



INTERNATIONAL SCIENTIFIC CONFERENCE

**ENGINEERING AND EDUCATIONAL TECHNOLOGIES 2024:  
CREATING AN INCLUSIVE LEARNING ENVIRONMENT FOR  
ENGINEERING PROFESSIONALS**

**9:00 – 10:00**

Registration

**10:00**

Opening of the Conference

**10:10 – 10:55**

Scientific Presentations

**11:00 – 11:50**

Panel Discussion

**11:50 – 12:20**

Closing of the Plenary Session Together  
with the Guests from the Orchestra

**12:30 – 13:30**

Lunch Break

**13:30 – 15:30**

Work in Scientific Groups and  
Innovation Alley



**10:10 – 10:30**

Development of Engineering  
Specialists Psychomotor and  
Creative Skills by Adjusting the  
Training – Learning Reflex

Prof. dr. Sigitas Vaitkevičius  
Research Director Vytautas Magnus  
University



**10:35 – 10:55**

A Flexible Model for Cooperative  
Studies Together with Industry

Prof. Dr.-Ing. Roy Knechtel  
University of Applied Sciences  
Schmalkalden, German



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**11:00 – 11:45**

PANEL DISCUSSION

Moderator – **Aurimas Perednis**

Discussion Topics:

- Creating an Inclusive Learning Environment: Where Does the Training of a Competent Professional Begin and Where Does It End?
- Collaboration Among Education Stakeholders in Order to Create Inclusive Learning Environment



**dr. Genutė Gedvilienė**  
Professor at the Academy  
of Education Vytautas  
Magnus University



**dr. Dainius Žvirdauskas**  
The President of LMVA,  
director of Kaunas  
University of Technology  
Engineering Lyceum



**dr. Lina Girdauskienė**  
Director of Kaunas  
University of Applied  
Engineering Sciences



**Mykolas Našlėnas**  
Alumnus of Kaunas  
University of Applied  
Engineering Sciences



**Povilas Bonkevičius**  
Head of KTK Racing  
Division

# CONSTRUCTION ENGINEERING RESEARCH

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MODERATOR DR. ROSITA NORVAIŠIENĖ

ROOM – 129

PRESS TO JOIN THE MEETING

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- 1. Non-Destructive Testing of Ceramic Tiles (On-Line Presentation). On-Line Presentation**  
Elif Eren Gültekin. (Selçuk University, Turkey)
- 2. Energy Transition in Buildings: Shift to Electric Utilities and Renewables**  
Fiaschi D. (University of Florence, Italy)
- 3. Operational Planning of Water Resources Management in Drainage - Irrigation Schemes**  
Brandyk A. (Warsaw University of Life Sciences, Poland)
- 4. How Sustainability Agenda Changes Construction Sector**  
Bielskyte R. (UAB Doresta, Lithuania)
- 5. Sustainability Analysis of Cross Laminated Timber, Concrete and Steel Buildings**  
Sragauskas M., Norvaišienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 6. Determination of Optimal Parameters of Large Span Steel Trusses**  
Mockienė J., Kantautas A. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 7. Study of Residential Building Partition Efficiency**  
Kaminskas D., Medelienė V. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 8. Assessment of Non-Ventilated Facade Insulation Systems for Residential Buildings**  
Jankauskas P., Medelienė V. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 9. Multi-Criteria Analysis of Commercial Building Flat Roof Covering Options**  
Klenauskas K., Medelienė V. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 10. Enhancing Sustainability Via Implementing Biological Additives for Soil Water Resources Management**  
Grybauskienė V., Vyčienė G. (Kaunas Forestry and Environmental University of Applied Sciences, Lithuania)
- 11. Analysis of the Selection of Floor Coverings for the Sport Hall**  
Botyrius I., Baltušnikienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 12. Solutions for the Management of the Slopes of Lithuanian Zoological Garden**  
Šadzevičius R., Ramukevičius D., (Kaunas University of Applied Engineering Sciences, Lithuania)
- 13. Analysis of Flat Roof Options**  
Dalbokaitė L., Kanauka E. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 14. Analysis of Options for Thermal Insulation Materials for Rendered Facades**  
Dalbokaitė L., Činikas D. (Kaunas University of Applied Engineering Sciences, Lithuania)



# ROAD ENGINEERING RESEARCH

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**MODERATOR DR. RAIMONDAS ŠADZEVIČIUS**  
ROOM – 319/1

