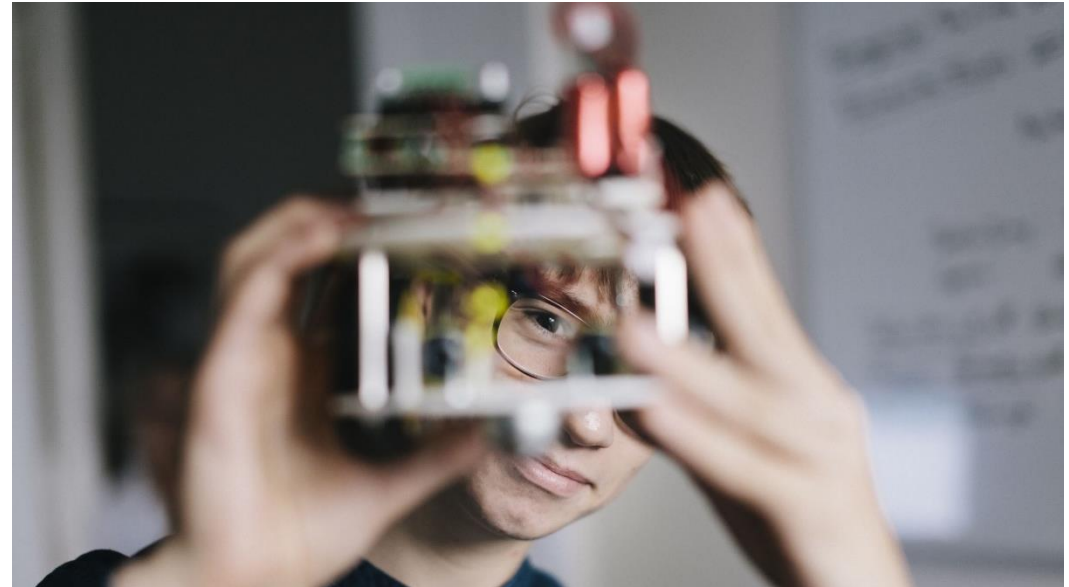

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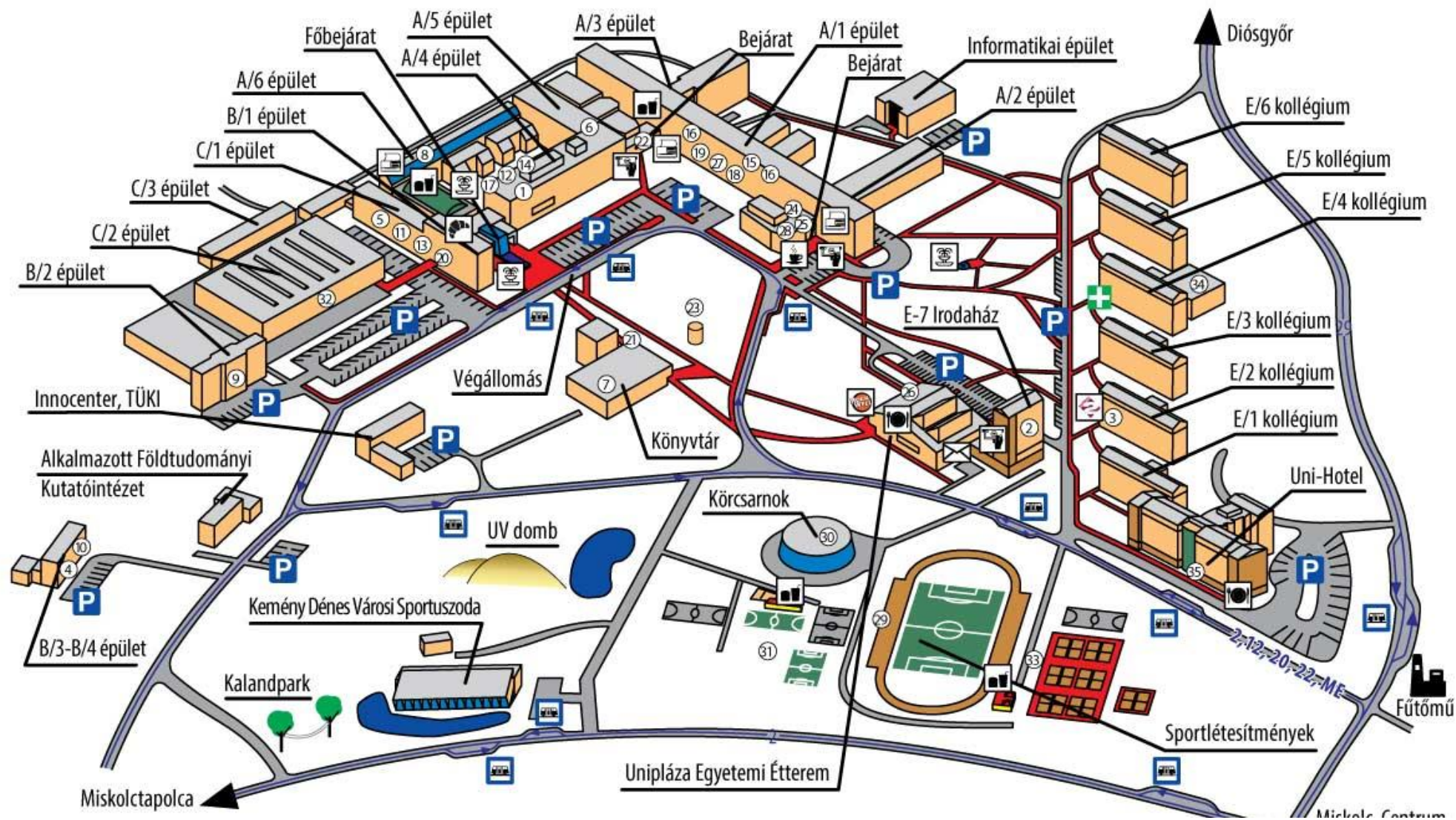
STUDENT TALENT DAY

