The third conference was held in Recife, Pernambuco State, in 2002. The
 proceedings were published as ACI SP-207. In this third conference, ACI and
 CANMET were associated with Federal University of Goiás, São Paulo University,
 and Pernambuco State University.
- In 2005, ACI and CANMET, in association with Federal University of Goiás, São Paulo University, Furnas Centrais Elétricas S.A., and the Brazilian Concrete Institute (IBRACON), sponsored the fourth conference in Olinda, Pernambuco State. This conference honored Dr. V. Mohan Malhotra, and the proceedings were published as ACI SP-229.
- In addition to the ACI Special Publications mentioned, all of these conferences had
 Supplementary Proceedings with papers also reviewed by an ACI review panel.

The present ACI Special Publication (ACI SP-253) contains the papers from the Fifth ACI/CANMET/IBRACON International Conference on High-Performance Concrete Structures and Materials that was held in Manaus, Amazon State (AM), Brazil, June 18-20, 2008. This Conference received 146 abstracts from 19 countries. In Warsaw, Poland, May 17-24, 2007, a review panel, in accordance with the policies of the American Concrete Institute, reviewed 67 manuscripts from 13 countries and selected 25 papers to be published in SP-253. The Fifth Conference is a result of the collaboration of ACI and CANMET along with São Paulo University, Federal University of Goiás, Amazon State University, and Brazilian Concrete Institute (IBRACON).

The Brazilian Institutions involved with these five conferences would like recognize the significant support of Dr. V. Mohan Malhotra, Dr. Terence C. Holland and Dr. P. K. Metha, without whom these conferences could not have been realized.

In the same way, we wish to thank the following members of the International Scientific Committee for their contributions to the success of the Fifth Conference:

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The help of the ACI staff is gratefully acknowledged in the administrative role associated with this publication.

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