



Transilvania
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HKA

2nd EDITION

INTERNATIONAL SUMMER SCHOOL ON SUSTAINABILITY SUSUS 2023

FROM BIODIVERSITY TO ENERGY. BIOMECHANICAL AND
ARTIFICIAL INTELLIGENCE.

PROGRAM

24-28 July 2023

Braşov
ROMÂNIA

The department of Mechanical Engineering from Transilvania University of Brasov in collaboration with Eastern Switzerland University of Applied Sciences and University of Applied Sciences Karlsruhe is pleased to welcome you to the 2nd edition of the

INTERNATIONAL SUMMER SCHOOL ON SUSTAINABILITY

to join students from all over Europe to gain experience and valuable information on sustainability, biomechanical and artificial intelligence. Along with other participants you will learn about the mentioned subject through discussions, workshops and debates.

INVITED SPEAKERS

- ▣ **Maria Luminița SCUTARU**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Daniel MUNTEANU**, Vice-Rector, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Mihaela Ioana BARITZ**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Ileana-Constanța ROȘCA**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Paul Nicolae BORZA**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Louis Francois PAU**, Prof. PhD Eng.,
- ▣ **Crinela PISLARU**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Mihai IVANOVICI**, Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Mihai MACHEDON-PISU**, Assoc. Prof. PhD Eng., Transilvania University of Brașov;
- ▣ **Marius-Daniel CĂLIN**, Lect. PhD Eng., Transilvania University of Brașov;
- ▣ **Florin STĂNICĂ**, Vice-Rector, Prof. PhD., University of Agronomic Sciences and Veterinary Medicine of Bucharest
- ▣ **Romulus PAPUC**, General Manager , Danfoss S.R.L., Bucharest
- ▣ **André PODLEISEK**, Eastern Switzerland University of Applied Sciences.
- ▣ **Michael KAUFFELD**, Prof. PhD Eng., University of Applied Sciences Karlsruhe.
- ▣ **Mihaela DUDITA-KAUFFELD**, Researcher PhD eng., Eastern Switzerland University of Applied Sciences.
- ▣ **Jacob BUSSMANN**, Hochschule Trier, Germany
- ▣ **Kanchan BOHARA**, Eastern Switzerland University of Applied Sciences.

- **Andreas REBER**, Eastern Switzerland University of Applied Sciences.
- **Jonas SCHMITT**, University of Applied Sciences Karlsruhe.
- **Jan HOINKIS**, University of Applied Sciences Karlsruhe.
- **Nathaniel PAGE**, ADEPT Foundation
- **Roxana CÂRCEAG**, Swit Rocs Stories
- **Andreea ANDREI**, AIESEC / Stabilus Romania
- **Daniel VOINEA**, PhD Eng., Transilvania University of Braşov;

Organising committee

- **Maria Luminița SCUTARU**, Prof. PhD Eng., Transilvania University of Braşov;
- **Eliza CHIRCAN**, Lect. PhD Eng., Transilvania University of Braşov;
- **Paul BORZA**, Prof. PhD Eng., Transilvania University of Braşov;
- **Michael KAUFFELD**, Prof. PhD Eng., University of Applied Sciences Karlsruhe
- **Mihaela DUDITA-KAUFFELD**, Researcher PhD Eng., Eastern Switzerland University of Applied Sciences

Contact us via email: d-mec@unitbv.ro.

Monday, 24th of July 2023

DOMENIUL DÂMBUL MORII

- ▣ **09:00 – 09:15** Maria Luminița SCUTARU
WELCOMING SPEECH
- ▣ **09:15 – 10:00** Daniel VOINEA
SMART CITY LIVING LABS. WHAT AND WHY?
- ▣ **10:00 – 10:30** William ANDERSON
THE POWER OF A SPEECH
- ▣ **10:30 – 12:30**
COMPANIES AND THE ENVIRONMENT
- ▣ **12:30 – 13:30**
LUNCH
- ▣ **13:30 – 15:00** Mihaela DUDITA-KAUFFELD
OUTDOOR TEAM BUILDING ACTIVITIES
- ▣ **15:00 – 16:45**
COMPANIES AND THE ENVIRONMENT
- ▣ **16:45 – 17:00**
COFFE BREAK
- ▣ **17:00 – 18:00** Roxana CÂRCEAG
SUSTAINABLE COMMUNITIES IN SA
- ▣ **18:00 – 19:30** Andreea ANDREI
WORKSHOP "THE JOBS OF THE FUTURE"
- ▣ **19:30**
DINNER

