







# **EcoSET**

Ecology, Science, Education and Technology.

Ways to Internationalise the Bydgoszcz University of Science and Technology in Areas of Research and Education



# Faculty International Seminar Bydgoszcz October the 25-29th, 2021

#### **Steering committee**

Jan Kempa, Professor and Chair, Faculty of Civil and Environmental Engineering and Architecture, Bydgoszcz University of Science and Technology
Marcin Karwasz, PhD, Head of the Department of Traffic Engineering, Transport and Geotechnics, Bydgoszcz University of Science and Technology
Bertha B. Santos, Professor, University of Beira Interior
Jorge Gonçalves, Professor, University of Beira Interior

#### **Organising committee**

Agata Bukaluk Zofia Rudnicka Radosław Klusek, PhD Marcin Karwasz, PhD Paulina Olenkowicz-Trempała, MSc Damian Wiśniewski, MSc

Research Team Members (PBS)	Research Team Members (UBI)
Jan Kempa, Professor	Bertha Santos, Professor
Jacek Chmielewski, PhD	Jorge Gonçalves, Professor
Marcin Karwasz, PhD	Pedro G. Almeida, Professor
Radosław Klusek, PhD	Isabel Matias, MSc (PhD student)
Damian Iwanowicz, PhD	Olga Gonçalves, MSc (PhD student)
Paulina Olenkowicz-Trempała, MSc	Ianca Feitosa, MSc (PhD student)
Damian Wiśniewski, MSc	André Nogueira, MSc
	Pollyanna Lucena, MSc student
	Sandro Ferreira, MSc student
	Pedro Gavinhos, MSc student

# Agenda

## Monday, 25<sup>th</sup> October

10h30 Welcome coffee (Introduction Prof. M. Dobiszewska)

10h45 Current status of developed and ongoing collaboration

11h15 Prof. J. Kwiecień - Spatial variability of carbon monoxide pollution on the example of the city of Bydgoszcz

11h45 Discussion

### Tuesday, 26th October

10h30 Welcome coffee

11h00 Prof. M. Dutkiewicz – Dean of the Faculty of Civil engineering and environmental engineering and architecture

12h00 Presentation of WMCAUS 2021 joint articles

#### • Mobility in Transportation Surveys

Paulina Olenkowicz-Trempała, Jacek Chmielewski, Jan Kempa

Faculty of Civil and Environmental Engineering and Architecture, UTP University of Science and Technology in Bydgoszcz, Poland

Aleksander Sobota

Faculty of Transport and Aviation Engineering Silesian University of Technology, Department of Transport Systems, Traffic Engineering and Logistics, Poland

Bertha Santos, Jorge Gonçalves

Department of Civil Engineering and Architecture, University of Beira Interior, Covilhã, Portugal; CERIS - Instituto Superior Técnico, Universidade de Lisboa, Portugal; CITTA - Faculty of Engineering of the University of Porto, Portugal

# • Low-Cost Geographic Information System for Municipal Road Signs Management in Depopulated and Low-Density Areas

Olga Gonçalves

Belmonte Municipality, Portugal

Jorge Gonçalves

Department of Civil Engineering and Architecture, University of Beira Interior, Covilhã, Portugal; CITTA - Faculty of Engineering of the University of Porto, Portugal

Jacek Chmielewski, Paulina Olenkowicz-Trempała

Faculty of Civil and Environmental Engineering and Architecture, UTP University of Science and Technology in Bydgoszcz, Poland

# • Transportation Network Spatial Analysis to Measure Pedestrian Suitability. The Case of Hilly Cities

André Nogueira, Bertha Santos, Jorge Gonçalves

Department of Civil Engineering and Architecture, University of Beira Interior, Covilhã, Portugal; CERIS - Instituto Superior Técnico, Universidade de Lisboa, Portugal; CITTA - Faculty of Engineering of the University of Porto, Portugal

Jan Kempa, Jacek Chmielewski

Faculty of Civil and Environmental Engineering and Architecture, UTP University of Science and Technology in Bydgoszcz, Poland

#### • Calming Traffic in Historic City Centers - A Case Study

Andrzej Zalewski, Jacek Chmielewski, Jan Kempa

Faculty of Civil and Environmental Engineering and Architecture, UTP University of Science and Technology in Bydgoszcz, Poland

Bertha Santos, Jorge Gonçalves

Department of Civil Engineering and Architecture, University of Beira Interior, Covilhã, Portugal; CERIS - Instituto Superior Técnico, Universidade de Lisboa, Portugal; CITTA - Faculty of Engineering of the University of Porto, Portugal

12h00 Discussion

## Wednesday, 27<sup>th</sup> October

10h00 Welcome coffee

10h15 Articles submission to scientific journals indexed to Scopus and Web of Science. Articles:

- Drivers view on the influence of atmospheric conditions on road traffic safety
- The influence of weather conditions on road traffic safety

(common articles of the Portuguese and Polish side)

11h15 Joint applications for scientific cooperation projects

Scientific Cooperation Agreement between Portugal and Poland – status

12h00 Discussion

### Thursday, 28th October

10h00 Welcome coffee

10h15 Transportation group, Department of Civil Engineering and Architecture of the University of Beira Interior: work in progress

• Road network suitability assessment for soft mobility: multi-criteria model and automated tools

Bertha Santos, Pollyanna Lucena, Sandro Ferreira

• Public transport accessibility index to large trip attractors in urban areas: case study - UBI

Jorge Gonçalves, Rafael Santos

• Application of unmanned aerial systems in road pavement condition assessment Bertha Santos, Pedro G. Almeida, Ianca Feitosa, Pedro Gavinhos

11h15 Bydgoszcz University of Science and Technology

• Concept of the LAST MILE of freight on the city road network for the Bydgoszcz Logistics Hub

M. Karwasz

• Application of data from dynamic vehicle mass measurement stations on the example of experiences in the USA

J. Chmielewski

12h00 Discussion

## Friday, 29th October

10h00 Welcome coffee 10h15 Planning Future Collaborations – Brainstorming 11h30 Closing