PRESS TO JOIN THE MEETING

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- 1. Construcion Project in Sweden. On-Line presentation**  
Ačylovas A. (UAB Tyrens Lietuva, Sweden)
- 2. Diversion Routes for Unplanned Events & Innovative Practices to Reduce Costs and Deliver a Better Customer Experience**  
Tamošiūnas A. (AtkinsRéalis, United Kingdom)
- 3. Opportunities for Improving the Infrastructure of the Kretinga - Vydmantai Cycle Path**  
Taroza Ž. (UAB YIT Lietuva, Lithuania)
- 4. Via Baltica: From Project to the Result**  
Mikelionis A. (AB Kauno tiltai, Lithuania)
- 5. Rationality Assessment of Bridge Superstructures Based on TOPSIS Method**  
Baranauskas M. (AB Via Lietuva, Lithuania)
- 6. Analysis of Roundabouts and Recommendations for Application on Lithuanian Trunk and National Roads of National Importance**  
Volosenko S. (UAB Realprojektas, Lithuania)
- 7. Road Engineering Today**  
Vorobjovas V. (VilniusTech, Lithuania)
- 8. Analysis and Evaluation of Alternative Engineering Solutions for the Selection of Road Culverts**  
Rainys R., Motienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 9. Trends in Digital Infrastructure and Smart Mobility in Europe**  
Miklušis T., Švenčionis M. (UAB Realprojektas, Lithuania)
- 10. Factors Influencing the Quality of Road Engineering Training**  
Motienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 11. Comparative Analysis of Road Alignment Options**  
Rumša M., Motienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 12. Roundtable Discussion Together with Social Partners**  
**“Training of Specialists in Road Engineering: Experience and Perspectives”**  
**Moderator:** Benas Berkmonas (UAB Tyrens Lietuva)  
**Participants:** Aistis Tamošiūnas (UAB AtkinsRéalis); Žydrūnas Taroza (UAB YIT Lietuva); Tomas Miklušis (UAB Realprojektas); Artūras Ačylovas (UAB Tyrens Lietuva); Marius Baranauskas (AB Via Lietuva); Mykolas Našlėnas (Asphalab Baustoffprüfungen GmbH); Jūratė Mališkienė (AB Kauno tiltai)

# **TRANSPORT AND MECHANICAL ENGINEERING RESEARCH**

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**MODERATOR DR. ANDRIUS DARGUŽIS**  
**ROOM – 319/2**

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- 1. IOT Based Hydrogen Leak Detection System for Airplane Refiling Station**  
Lancha Gonzalez G., Kairiūkštis L. (Universidad Rey Juan Carlos, Kaunas University of Applied Engineering Sciences, Lithuania)
- 2. Air and Engineering: Improvements and Developments Made by Understanding the Concept of Air in Engineering**  
Yeniçeri O. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 3. Mechanical Vibrations in Industrial Engine**  
Gracas Massudi T.D., Štyps E. (Instituto Politécnico de Bragança, Portugal, Kaunas University of Applied Engineering Sciences, Lithuania)
- 4. Research of Electric Car Battery Reliability in Cold Climate Zone**  
Mažeika M. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 5. Modification of Oils With Additives**  
Kupčinskas A. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 6. Design of an Additional Safety System to Prevent Unauthorised Starting of Vehicles**  
Mitkevičius M., Kiveris A. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 7. The Influence of the Shape of the Cutting Insert on the Build-up Edge Growth**  
Žunda A., Andriušis A., Kupčinskas A. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 8. Research of Welding Arc Stability: Impact on Stud Welding Quality**  
Putnaitė D., Kozlovas A. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 10. Research of Electric Car Fire Prevention Safety**  
Juodvalkis D. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 11. Theoretical Study of the Efficiency of Cars with Different Levels of Hybridization**  
Dargužis A., Juodvalkis D. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 12. Overview of Simulation Tools to Improve Analog Circuit Analysis and Troubleshooting Skills**  
Paškauskas M., Saunoris M. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 13. Infuence of Driver Assistance Systems on Road Safety**  
Leonavičius M., Mickevičius T. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 14. Modeling Traffic Flow on Intersection**  
Gedeikis L., Mickevičius T. (Kaunas University of Applied Engineering Sciences, Lithuania).

