

HI-SMART lectures April-Mai 2021



SLOVAK UNIVERSITY OF
TECHNOLOGY IN BRATISLAVA



21.04.2021

13:45 – 15:15

Energy Directives and Audits

by Michal Krajčík from Slovak University of Technology in Bratislava

Strategies, action plans, statistics

by László Magyar from ENERGIAKLUB

Content Description: Related EU Directives; energy audit and certification of buildings; nearly zero energy buildings

15:30 – 17:00

Certification schemes

by Jakub Čurpek from Slovak University of Technology in Bratislava

Content Description: Building rating, Background of Certification schemes, BREAM, LEED, DGNB, CASBEE, etc.

Zoom Link: <https://uni-kl-de.zoom.us/j/91371316884?pwd=R1VCc0lwbm94OEpgQ3VtdGRJRkxBdz09>

28.04.2021

13:45 – 15:15

High-performance windows; Thermal Insulation Materials

by Peter Hanuliak and Rastislav Ingeli from Slovak University of Technology in Bratislava

Content Description: Thermal and optical properties of glazing systems and framing elements; Thermal Insulation Materials of NZEB

15:30 – 17:00

Innovative façade systems

by Jakub Čurpek from Slovak University of Technology in Bratislava

Content Description: Adaptive principles, Renewables in building envelopes, Responsive materials

Zoom Link: <https://uni-kl-de.zoom.us/j/98211816735?pwd=R2FoeUtDY3J3NUZlNkNlYmRlR0pRZz09>

05.05.2021

13:45 – 15:15

Energy Communities in District Heating Systems

by Balázs Bokor from Budapest University of Technology and Economics

Content Description: The development of district heating systems (1st-5th generation). Heat production, heat distribution and heat transmission in DH systems. Energy communities in district heating systems. Waste heat utilization, future prospects.

15:30 – 17:00

Thermally activated building systems & Residential Heat recovery ventilation

by Edit Barna from Budapest University of Technology and Economics

Content Description: Thermally activated building systems (TABS): Fundamentals of TABS, installation of the system, system elements; energy calculations, system control

Heat recovery ventilation (HRV): Fundamentals, heat recovery ventilation types, parameters to consider when selecting an appliance, system elements, selection and sizing

Zoom Link: <https://uni-kl-de.zoom.us/j/94185006250?pwd=WEIwcUZTbmY3TStQV2xPbkdHY1JWdz09>

12.05.2021

13:45 – 15:15

Advances in Heat Pump Technology

by Balázs Bokor from Budapest University of Technology and Economics

Content Description: Different heat sources of heat pumps. Constructional advances in heat pumps to enhance performance.

15:30 – 17:00

Biomass

by Norbert Érces from Budapest University of Technology and Economics

Zoom Link: <https://uni-kl-de.zoom.us/j/93718617215?pwd=Y1ljV1huZGRQc2huY2IDZXZVOGJJUT09>

19.05.2021

13:45 – 15:15

Smart readiness indicator

by Balázs András-Tövissi from Budapest University of Technology and Economics

15:30 – 17:00

Smart meter and demand side management

by Tamás Csoknyai, Viktória Vámos and Miklós Horváth from Budapest University of Technology and Economics

Content Description: Smart metering: concept and technology; impact of occupants' behavior on energy consumption of buildings; demand side management, actions for behavioral change; smart metering data assessment: time series analysis and statistical methods; analytical demand side management

Zoom Link: <https://uni-kl-de.zoom.us/j/94962694791?pwd=QXRlamFQc2Z0dF0xbkl2cmZVYkhUQT09>

26.05.2021

13:45 – 15:15

Sustainability

by Roman Rabenseifer from Slovak University of Technology in Bratislava

Content Description: Historical development of energy efficient construction, today's perception of sustainability and outlook for the future, operational vs. grey energy, environmental impact in terms of greenhouse gases, case study

15:30 – 17:00

Global cost and life cycle analysis and Economic calculations for energy audit of buildings

by Katarína Minarovičová and Michal Krajčík from Slovak University of Technology in Bratislava

Content Description: Background, procedures, related EU's standardization and legislative; Energy audit of buildings; energy efficiency measures; profitability indicators; net present value; payback; energy performance contracting (EPC)

Zoom Link: <https://uni-kl-de.zoom.us/j/91536534943?pwd=YXpEbVhXZWJyeHZEeIF1K2hqOTNVdz09>