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**The Scientific Department of Unconventional Technologies and Textiles** specialises in interdisciplinary research on innovative techniques, functional textiles and textile composites including nanotechnologies and surface modification.

Research are performed on modern apparatus, *inter alia*:

- Scanning electron microscope VEGA 3 LMU, Tescan with EDS INCA X-ray microanalyser, Oxford
- Raman InVia Reflex spectrometer, Renishaw
- Vertex 70 FTIR spectrometer with Hyperion 2000 microscope, Brüker
- Differential scanning calorimeter DSC 204 F1 Phenix, Netzsch
- Thermogravimetric analyser TG 209 F1 Libra, Netzsch with FT-IR gas cuvette
- Sigma 701 tensiometer, KSV
- Automatic drop shape analyser DSA 100, Krüss
- PGX goniometer, Fibro Systems
- Particle size analyser Zetasizer Nano ZS, Malvern
- Labcoater LTE-S, Werner Mathis
- Corona discharge activator, Metalchem
- Ultrasonic homogenizer UP 200 st, Hielscher

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