





Student Scientific Conference NEW TECHNOLOGY AND LOGISTICS ON THE RAILWAY

Project SGS - SVK 48/22/F6

ORGANISATIONAL FRAMEWORK:

Event Venue: Congress Centre - U Hájků, hotel Grandior, Na Poříčí 42, Prague 1

Language: Czech, English Dates: 5. 5. 2022

Schedule: 09:00 to 10:00 Registration

10:00 to 17:30 Lectures, forum of discussion

Organizer: Czech Technical University in Prague

Guarantor of the conference: prof. Ing. Ondřej Přibyl, Ph.D., the Dean of FTS CTU in Prague

PROGRAMME OF THE CONFERENCE:

09.00 - 10.00 REGISTRATION

10.00 prof. Ing. Josef Jíra, CSc.

Opening the Conference

INVITED LECTURES

Moderator: doc. Ing. Vít Fábera, Ph.D.

10.00 – 10.20 doc. Ing. Josef Kolář, CSc. (ČVUT)

MODERN VEHICLES FOR REGIONAL RAILWAYS

10.20 - 10.40 Ing. Jaroslav Vašátko (SIZI)

ROADMAP MODERN TECHNOLOGIES IN THE HIGH-SPEED LINES PREPARATION AND

IMPLEMENTATION IN THE CZECH REPUBLIC

10.40 - 11.00 doc. Ing. Martin Leso, Ph.D. (ČVUT)

PROBLEMS OF ASSESSMENT OF INTEGRAL INTERLOCKING ACCORDING TO REQUIREMENTS OF

EUROPEAN STANDARDS

11.00 - 11.30 COFFEE BREAK

SECTION A

Moderator: Ing. Martin Jacura, Ph.D.

11.30 – 11.50 Petr Nachtigall, Erik Tischer

CALCULATION OF THE TRACK CAPACITY UNDER THE ETCS L3

11.50 – 12.10 Přemysl Šrámek, Jaromír Široký, Martin Vojtek

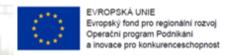
ARTIFICIAL INTELLIGENCE IN OPERATIONAL APPLICATIONS OF RAILWAY INFRASTRUCTURE

MANAGER

12.10 – 12.30 Lukáš Křižan, Martin Vojtek

BENEFITS OF REMOTE CONTROL ON THE RAILWAY LINES

12.30 - 13.30 LUNCH







SECTION B

Moderator: Ing. Petr Nachtigall, Ph.D.

13.30 - 13.50 Vojtěch Dybala

THE MEASUREMENT OF THE INFLUENCE OF THE ADHESION LOSS ON THE DYNAMIC LOAD OF

THE DRIVE REACTION ROD ON THE ROLLER RIG

13.50 - 14.10 Jakub Seidl

THE INFLUENCE OF THE CONSTRUCTION OF TRAM FRONTS ON THE CONSEQUENCES OF

ACCIDENTS WITH PASSNGER CARS

14.10 - 14.30 Jan Vrba

COOPERATION OF ACTIVE STEERING CONTROL OF WHEELSETS WITH SUBSZSTEMS OF AN

AUTONOMOUS URBAN ROLLING STOCK

14.30 – 14.50 Jakub Hora, Antonín Suk, Filip Baran

INTEGRATED CYCLIC TIMETABLE ON THE RAILWAYS IN THE KARLOVY VARY REGION

14.50 - 15.10 Martin Jacura, Lukáš Týfa

PROPOSAL OF OPERATIONAL CONCEPT FOR BULK SUBSTRATES TRANSPORT BY FRIEGHT TRAINS

AND ITS APPLICATION WITHIN CASE STUDY OF AGGREGATE TRANSPORT FOR CONSTRUCTION OF

VLACHOVICE DAM

15.10 - 15.30 COFFEE BREAK

SECTION C

Moderator: Ing. Jaroslav Vašátko

15.30 - 15.50 Adam Hlubuček

DETERMINING THE COORDINATES AND POSITIONS OF 3D POINTS BASED ON THE TRACK

GEOMETRY DESCRIPTION

15.50 - 16.10 Pavel Purkart, David Vodák

EXPERT QUESTIONNAIRE ON THE ISSUE OF ECONOMICAL USE OF THE RAILWAY TRAFFIC PATH

CAPACITY AND BUILDINGS PREPARATION ON THE RAILWAY

16.10 – 16.30 Martin Chýle, Michal Drábek

ECOLOGICAL SOLUTIONS FOR FREIGHT TRAINS

16.30 – 16.50 Tomáš Kohout, Luboš Nouzovský, Pavel Vrtal, Karel Kocián

ECOLOGICAL SOLUTIONS FOR FREIGHT TRAINS

16.50 – 17.10 Jan Froněk, Jaroslav Chlumecký, Daniel Vymětal

LENGTH OF TRANSFER TIME BETWEEN CONNECTING TRAINS - IS THERE AN IDEAL VALUE?

FINAL SECTION

Moderator: doc. Ing. Vít Fábera, Ph.D.

17.10 - 17.30 Expert Discussion

17.30 CLOSE OF THE CONFERENCE