April 2026

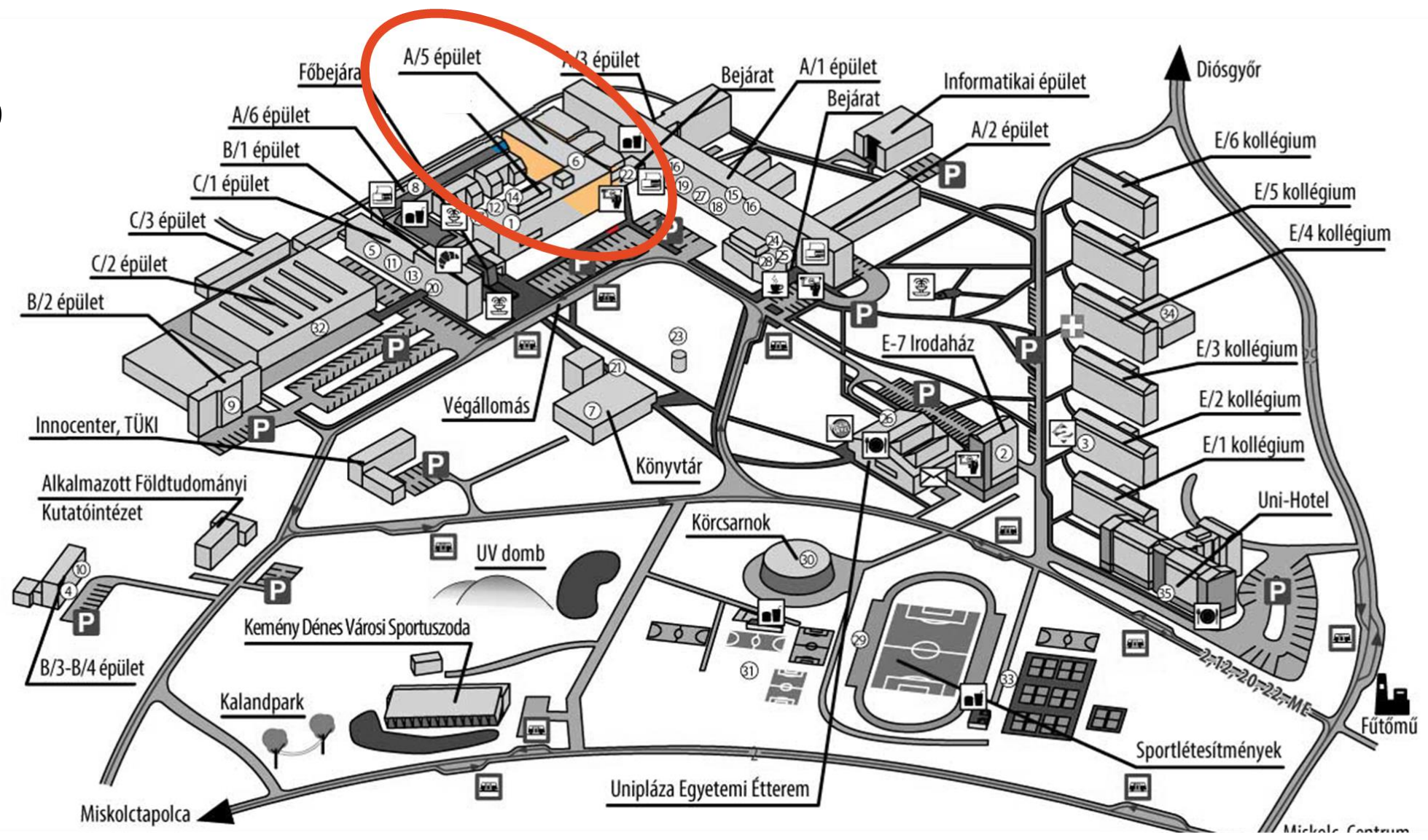
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ME



