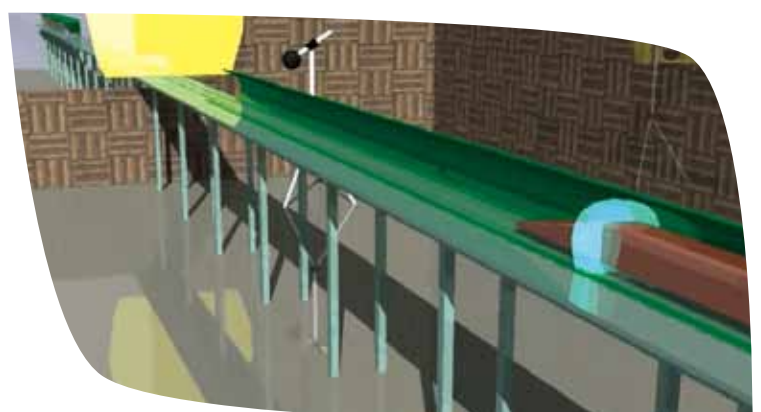
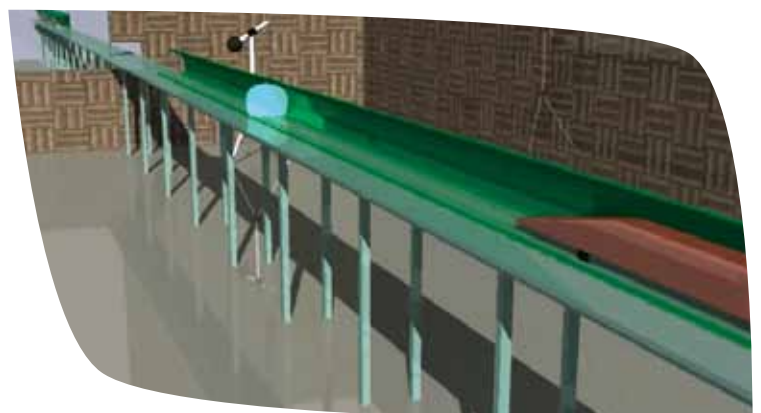
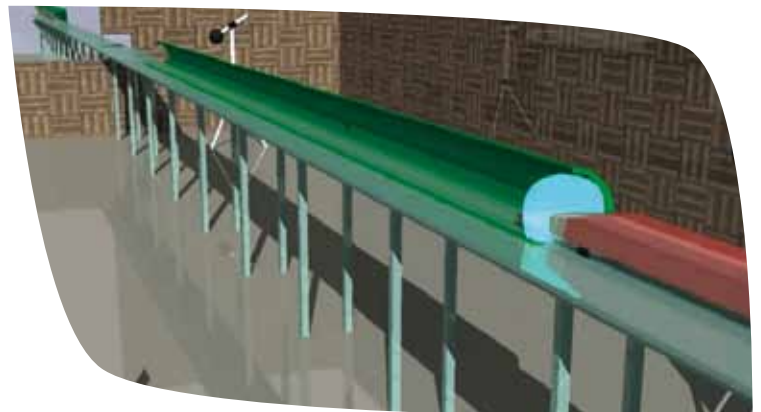
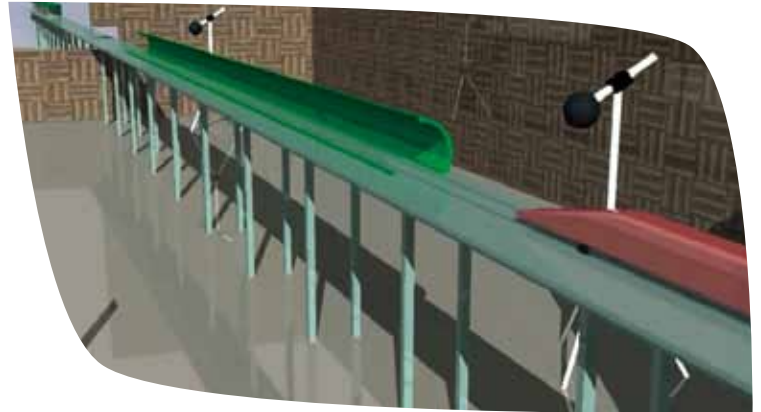


Faster and Energy-efficient Railway



2 Preface

Articles

3 The Necessity of Trains Becoming Faster, More Comfortable and Energy-efficient

7 Reduction of Elastic Vibration of Car Bodies and Internal Noise

10 Weight Reduction for Energy Efficiency and Higher Speed

12 Reducing the Air Resistance of Vehicles

14 Preservation of Environments beside High Speed Lines

Contribution

17 High Speed Rail in the UK

International Activities

21 Agreement on Collaborative Research with IFSTTAR

22 Collaboration Agreements with DLR

23 **WCRR 2019 TOKYO** The 12th World Congress on Railway Research (WCRR 2019)

