National Transport Infrastructure Conference with International Participation (NTICIP 2023)

IOP Conference Series: Materials Science and Engineering Volume 1297

Nessebar, Bulgaria 5 - 7 October 2023

Editors:

Andrey Totsev Petar Nikolov Lazar Georgiev

ISBN: 978-1-7138-8734-8

ISSN: 1757-8981

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

This work is licensed under a Creative Commons Attribution 3.0 International Licence. Licence details: http://creativecommons.org/licenses/by/3.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination and minor adjustments for aesthetics.

Printed with permission by Curran Associates, Inc. (2024)

For permission requests, please contact the Institute of Physics at the address below.

Institute of Physics Dirac House, Temple Back Bristol BS1 6BE UK

Phone: 44 1 17 929 7481 Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

TABLE OF CONTENTS

Peer Review Statement	
Drainage of Road Bridges	1
Study of Problems Related to Pedestrian Bridges in Bulgaria	e
Testing of a Temporary Railway Bridge and Analysis of the Results	13
Technological Methods for Pavement Block Repairs in Road Bridges	18
About Effect of Dynamic Loading Caused by Concrete Pump on Bending Moments, Anchor Forces and Deformations in Single Level Anchored Retaining Wall	25
Structures for Permanent Stabilization of the Sea Coast	34
Analysis of a Two Pile Frame for a Horizontal Force	43
Advanced Technologies for Landslide Monitoring	51
Rapid Detection of Landslides Mechanisms and Assessment of Their Geometry and Dimensions by Means of a Drone Survey (UAV) After the 2023 Turkey-Syria Earthquake	61
Experiences and Practices from Application of Rockfall Remedial Works at MKD National Road Network	70
Depth Profile of Eurocode LM1 Load and Its Influence on Geotechnical Structures	78
Innovative Approach for Surveying Slope Stability in Road Infrastructure Rehabilitation	86
Evaluating the Long-Term Plastic Strain Accumulation in Reclaimed Asphalt Pavement (RAP) Application for Road Subbase Construction: A Cyclic Triaxial Loading Study	96
Analysis of the Impact of Rail Head Wear on Railway Superstructure Stability	104
Study of the Interaction of a Modified Rim Profile with Rail Profiles Used in the Tram Track of the City of Sofia	113

Strategic Development of the National Road Network	119
The Economic Factor as a Key in Planning Activities of the National Road Network	127
Possibilities for the Construction of a Parallel Route of the European Transport Corridor No 9 Through Romania, Bulgaria, and Greece Nikolay Tsonkov, Kamen Petrov	137
On the Need for Connectivity and a New Strategic Approach to Building Road Infrastructure in the Balkans	148
Application of Artificial Intelligence in Road Network Inventory and Network-Wide Road Safety Assessment I Katsarov, S Penkov	160
Road Safety Impact Assessment Practices and Recommendations	168
Purpose of Acceleration and Deceleration Lanes. Comparison of the Regulatory Framework for the Design Acceleration and Deceleration Lanes in Bulgaria, Austria, Germany and the USA (California)	175

Author Index