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Titolo	Noise and Vibration Mitigation for Rail Transportation Systems : Proceedings of the 11th International Workshop on Railway Noise, Uddevalla, Sweden, 9–13 September 2013 // edited by Jens C.O. Nielsen, David Anderson, Pierre-Etienne Gautier, Masanobu Iida, James T. Nelson, David Thompson, Thorsten Tielkes, David A. Towers, Paul de Vos
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; Railway Noise Control in Europe: Current Status; 1 Introduction; 2 European Policy and Incentives; 3 National Legislation and Incentives; 4 Economics of Railway Noise Control; 5 Noise Control Strategy of the Railways; 6 Noise Differentiated Track Access Charges (NDTAC); 7 Problematic Trends; 8 Outlook; References; Novel Legislation for Railway Lines and Motorways in The Netherlands; 1 Introduction; 2 Noise Production Ceilings; 3 Merits and Drawbacks of the New System; References; Bearable Railway Noise Limits in Europe; 1

Developments; 2 Findings; References

State-of-the-Art of the Noise Emission of Railway Cars1 Introduction; 2 TSI Noise Revision; 3 Collection of Noise Emission Data; 4 State-of-the-Art of Noise Emission of European Trains; 5 TSI Noise Revision - Results; References; On Separation of Vehicle Noise for Limit Setting in Future Legislation; 1 Introduction; 2 Background; 3 Separation; 4 Results; 5 Conclusion and Open Points; References; Estimating the Performance of Wheel Dampers Using Laboratory Methods and a Prediction Tool; 1 Introduction; 2 Wheel Modelling Procedure; 3 The Prediction Tool; 4 Conclusion; References

Estimating the Performance of Rail Dampers Using Laboratory Methods and Software Predictions1 Introduction; 2 Decay Rate Measurements; 3 STARDAMP Software; 4 Conclusions; References; Experimental and Theoretical Studies on Impact Noise Generation due to Rail Joints; 1 Introduction; 2 Experimental Study on Impact Noise; 3 Theoretical Study on Impact Noise; 4 Conclusion; References; An Explicit Integration Finite Element Method for Impact Noise Generation at a Squat; 1 Introduction; 2 Method; 3 Results and Analyses; 4 Conclusion and Future Work; References

Future European Noise Emission Ceilings: Threat or Solution? A Review Based on Swiss and Dutch Ceilings1 Introduction; 2 Emission Ceilings and Reception Limits; 3 Experience with Emission Ceilings; 4 Pros and Cons of Ceilings; 5 Conclusions; References; Comparison between Road and Rail Noise Cost per Transported Ton of Cargo; 1 Introduction; 2 Method; 3 Results; 4 Discussion; References; A Survey of Freight Locomotive Passby Noise Emissions; 1 Introduction; 2 Aims and Methodology; 3 Results; 4 Concluding Remarks; References

On the Importance of Accuracy of Geographic Model Data for Noise Impact Studies1 Introduction; 2 Noise Model for the Dutch Railway Network; 3 Results; 4 Conclusion; References; The Efficiency of Noise Reduction Measures on Railway Infrastructure in Normal Operating Conditions - NOVIBRAIL; 1 Introduction; 2 Efficiency of Rail Absorbers 1.5 Year after Installation; 3 Efficiency of Noise Reduction Measure on Rail Brakes on Hump Yard; 4 Noise Reduction by Application of Absorbing Layer on the Platform Edge; References; Characterizing Wheel Flat Impact Noise with an Efficient Time Domain Model  
1 Introduction

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## Sommario/riassunto

The book reports on the 11th International Workshop on Railway Noise, held on 9 – 13 September, 2013, in Uddevalla, Sweden. The event, which was jointly organized by the Competence Centre Chalmers Railway Mechanics (CHARMEC) and the Departments of Applied Mechanics and Applied Acoustics at Chalmers University of Technology in Gothenburg, Sweden, covered a broad range of topics in the field of railway noise and vibration, including: prospects, legal regulations and perceptions; wheel and rail noise; prediction, measurements and monitoring; ground-borne vibration; squeal noise and structure-borne noise; and aerodynamic noise generated by high-speed trains. Further topics included: resilient track forms; grinding, corrugation and roughness; and interior noise and sound barriers. This book, which consists of a collection of peer-reviewed papers originally submitted to the workshop, not only provides readers with an overview of the latest developments in the field, but also offers scientists and engineers essential support in their daily efforts to identify, understand and solve a number of problems related to railway noise and vibration, and to achieve their ultimate goal of reducing the environmental impact of railway systems.

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