# **ELECTRICAL AND ELECTRONICS RESEARCH**

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**MODERATOR DR. GEDIMINAS DAUKŠYS**  
**ROOM – 112**

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- 1. Sustainability on Electric Vehicles**  
Yilmaz E. (Gazi University, Turkey)
- 2. Electric Power and Distribution Systems**  
Sagredo Gonzalez J., Abad V, Fernandez V. (University of Burgos, Spain)
- 3. MEMS Microphones, the Ears of Alexa, Siri and Co. - Functionality, Technology and Applications**  
Knechtel R., Seyring.M. (University of Applied Sciences Schmalkalden, Germany)
- 4. Aesthetics of Failure and Indeterminism**  
Kolodzeiskis L. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 5. Investigation of Industrial Building with Hybrid Solar Power Station**  
Juknevičius R., Daukšys G. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 6. Implementation and Investigation of Wireless Charging**  
Motūzas J., Saunoris M. (Kaunas University of Technology, Kaunas University of Applied Engineering Sciences, Lithuania)
- 7. Investigation of a Pseudo Random RSA Key Generator**  
Nefas P., Jankūnienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 8. Grounding and Zeroing: What You Need to Know**  
Tamulynas R., Gužauskas M., Muleravičienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 9. Investigation of Radio Wave Propagation in 5G Network With 3GPP Tr 38.900 and SPM Models**  
Kašėta S. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 10. Analysis of Programmable Electronic Load Architectures and Control Techniques**  
Sankauskas M., Saunoris M. (Kaunas University of Technology, Kaunas University of Applied Engineering Sciences, Lithuania)
- 11. Investigation of Application of Method for Electrical Shoes Heating**  
Tamulynas R., Kybartas D. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 12. Assessing the Effects of Edge and Fog Computing on Data Processing Latency**  
Tervydis P. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 13. Types of Electrical Grid Failsafe Devices**  
Pranckevičius D., Muleravičienė R. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 14. Electronic Warfare and Its Elements**  
Grimaila, V. (UAB NT Service, Kaunas University of Applied Engineering Sciences, Lithuania, Kaunas University of Technology, Lithuania)
- 15. Progress and Challenges in Recycling Lithium Batteries in Lithuania and EU**  
Kairiūkštis L., Staliulionis Ž. (Kaunas University of Applied Engineering Sciences, Lithuania)



# **SOCIAL SCIENCE RESEARCH**

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**MODERATOR DR. KĘSTUTIS VITKAUSKAS**  
ROOM – 319/3

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- 1. Definition of Key Competences and their Content for Lifelong Learning a European Framework**  
Mencenevičienė S. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 2. Respecting the Employee's Family Commitments in Work Relations**  
Vitkauskas K. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 3. Does the Building Permit Issuance Process Ensure That the Permit Will Be Legal?**  
Grybauskas T., Vitkauskas K. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 4. Peculiarities of Students' Adaption in the Engineering Studies**  
Palaimienė V., Martišienė D. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 5. Expression of Students' Financial Literacy Competencies**  
Burneikienė K. (Kaunas University of Applied Engineering Sciences, Lithuania)
- 6. Research of Final Thesis Process Efficiency**  
Štreimikienė J., Adomavičienė G. (Kaunas University of Applied Engineering Sciences, Lithuania)

# INNOVATION ALLEY

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MODERATOR DR. ŽYGIMANTAS STALIULIONIS  
ROOM – KTK LIBRARY, 1<sup>ST</sup> FLOOR

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1. **EBEA® Balcony Connector: Load-bearing Thermal Break. Modern Solutions**  
Gasiūnė S. (UAB Peikko Lietuva)
2. **Aspects of Building Self-Service System: from Individual Outlets to the Whole Ecosystem**  
Bačiliūnas A., Jankūnienė R. (UAB Acoris)
3. **Hydraulic Pressing Equipment in Energy Industry**  
Žilionis G. (UAB Flamanda)
4. **Passengers Train Remote Diagnostics, Predicting Maintenance, Information and Video Systems**  
Bereiša M., Gudaitis V. (AB Lietuvos geležinkeliai, Lithuania)
5. **Challenges in the Implementation of Energy Facilities in Sweden**  
Kairys D. (Zilinskis & Co UAB)
6. **Data Sources in Agricultural Sector**  
Navickas E. (UAB DOJUS agro, Lithuania)
7. **Radiography Laboratory on Wheels**  
Kačinskas T. (UAB Iremas, Lithuania)
8. **International Blended Intensive Program (BIP) Project Aviation English: Findings and Presentations of the Final Project Results.**