A/5







SUPERVISOR

TOPIC

Dr. Tamás FEKETE

Alternating-Current Hydraulic Drives

Dr. György HEGEDŰS

Investigation of Motion Transmission Mechanisms in Manual Machine Tools

Pálma KAPITÁNY

Inductance Modeling of Electromagnets

Dániel KISS

Manufacturing of Threaded Surfaces by Machining

József LÉNÁRT, Dr. László RÓNAI

Development of a Spiral-Shaped Robotic Gripper

Dr. László RÓNAI, József LÉNÁRT

Development of a Soft Robot for Manipulation Tasks

Gábor SIMON

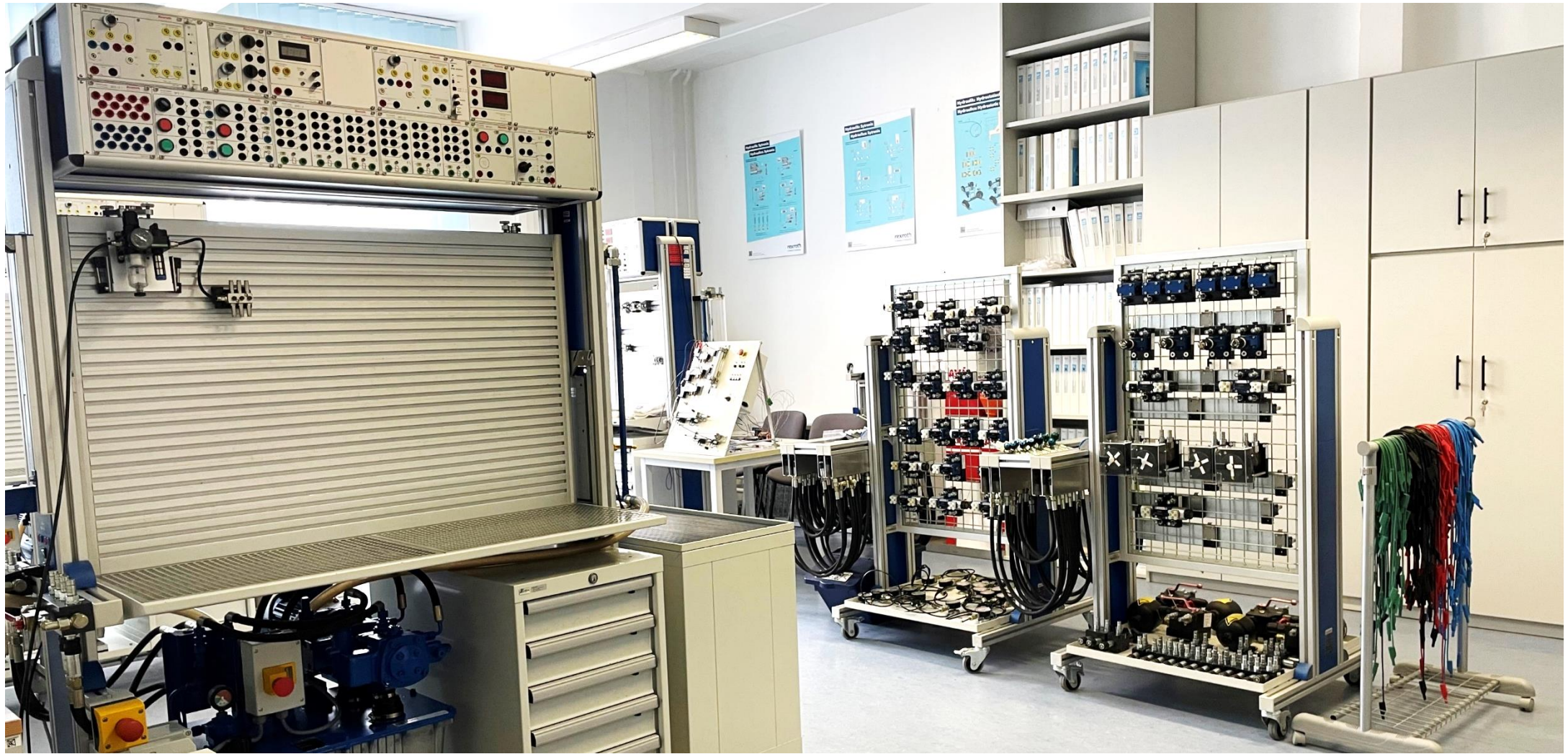
Design of Equipment for Determining the Dynamic Parameters of Belts

