

Korea-EU Horizon Europe Researchers Networking Forum on Energy & Advanced Mobility

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**Habilitated
Associate Professor**

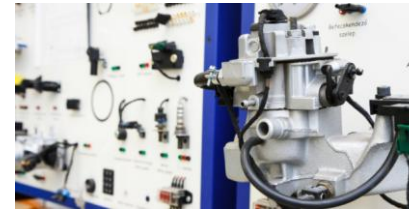
**Széchenyi István
University-Vehicle
Industry Research
Center**

**PhD in Business &
Organizational
Sciences**

1. Short Introduction of your Organization

Széchenyi István University – Vehicle Industry Research Center (SZE-JKK)

- ~14,000 students, strong focus on engineering sciences
- Dedicated Vehicle Industry Research Center (since 2012 in EV R&D, 2017 in autonomous mobility)
- **Four research groups:**
 1. **Social & Technological Acceptance**
 2. **Autonomous Transport Systems**
 3. **Mobile Robotics & Industry 4.0 E-Mobility**
- **Infrastructure:** direct access to ZalaZONE proving ground, modern labs and test facilities



Vehicle-electricity and Electronics Laboratory



Vehicle-mechatronics and Intelligent Vehicles Laboratory



Vehicle Diagnostics Laboratory



Autonomous and Intelligent Robots Laboratory



Electric Motor Testing-bench Examining-laboratory



2. Expertise

Expertise of SZE – JKK

- **Human-centred research:** consumer acceptance of technology, behavioural aspects of mobility, social impacts of CCAM
- **Autonomous vehicle R&D:** perception, object detection & tracking, control, V2X communication - **TRL 6**

Proven track record in **EU and national projects**, strong industry partnerships:

- a. Audi Hungária Ltd.
- b. Robert Bosch LLC.,
- c. Continental Autonomous Mobility Hungary Kft.

Access to **unique infrastructure:** ZalaZONE proving ground, advanced labs, Lexus autonomous test vehicle, SzEnergy race car

Keywords

Autonomous Mobility • CCAM Validation • Technology Acceptance • Sustainable Transport • Mobility ecosystems



Potential Contribution to a Consortium

- Ability to address **complex, interdisciplinary problems** in **Connected and Automated Mobility (CCAM)** by integrating:
 - **Engineering expertise:** development and validation of autonomous systems on advanced prototypes using ZalaZONE proving ground
 - **Human-centred research:** examination of public and driver attitudes, trust, and acceptance through multiple methods:
 - Questionnaire-based studies
 - Implicit physiological measurements
 - Qualitative interviews

3. Your Project Idea

Targeted Call

- Horizon Europe Cluster 5 – *Energy & Advanced Mobility*
- Focus areas: **Connected and Automated Mobility (CCAM)**, **Mobility ecosystems**

➤ HORIZON-CL5-2026-01-D6-05

➤ HORIZON-CL5-2026-01-D6-14

Main Objectives

- Develop and validate next-generation solutions for **safe and resilient mobility**
- Integrate **AI-driven methods** into simulation, testing and control of autonomous and electric vehicles
- Support **technology acceptance** and address societal aspects of advanced mobility



4. Profile You are Seeking and Why

We are open to joining existing or newly forming Horizon Europe consortia in:

- CCAM validation frameworks and safety assurance
- AI and human-centred design for mobility
- Cross-sectoral initiatives linking technology, sustainability, and society

Idea Briefly Explained

- Integrating engineering and human-centred research to support safe and accepted CCAM deployment.
- Using real-world testing on the ZalaZONE proving ground combined with behavioural and physiological studies.
- Providing a holistic framework that connects technology, sustainability, and social acceptance.



5. Contact Details



Contact details

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