COMPLEX INVESTIGATION OF SOLAR CELLS AND SOLAR SYSTEMS

The share of solar power plants in the electricity network implies increased problems through electric grid feedback. In addition, environmental impacts also affect the operation of solar panels and thus their power plants, so it has become necessary to study both solar panels and their power plants in a complex way.

COMPETENCIES

- Condition assessment and diagnostics of solar cells
- Electric grid feedback and data analysis
- Laboratory and outdoor measurement of solar panels
- Measurement and evaluation of the effects of environmental factors (temperature, surface pollutants)
- Simulation studies

SERVICES

- Thermovision testing of solar cells
- Electrical measurements, grid impact assessments
- Measurement and analysis of the effects of temperature and surface contaminants
- Performing laboratory and outdoor measurements
- Creating simulations for constant and variable temperature behaviour

TOOLS

- LED-Halogen Solar Simulator for standard laboratory testing of solar cells with a maximum size of 165×165 mm
- Halogen Sunlight Simulator for testing solar panels
- Solar cell tester
- Measuring and data acquisition system for electrical parameters as well as temperature

REFERENCES

- MVM OVIT Zrt.: Exploring the causes of solar panel damage in a solar park

MISKOLCI EGYETEM
UNIVERSITY OF MISKOLC

Technológia- és Tudástranszfer Igazgatóság
techtransfer@uni-miskolc.hu

AZ NKFI ALAPBÓL MEGVALÓSULÓ PROGRAM