Kristóf SZABÓ

Simulation-Based Product Development

Dániel TÓTH

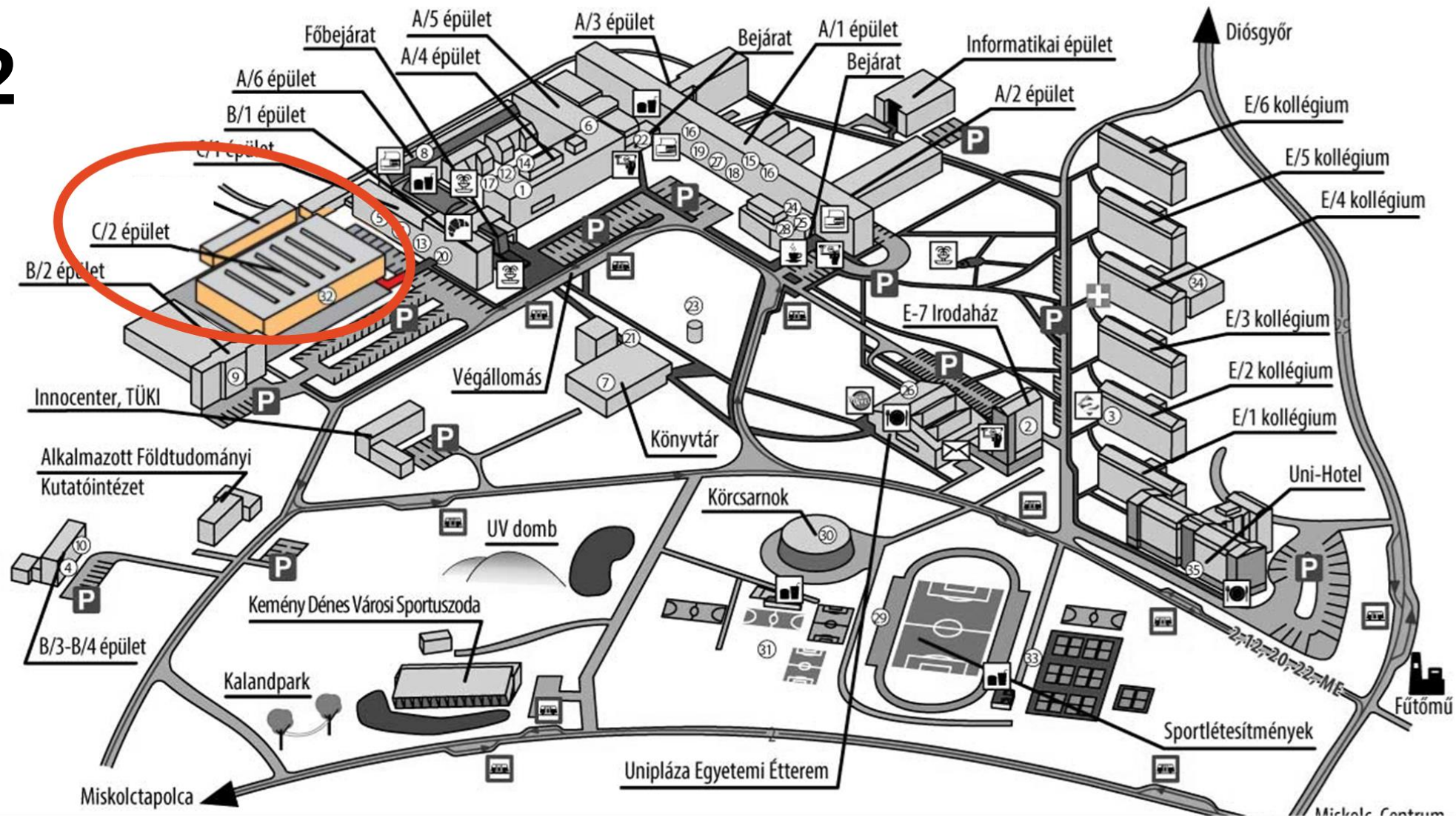
Investigation of the Remaining Useful Life of Rolling Bearings







