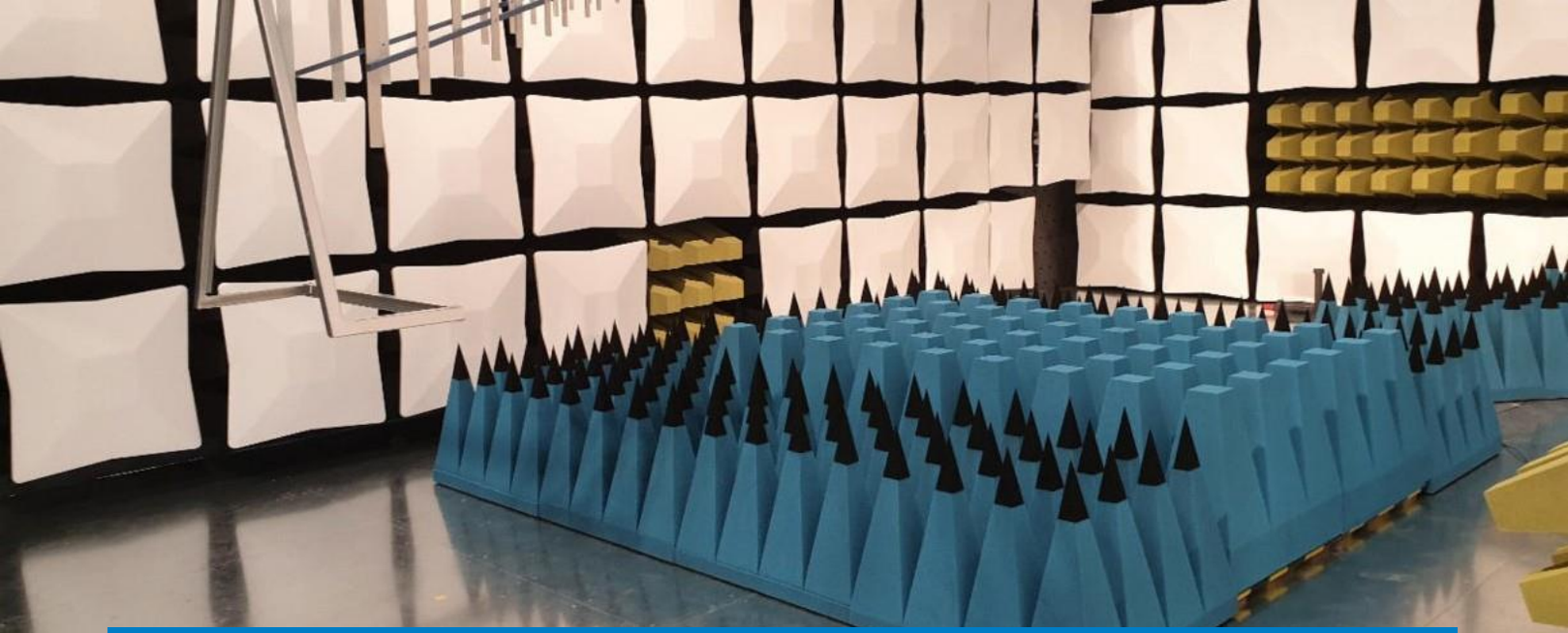

EMC AND ESD

A new EMC (electromagnetic Compatibility) laboratory was built at the University of Miskolc in 2020 to serve industrial needs. The laboratory is suitable for measuring radiated and conducted disturbances in automotive and commercial electronic devices, as well as for testing standard ESD (electrostatic discharge). In addition to measurements, the laboratory also offers electromagnetic product design, product analysis and educational and training services.

COMPETENCIES

- Theory of electromagnetic compatibility
- Practical design of electromagnetic compatibility measuring points and measurements, standard performance of measurements
- Electromagnetic and electrodynamic simulation and investigation of motors
- EMC guided product design, methodology for reducing EMC interference

SERVICES

- Measurement and evaluation of conducted and radiated EMC disturbances in commercial electronic devices up to a measuring distance of 3m
- Preparation of static and dynamic electromagnetic simulations
- Reduction of electromagnetic interference, EMC-guided product design consultancy
- ESD measurement of automotive and commercial devices; measuring table size: 2.5 m × 1 m
- Specialist training in EMC basics and measurements

TOOLS

- SAC-3 type chamber; 9.1 m × 5.2 m × 6.0 m (h × w × m); 10 Hz - 40 GHz
- Filters: DC: 4x200 A, 14 kHz; AC: 2x32 A, 150 kHz; AC: 4x32 A, 150 kHz; AC: 4x32 A, 150 kHz
- Rohde & Schwarz ESR26 measuring receiver up to 26.5 GHz
- Rod antenna 1 m, built-in amplifier 9 kHz - 30 MHz (HFH2-Z6)
- BILOG antenna 30 MHz - 6 GHz + preamplifier (HL562E + BBV9744)
- Artificial main networks for automotive DC power supply: 2 x 200 A
- Artificial main network for commercial measurements 1 x 230 V / 16 A
- REFRAD X reference generator
- Rohde & Schwarz ZVH8 network analyser for 100 kHz-8 GHz range
- ESD simulator: TESEQ NSG-438A; Max 30 kV

REFERENCES

- Robert Bosch Energy and Body Systems Ltd. GINOP-2.2.1-15-2017-00090 E-mobility from Miskolc - THERMAL SYSTEMS. 2017-2020

MISKOLCI EGYETEM
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