

Budapest University of Technology and Economics (BME) online workshop-Report

Event type	Workshop
WP Number	WP3, WP7
WP Leader	NTUA, HTU
Event date	17-11-2021
Number of Participants	137
Total number of pages	8

Project Coordinator

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1 Event Description

Budapest University of Technology and Economics (BME) from Hungary conducted the workshop on 17th of November 2021. The 2-hours workshop was conducted via ZOOM and titled “Internal Combustion Engines in Hybrid Drivetrain Systems”.

The workshop started with a welcoming speech and an overview of the nature of the project, its objectives and the partners working on it by the project coordinator, Prof. Ahmed Al-Salaymeh from The University of Jordan.

- “Modelling and Design of up-to-date Internal Combustion Engines”.
- “Hybrid Drivetrain Systems”.

By: Ádám Nyerges, Vehicle Engineer.

A discussion panel was opened for participants.

2 PPTs

- ECO-CAR in brief:

https://fisjo-my.sharepoint.com/:p:/g/person/eco-car_ju_edu_jo/ESUNW8bFvOpKIUI0mx3BBzYBY_oJjne73DOn6Yx06h7aRg?e=bK2VnC

- Internal Combustion Engines in Hybrid Drivetrain Systems:

https://fisjo-my.sharepoint.com/:b:/g/person/eco-car_ju_edu_jo/EYDu2LtIVnBGsyEzd-0ZZxoBPaN6FyVUBGwTR5IW6tqPow?e=NDhEhq

3 Poster



ECO-CAR Workshop

Internal Combustion Engines in Hybrid Drivetrain Systems



Presented by: BME University - Hungary

Wednesday, November 17, 11:00 AM (Amman time)

10:45-11:00 : Registration

11:00-11:15: Welcoming Speech, by:
Prof. Ahmed Al-Salaymeh, General Project
Coordinator at The University of Jordan

11:15-12:00 : Modelling and Design of up-to-
-date Internal Combustion Engines

12:00-12:05 : Break

12:05-12:45 : Hybrid Drivetrain Systems

12:45-13:00: Discussion and Closing



Presenter: Ádám Nyerges, Vehicle Engineer, BME



4 ZOOM participants list

First Name	Last Name	Email	Registration Time
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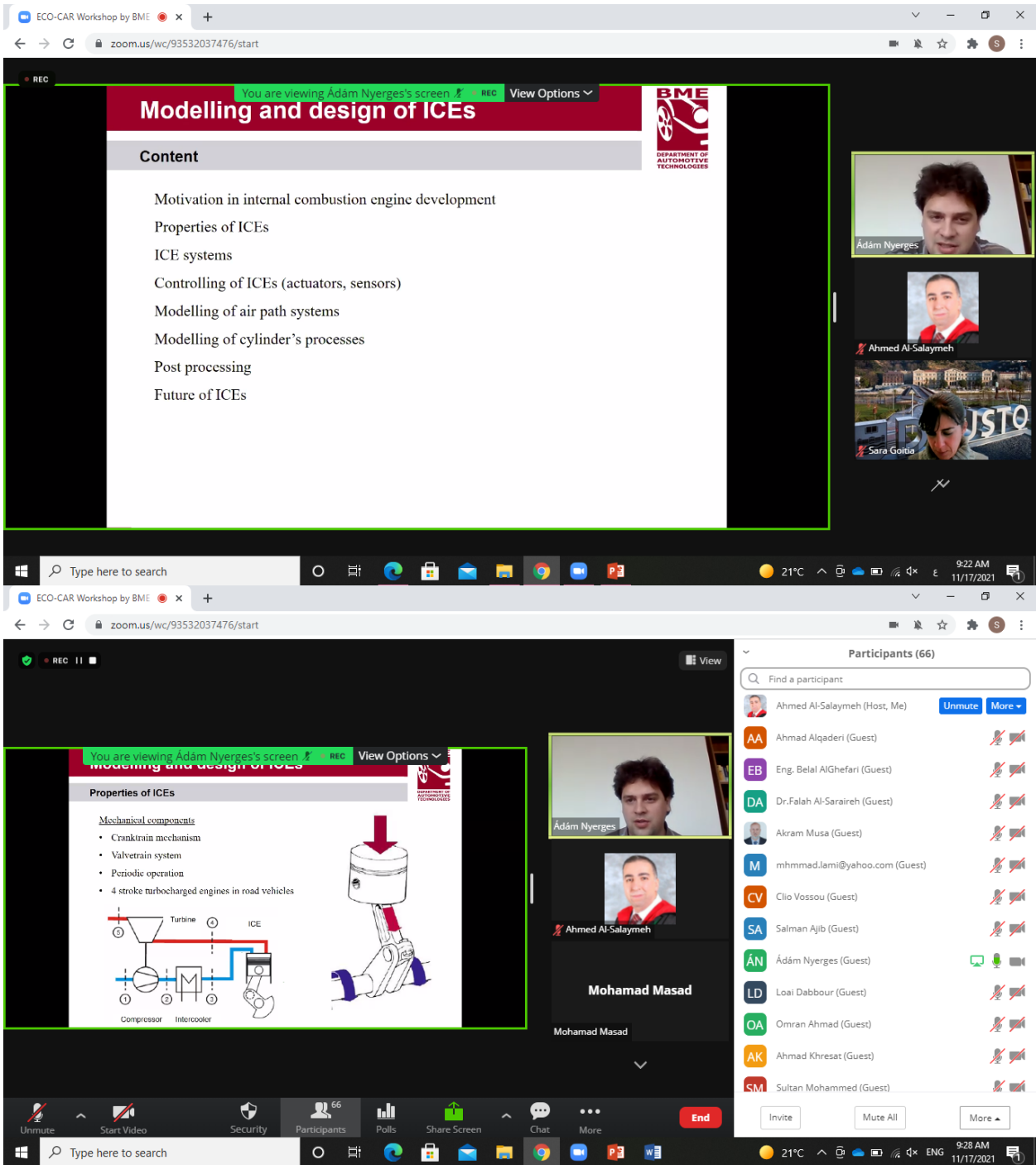
ERASMUS+ PROGRAMME Project Number: 618509-EPP-1-2020-1-JO-EPPKA2-CBHE-JP

