



UNIVERSITATEA DIN ORADEA

Facultatea de Inginerie Electrică  
și Tehnologia Informației

## Departamentul de Electronică și Telecomunicații

### T 206 – Electronică de putere

LOCAȚIE: Clădirea T, etaj 2, Universitatea din Oradea  
COD SALĂ T206



*Aparatură, echipamente, utilaje, standuri, sisteme informatice existente:*

Nr. Crt.	Denumirea bunurilor inventariate	Buc.
1	Laptop	2
2	Osciloscop Digital	4
3	Osciloscop Analogic	2
4	Pachet software ORCARD	1
5	Osciloscop Analogic 2x35MHz	2
6	Calculator ALL-IN-ONE TIP 1 Lenovo THINKCENTRE PNOO3113	10
7	Multimetru de banc	4
8	Generator de semnal / funcții	4
9	Kit educational initiere in electronic	5
10	Videoproiector	2
11	Tabla-Ecran interactive SAMSUNG FLIP PRO	1
12	Statie de lipit, digitală	8
13	Kit pentru lipit EU cu multimetru digital	1
14	Sursa de alimentare laborator, multicanal	4

#### Teme de cercetare

- Optimizarea sistemelor electrotermice inductive echipate cu invertoare de înaltă frecvență utilizate în procesul de tratamente termice;
- Studiul materialelor avansate utilizate în ingineria electronică;
- Optimizarea proceselor din industria EMS;
- Electronică aplicată și aparatură electronică;
- Studiul surselor de alimentare și a metodelor de comandă ale acestora.



### **Lista lucrări reprezentative**

1. Șchiop Adrian, Trip Daniel, Șchiop Adrian Marian, Comparative Analysis of Fourth-Order Non-Isolated DC-DC Converters: Ćuk, SEPIC and Zeta, Journal of Electrical and Electronic Engineering, vol.18, no.2, October 2025, indexată Scopus.
2. Nistor Daniel Trip, Adrian Șchiop, Adriana Grava, Cristian Grava, Analysis and Simulation of a Control Method for a ZCS-QRC Buck Topology with Constant Switching Frequency, 2024 International Symposium on Electronics and Telecommunications (ISETC), Date of Conference: 07-08 November 2024, Timișoara, Electronic ISBN:979-8-3503-9086-5
3. A. Șchiop, A Step-Up Five Level Inverter with Reduced Number of Components, International Symposium on Signals, Circuits and Systems, ISSCS 2023, Iasi, 13-14 July, 2023, Electronic ISBN:979-8-3503-4203-1
4. Șchiop, A., Control Methods for Five lever, IEEE Conference: 15th International Conference on Engineering of Modern Electric Systems (EMES) Location: ORADEA, ROMANIA Date: JUN 13-14, 2019, Pages: 217-220, Published: 2019, WOS:000503434500055.
5. Trip, N.D., Șchiop, A., Burca, A., Considerations on the use of a MPPT circuit for a thermoelectric generator, IEEE Conference: 14th International Conference on Engineering of Modern Electric Systems (EMES) Location: ORADEA, ROMANIA Date: JUN 01-02, 2017, Pages: 252-255, Published: 2017, WOS:000427085200060.
6. A. Șchiop, A control scheme for multilevel inverter, IEEE Conference: 2015 International Symposium on Signals, Circuits and Systems (ISSCS) Location: Iasi, ROMANIA Date: JUL 09-10, 2015, Published: 2015, WOS:000380451600057.
7. Neamtu, MO , Trip, ND , Burca, AT , Low Power Renewable Energy System used for Power Back-up Applications Thermoelectric Generator System with Geothermal Water in Simulations, 2017 IEEE 23RD INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME), Constanta, ROMANIA, OCT 26-29, 2017 (Date Added to IEEE Xplore: 18 January 2018)
- 8 Neamtu, MO , Trip, ND , Burca, AT , Low Power Renewable Energy System used for Power Back-up Applications Thermoelectric Generator System with Geothermal Water in Simulations, 2017 IEEE 23RD INTERNATIONAL SYMPOSIUM FOR DESIGN AND TECHNOLOGY IN ELECTRONIC PACKAGING (SIITME), Constanta, ROMANIA, OCT 26-29, 2017 (Date Added to IEEE Xplore: 18 January 2018)
9. Trip, N.D., Burca, A., Morgos, L. , Considerations on the use of thermoelectric generators at low temperatures to recover waste geothermal energy, 2017 14th International Conference on Engineering of Modern Electric Systems, EMES 2017, 7980426, pp. 248-251