PLASMON ENHANCED TERAHERTZ ELECTRON PARAMAGNETIC RESONANCE

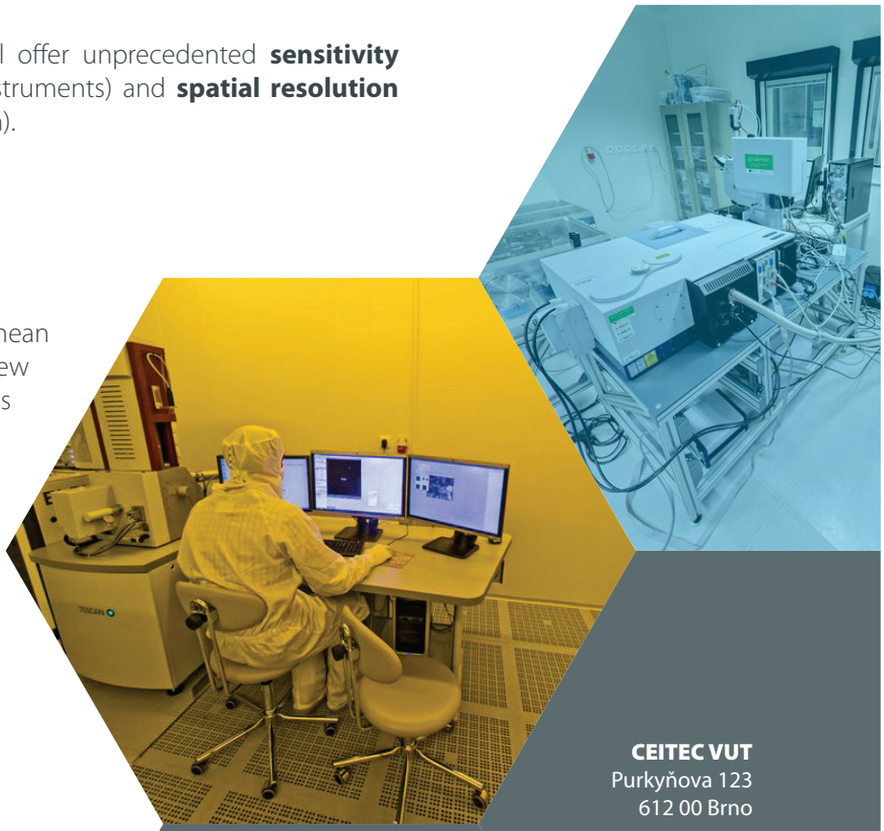
Horizon 2020 project FET OPEN

Project Outcomes

- Establishing a **brand novel** terahertz-frequency EPRmicro-spectroscopic **technique** based on a combination of **plasmonic**-based **magnetic field enhancement** and **scanning probe microscopy**.
- **Developed THz EPR micro-spectroscope** will offer unprecedented **sensitivity** (several orders higher than conventional EPR instruments) and **spatial resolution below 1 µm** (approx. 1/300th of used wavelength).

Why all the fuss?

If successful, PE THz EPR micro-spectroscopy will mean a revolution in the field of EPR by opening new possibilities to in-situ study of wide variety of materials for scientific, technological and medical purposes.



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This project has received funding from the European Union's Research and Innovation programme Horizon 2020 under Grant Agreement No. 767227.