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5 Photos



The top screenshot shows a Zoom meeting window displaying a slide titled "Modelling and design of ICES". The slide content includes:

- Content
- Motivation in internal combustion engine development
- Properties of ICES
- ICE systems
- Controlling of ICES (actuators, sensors)
- Modelling of air path systems
- Modelling of cylinder's processes
- Post processing
- Future of ICES

The bottom screenshot shows a Zoom meeting window displaying a slide titled "Properties of ICES". The slide content includes:

- Properties of ICES
- Mechanical components
 - Cranktrain mechanism
 - Valvetrain system
 - Periodic operation
 - 4 stroke turbocharged engines in road vehicles

The slide also features a diagram of a turbocharged engine system with components labeled: Compressor, Turbine, Intercooler, and ICE. A 3D model of a piston and crankshaft is also shown.

The bottom screenshot also displays a list of participants (66) in the meeting, including:

- Ahmed Al-Salaymeh (Host, Me)
- Ahmad Alqaderi (Guest)
- Eng. Belal AlGhefari (Guest)
- Dr.Falah Al-Saraireh (Guest)
- Akram Musa (Guest)
- mhammad.lami@yahoo.com (Guest)
- Clio Vossou (Guest)
- Salman Ajib (Guest)
- Ádám Nyerges (Guest)
- Loai Dabbour (Guest)
- Omrnan Ahmad (Guest)
- Ahmad Khresat (Guest)
- Sultan Mohammed (Guest)

ERASMUS+ PROGRAMME Project Number: 618509-EPP-1-2020-1-JO-EPPKA2-CBHE-JP

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zoom.us/jc/93532037476/start

Talking: Adam Nyerges

Hybrid Drivetrain Systems

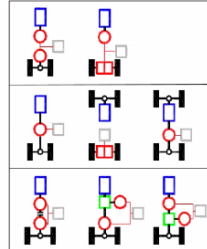
Classification

- Hybridisation ratio
- Topologies
- System voltage

Categories	Hybridisation ratio
Conventional vehicle	0
Micro/Mild hybrid	~0.25
Full hybrid, SHEV, PHEV	~1
Range extender hybrid	1
Electric vehicle	1

Hybrid electric vehicles

- Add-on hybrid
 - Parallel hybrid
- Dedicated hybrid
 - Serial hybrid
 - Powersplit hybrid
 - Multi-mode hybrid



BME
DEPARTMENT OF AUTOMOTIVE TECHNOLOGIES

Ahmed Al-Salaymeh

Majed Alswaiti

Abdallah Alatawneh

Unmute Start Video Security Participants 62 Polls Share Screen Chat Pause/Stop Recording Breakout Rooms Reactions More End

Type here to search

21°C Mostly sunny 10:32 AM 11/17/2021

6 Video

<https://youtu.be/WxObaPo21IA>