

Table of Contents

Preface	vii
1. Strengthening and Reinforcement of Pavements	1
1. Reinforcement of Pavements with Steel Meshes and Geosynthetics <i>H.G. Rathmayer</i>	3
2. Geotechnical Aspects Related to Foundation Layers of Pavements and Rail Tracks	15
2. Improved Performance of Ballasted Tracks <i>A.M. Kaynia & D. Clouteau</i>	17
3. Frost Design Method for Roadways and Railways – State of the Art in France <i>C. Mauduit, J. Livet & J-M. Piau</i>	31
4. Influence of Impact Load on Base Course and Sub-grade by Circulation <i>Y. Shioi & T. Sakai</i>	45
5. Development and Performance Evaluation of Multi-ring Shear Apparatus <i>T. Ishikawa, S. Miura & E. Sekine</i>	53
6. Development of Rut Depth Prediction Model Considering Deformation of Asphalt Layer and Subgrade <i>T. Kanai, S. Higashi, K. Matsui & K. Himeno</i>	65
7. Effects of Continuous Principal Stress Axis Rotation on the Deformation Characteristics of Sand Under Traffic Loads <i>Y. Momoya, K. Watanabe, E. Sekine, M. Tateyama, M. Shinoda & F. Tatsuoka</i>	77

8.	The Effects of Shear Stress Reversal on the Accumulation of Plastic Strain in Granular Materials under Cyclic Loading <i>S.F. Brown</i>	89
3.	Earth Structures in Pavement and Railway Construction – Promoting the Use of Processed Materials and Continuous Compaction Control	109
9.	Roller-integrated Continuous Compaction Control (CCC) Technical Contractual Provisions & Recommendations <i>D. Adam</i>	111
10.	Crushed Concrete Aggregate as a Backfill Material for Civil Engineering Soil Structures <i>F. Tatsuoka, Y. Tomita, L. Lovati & U. Aqil</i>	139
11.	Evaluation of Resilient Modulus and Environmental Suitability of Two Granular Recycled Materials <i>T.B. Edil</i>	159
12.	Current State of the Use of Recycled Materials in Geotechnical Works in Portugal <i>E. Fortunato & F. Pardo de Santayana</i>	171
13.	Utilization of Processed Material in Pavement Surface and Base-course in Japan <i>N. Yoshida</i>	187
14.	Geotechnical Characteristics of Crushed Concrete for Mechanical Stabilization <i>E. Sekine & Y. Momoya</i>	201
	Author Index	211