NINTH INTERNATIONAL CONFERENCE ON CONCRETE PAVEMENTS

The Golden Gate to Tomorrow's Concrete Pavements

Organized by:

International Society for Concrete Pavements

August 17-21, 2008

San Francisco, California, USA

Volume 1 of 2

FOREWORD

These are the proceedings for the Ninth International Conference on Concrete Pavements, organized by the International Society for Concrete Pavements (ISCP). This is the ninth in a series of such conferences to bring together experts from all over the world to discuss the state of the art of concrete pavement design, construction, evaluation, performance, and rehabilitation. Additional topics addresses include precast pavements, bases, sealants, joints, and drainage.

The First International Conference on Concrete Pavement Design was held at Purdue University on February 15-17, 1977. The Second International Conference on Concrete Pavement Design was held in Indianapolis, Indiana on April 14-16, 1981. Both of these conferences were planned and organized by Eldon J. Yoder, Professor of Civil Engineering at Purdue University. The Third International Conference, dedicated to his memory and his many contributions to the engineering profession, was held on April 23-25 at Purdue University. The Fourth and Fifth conferences were also held on the Purdue Campus in 1989 and 1993, respectively. The Sixth Conference was held in Indianapolis, Indiana in 1997. The Seventh Conference was held at the Disney Coronado Springs Resort in Orlando, Florida, on September 9-13, 2001. The Eighth Conference was held at Colorado Springs, Colorado. The Ninth Conference was held at San Francisco, California on August 17-21, 2008.

The papers presented in these proceedings were selected through peer review from manuscripts submitted in February 2008. Seventy-two papers were accepted for this conference on the basis of the peer review comments. The papers published in these proceedings have been organized in the same format as that of the general program, as described on page v.

We would like to take this opportunity to thank the authors and the many reviewers who volunteered their time to ensure that the papers that appear in these proceedings are of the highest quality. We wish to thank the members of the conference steering committee and the technical program subcommittee for their tireless efforts in developing the overall conference program and the technical program. We extend special thanks to all of the program cosponsors for their financial support and their guidance in developing the final program. We would like to thank Dr. Neeraj Buch for his assistances with manuscript preparation and coordination of correspondence with the authors and reviewers. Finally, we would like to thank Nona Schaler and her staff at Occasional Events, Inc for all of their efforts in support of planning and organization of the conference.

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Mission- The mission of the society to facilitate the advancement of knowledge and technology related to concrete pavements through education, technology transfer and research at the international level.

The Society will gather and disseminate information for the concrete pavement community. The Society's efforts will promote technological advancements and competence of its members, leading to improved concrete pavement performance.

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9th International Conference on Concrete Pavements San Francisco, California – August 17-21, 2008

	Sunday	Monday	Tuesday		Wednesday		Thursday	
7:00 AM	August 17	August 18 Registration	August 19 Registration		August 20 Registration		August 21	
7:30 AM			Session 7a: Low- Volume	aration .	Session 11a: Fiber-	ti ation	Session 15: Topics	
8:00 AM		Plenary Session (Invited Speakers)	Road Design and Performance		Reinforced Concrete Pavements	Session 12:	in Pavement Materials Session 16: Thin	
8:30 AM 9:00 AM 9:30 AM	Registration	Break	Session 7b: Permeable Bases	PCC in Airfield Applications	Session 11b: Construction	Pavement Analysis and Performance Prediction	Concrete Paving	
10:00 AM		Session 1: Pavement		reak	Break		Break	
10:30 AM	ISCP Board and Membership Meeting	Research Programs, Initiatives and Policies Session 2: CRCP –	Session 9a: Pavement Scanning Equipment	Session 10: Concrete Pavement	Session 13: Pavement Ride Quality and Safety Session 14: Pavement Behavior and Modeling		Session 17: Design Methods and Considerations	
11:30 AM	(open to all)	Design, Construction and Performance	Session 9b: Dowel Bar Alignment	Rehabilitation and Restoration			Session 18: Innovations in CRCP Design and	
12:00 PM 12:30 PM		Lunch					Construction	
1:00 PM	Hot Tonio	Session 3: M-E Pavements Design Procedures – Evaluation and	Student Poster Board Competition Judging		Lunch			
2:30 PM	Hot Topic Workshops	Comparisons Session 4: Pervious Concrete Pavements			a FHWA/CF	Workshops nd RSI Training p on CRCP	Conference Ends	
3:00 PM	Break	Break			Break		12:30 PM	
3:30 PM	Hot Topic Workshops	Session 5: Analysis of PCC Pavement Response Session 6: Admixtures and Concrete	Adjourn until Wednesday 7:30 AM		a FHWA/CF	Workshops nd RSI Training p on CRCP		
5:00 PM	(continued)		7.30	O Z ZIVI				
5:30 PM						inued)		
6:00 PM 7:00 PM	ISCP Reception Exhibit and Student Poster Board Areas Officially Open	Dinner on your own ISCP Board Dinner (by invitation only)			Awards Dinn	eption er and Closing emony		

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