C/2





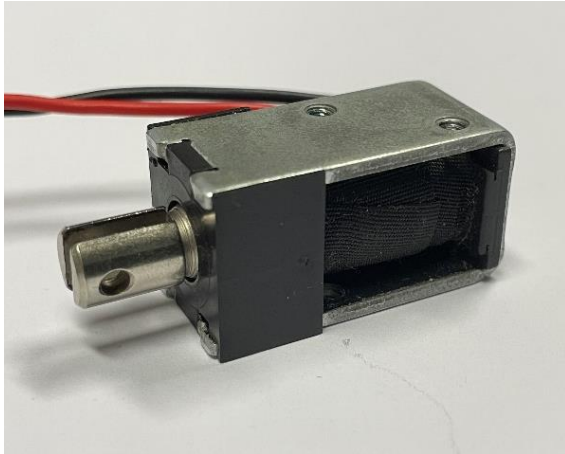


WAY



- LEARN
- DESIGN
- CREATE
- MEASURE
- SCIENTIFIC ARTICLE
- TDK CONFERENCE
- EXPERIENCE
- KNOWADLE IS YOURS





$$\underbrace{\frac{\partial^2 W_{m\Sigma}^*(x, \dot{q})}{\partial \dot{q}^2}}_{\text{INDUCTANCE}} \frac{d\dot{q}}{dt} + \underbrace{\frac{\partial^2 W_{m\Sigma}^*(x, \dot{q})}{\partial x \partial \dot{q}}}_{\text{MOTION INDUCED VOLTAGE}} \dot{x} + R\dot{q} = U_0 - \underbrace{\lambda'_p(x)}_{\text{FLUX OF PERMANENT MAGNET}} \dot{x}$$

INDUCTANCE

**MOTION INDUCED
VOLTAGE**

**FLUX OF
PERMANENT MAGNET**



$$m\ddot{x} + r\dot{x} + F_s(x) = \underbrace{\frac{\partial W_{m\Sigma}^*(x, \dot{q})}{\partial x}}_{\text{FORCE OF WORKING COIL}} + \underbrace{\lambda'_p(x)\dot{q}_{ind}}_{\text{FORCE OF PERMANENT MAGNET}} - mg$$

**FORCE OF
WORKING COIL**

**FORCE OF
PERMANENT MAGNET**

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