

## Universal electromagnetic radiation detector

- Markku Vainio, Tampere University of Technology
- Erkki Ikonen, Aalto University



**RADESS** UNIDET project focuses on the development of a universal electromagnetic radiation detector. The new detector technology is based on the photoacoustic effect. It can be used to measure radiation power with high precision over a large dynamic range, with unprecedented operating range that extends from visible to the far-infrared and THz regions of the electromagnetic spectrum. UNIDET detector makes possible new scientific experiments and improves measurement capabilities in health, safety and security applications, such as in the detection and analysis of explosives and toxic gas compounds.