

Registration opens at 8:45am on 16 April 2025
Conference starts at 9:45am on 16 April 2025,
Presentation time (presentation and questions) – 12 minutes
Venue: KTU M-Lab (Studentų St. 63A, 51368 Kaunas)

Chair: dr. Eglė Savickaitė-Kačerauskienė

Programme

- Opening of **TiFEC 2025**.

- Invited speaker

Alexander Kovalevsky

NTlab Technical Director

Microelectronics in our lives

1. **Aidas Astrauskas** (Supervisor M. Žilys)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Design of Low Power 1.2 V Dynamic Comparator

2. **Benas Česnauskas** (Supervisor A. Chaziachmetovas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

5-T OTA Chip Design and Tape-Out in IHP Open Source PDK

3. **Dovydas Liutkus** (Supervisor R. Ramanauskas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

ASIC Implementation of a RISC-V Core: From RTL to GDSII

4. **Lukas Adomas** (Supervisor M. Žilys)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Comparison of Cross-Coupled NMOS and CMOS VCOs

5. **Donatas Budzeika** (Supervisor A. Chaziachmetovas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Design of a Bandgap Voltage Reference Using IHP SG13G2 Technology

6. **Mindaugas Matijūnas** (Supervisor R. Ivanauskas)

Kaunas University of Technology, Department of Physical and Inorganic Chemistry

Sustainable Bioaccumulation-based Filter for Heavy Metal Remediation Using Protozoan Tetrahymena Thermophila

7. **Dominykas Mendelis** (Supervisor M. Žilys)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Efficiency of Functional Testing in the Electronics Industry

8. **Tomas Bakšys** (Supervisor A. Merfeldas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

CMOS Low Noise Amplifier for GNSS Receiver

9. **Matas Tamulynas, Eidenis Kasperavičius** (Supervisor D. Navikas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Temperature Stability and Compensation of Magneto Resistance Sensors

10. Ignas Kristutis, Rajavishnu Rajkumar, Muhammad Suleman Jamal

(Supervisor R. Urniežius)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

MPPT Controller Using P&O Algorithm for a Cost-Effective Embedded System Development and Study – 2025

- Coffee break 12:15-12:30

11. Karolis Petrauskas, Tomas Bakšys (Supervisor R. Ramanauskas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Development of a Real-Time GPS Receiver: A Comprehensive Analysis

12. Justas Petkus (Supervisors: P. Kuzas, A. Merfeldas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Chipless Split-Ring RFID Tag Design on FR-4 Substrate

13. Tadas Skeltys, Somashekhar Maragondanahalli Rajanna, Karolis Mickevicius,

Bilal Butt, Rytis Petrauskas (Supervisor R. Urniežius)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Development of Weight Measurement Algorithm for a Custom Actuator

14. Jokūbas Šakys (Supervisor K. Rimkus)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Development of a Computer Vision-based Electrical Connector Side Recognition System

15. Vaiva Paškevičiūtė (Supervisors: V. Raudonis, A. Lipnickas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Development and Evaluation of YOLOv5-based Algorithms for Detecting the Endometrial Glandular Layer

16. Augustin Averkin (Supervisor R. Urniežius)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Research and Development of a Computer Vision Quality Control Algorithm for Blind Drilled Holes in Furniture Panels

17. Javid Karimov (Supervisor V. Vaitkus)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Volatility Prediction: An Empirical Study

18. Nicol'as Augusto Pava Rold'an (Supervisor G. Dervinis)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Real-Time Facial Emotion Recognition for Human-Robot Interaction: A Comparative Study of Deep Learning Models

19. Ernestas Simniškis (Supervisor A. Lipnickas)

Kaunas University of Technology, Faculty of Electrical and Electronics Engineering

Removing Blur from Surgical Imaging with Deep Learning-based Deblurring

- Best papers awards