Tuesday, 25th of July 2023

TRANSILVANIA UNIVERSITY OF BRASOV, AULA

- ▣ **08:30 – 09:00**
REGISTRATION
- ▣ **09:00 – 09:15** Daniel MUNTEANU

OPENING SPEECH

- **09:15 –09:30 City Hall Representative**
WELCOMING TO BRASOV
- **09:30 –10:30 Ileana-Constanța ROȘCA**
ON BIOMECHANICAL ENGINEERING
- **10:30 – 11:15 Romulus PAPUC**
ESG IN DANFOSS CLIMATE SOLUTIONS- WE ENGINEER TOMORROW , TO
BILD A BETTER FUTURE
- **11:15 – 13:15 Louis Francois PAU**
ENERGY SAVINGS AND EMISSIONS ASSESSMENT
- **13:15 –14:00**
LUNCH
- **14:00 –14:30 André PODLEISEK(online)**
CARBON NEUTRALITY ROADMAP
- **14:30 –16:30 Louis Francois PAU**
WORKSHOP: SUSTAINABILITY ENTREPRENEURIAL PROJECT
- **16:30 – 16:40**
COFFE BREAK
- **16:40 –17:30 Crinela PISLARU**
INTEGRATION OF SUSTAINABILITY IN HIGHER EDUCATION CURRICULUM
- **17:30 –18:00 Kanchan BOHARA**
SOLAR ACTIVE HOUSES
- **18:00 –18:30 Michael KAUFFELD**
SUSTAINABLE HEATING & COOLING SOLUTIONS AND THEIR
APPLICATION IN EU SOPHIA PROJECT
- **18:30 –19:00 Kodjo Sédi AGBOKOU**
OVERVIEW OF SOPHIA SOLAR TECHNOLOGIES AND THEIR
APPLICATIONS IN AFRICA
- **19:00**
DINNER

Wednesday, 26th of July 2023

DOMENIUL DÂMBUL MORII

- **08:30 – 09:00** **Andreas REBER**
INTRODUCTION IN SMALL STAND ALONE OFF GRID PV
- **09:00 – 09:30** **Jonas SCHMITT**
WAYS TOWARDS CARNOT-HOW TO IMPROVE THE EFFICIENCY OF VAPOR COMPRESSION REFRIGERATION AND HEAT PUMP CYCLES
- **09:30 – 10:00** **Paul Nicolae BORZA**
ELECTRIC STORAGE SYSTEMS AND THEIR APPLICATIONS
- **10:00 – 11:30** **Jacob BUSSMANN**
INTERCORUM- INTERACTIVE COACHING FOR THE DEVELOPMENT OF THREE RESILIENT VILLAGES IN ROMANIA
- **11:30 – 12:30** **Florin STĂNICĂ**
WILD FRUITS FROM ROMANIAN CARPATIAN MOUNTAINS
- **12:30 – 13:30**
LUNCH
- **13:30**
DISCOVER AND EXPERIENCE BIODIVERSITY. HIKE AT 7 STAIRS CANION.

Thursday, 27th of July 2023

DÂMBUL MORII

- **09:00 – 09:45** **Jan HOINKIS (online)**
WATER TREATMENT TECHNOLOGIES AND THEIR APPLICATION IN SOPHIA
- **09:45 – 10:15** **Andreas REBER**
SOPHIA SCADA
- **10:15 – 10:45** **Mihai MACHEDON-PISU**

GREEN COMPUTING – IOT TECHNOLOGY AND ITS INTEGRATION INTO DISTRIBUTED CONTROL SYSTEMS

▣ **10:45 – 11:15 Mihai IVANOVICI**

AI4AGRI – ROMANIAN EXCELLENCE CENTER ON ARTIFICIAL INTELLIGENCE ON EARTH OBSERVATION DATA FOR AGRICULTURE

▣ **11:15 – 11:30**

COFFEE BREAK

▣ **11:30 – 18:00 Caroline FERNOLEND**

FIELD TRIP – VISCRI: SUSTAINABLE AGRICULTURE, LOCAL FOOD (LUNCH INCLUDED) AND ECOLOGICAL WASTEWATER SYSTEMS

▣ **18:00 – 19:30**

INTERNATIONAL DINNER – COOK YOUR OWN TRADITIONAL FOOD

▣ **19:30**

DINNER

Friday, 28th of July 2023

TRANSILVANIA UNIVERSITY OF BRASOV, INSTITUTE OF RESEARCH AND DEVELOPMENT

▣ **10:00 – 11:30 Kanchan BOHARA, Mihaela DUDITA-KAUFFELD**

WORKSHOP BUILDING THE CLIMATE FRESK

▣ **11:30 – 12:30 Mihaela Ioana BARITZ**

BIOMECHANICAL ENGINEERING APPLICATIONS

▣ **12:30 – 13:00 Marius-Daniel CĂLIN**

EMC (ELECTROMAGNETIC COMPATIBILITY) AND SUSTAINABLE COMMUNITIES

▣ **13:00 – 16:00**

COMPANIES AND THE ENVIRONMENT

▣ **16:00 – 18:00**

CLOSING SESSION & FEEDBACK

JOIN US

FROM BIODIVERSITY TO ENERGY

BIOMECHANICAL AND ARTIFICIAL INTELLIGENCE

International Summer School on Sustainability

24 - 28 July 2023

Transilvania University of Brasov, Romania



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SCHAEFFLER



RATBV S.A.

Danfoss

