



# **PROCEEDINGS OF THE 7TH INTERNATIONAL CONFERENCE ON EXPANSIVE SOILS**

August 3 - 5, 1992

Dallas, Texas (USA)



Dallas Skyline  
(Provided by Dallas Convention and Visitors Bureau)

## TABLE OF CONTENTS

<i>Introduction</i>	
W. K. Wray .....	vii

### Plenary Papers

<i>Practical Solutions to Problems of Collapsible Loess in China</i>	
Z. Y. Chen .....	1
<i>Use of Mechanics in Expansive Soils Engineering</i>	
R. L. Lytton .....	13
<i>Engineering Problems Associated with Expansive and Collapsible Soils Behaviour</i>	
M. E. Popescu .....	25
<i>Heaving Soils in a Southern Environment</i>	
A. A. B. Williams .....	47

### Address by ISSMFE President

<i>Presidential Address for the 7th International Conference on Expansive Soils, Dallas, USA</i>	
N. R. Morgenstern .....	65

### Discussions

<i>Discussion by Mustafa Aytekin</i> - Paper: "A New Method for Calculating Lateral Swelling Pressure in Expansive Soil" by Jiang Zhong Xin and Qin Xiao Ling (pp. 233-238, Vol. 1) .....	67
<i>Discussion by D. A. Cameron</i> - Paper: "A Model for Predicting Expansive Soil Behavior" by R. G. McKeen (pp. 1-6, Vol. 1) .....	73
<i>Closure by R. Gordon McKeen</i> .....	75
<i>Discussion by Ulrich Smoltczyk</i> - Paper: "Physical and Mineralogical Characterization of a Swelling Claystone" by M. Picornell and R. L. Lytton (pp. 352-357, Vol. 1) .....	77
<i>Discussion by R. Gordon McKeen</i> - Paper: "Evaluation of Soil Suction-Heave Prediction Methods" by D. R. Snethen and G. Huang (pp. 12-17, Vol. 1) .....	79

## Papers Received After Publication of Volume I

### **Composite Underreamed Pile Construction for Light Structure in Expansive Soils**

S. M. Humad and R. Agrawal..... 83

### **Shear Strength of Unsaturated Soil**

R. W. Peterson ..... 89

**Appendix A:** Correction to Page 127 of Volume 1 - Paper: "Helical Piers in Expansive Soils of Dallas, Texas" by R. L. Hargrave and R. E. Thorsten ..... 95

### **Appendix B: List of 7th International Conference on Expansive Soils**

Attendees and Exhibitors..... 97