

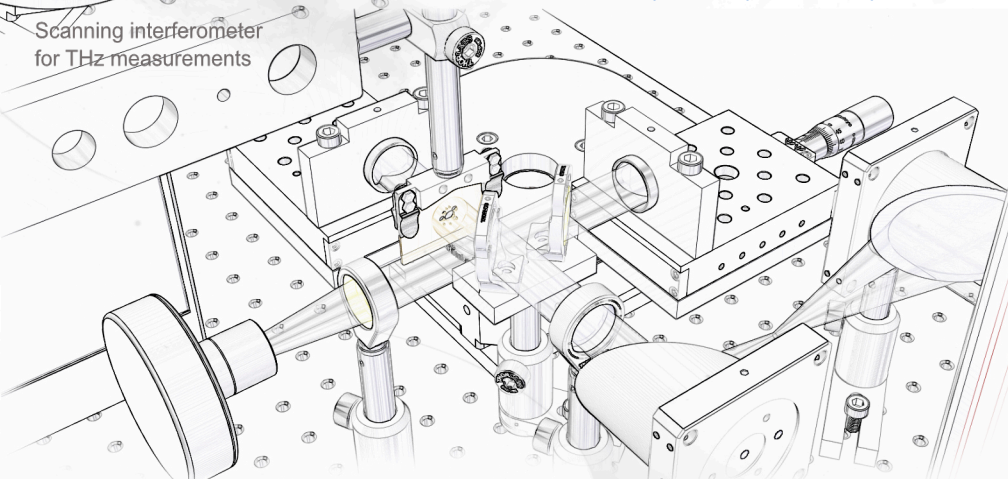
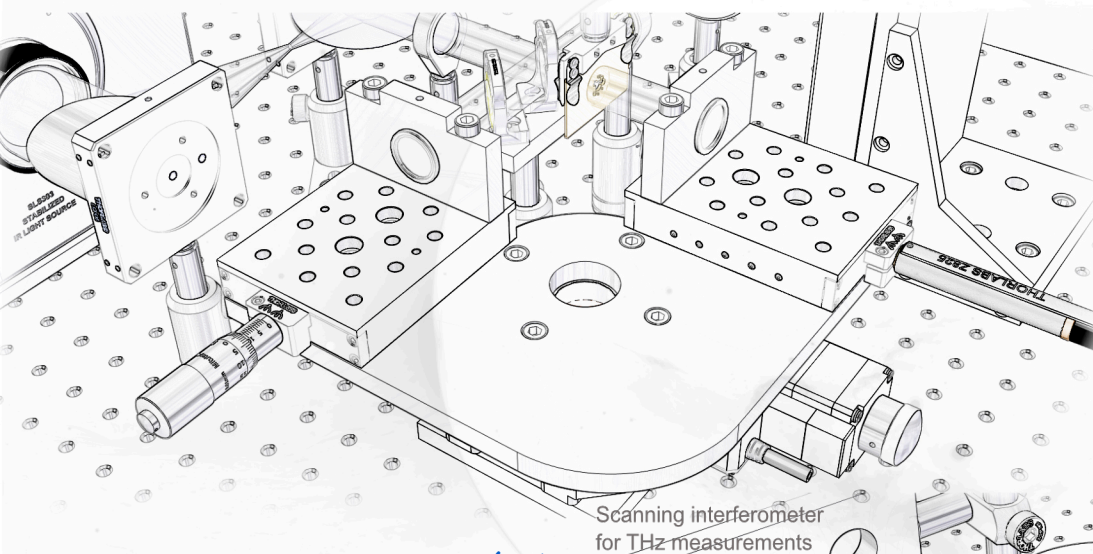
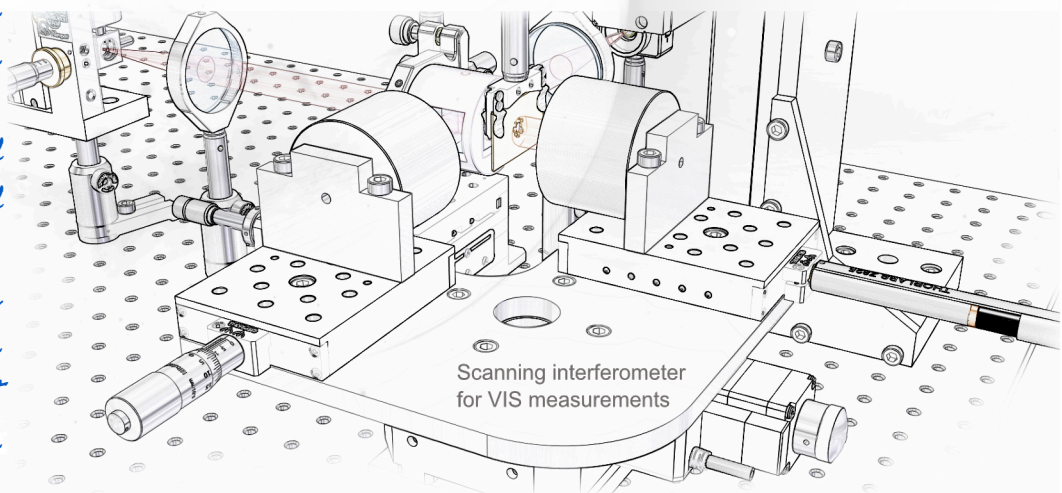
# THEZSERACT

The frequency region between microwave and infrared part of the spectrum, called terahertz (THz), encompasses electromagnetic waves oscillating at frequencies, loosely defined, in the range 0.1 to 30 THz. Generating or detecting radiation in this range has proved quite challenging, owing mainly to the presence of background sources of incoherent light.

Nevertheless, this radiation has unique properties that makes it particularly attractive for applications ranging from bio-medical imaging, national security and packaged goods inspection to remote sensing and spectroscopy.

Moreover, with an energy between 0.4 and 124 meV it is non-ionizing and, therefore, not harmful to the living world. The project demonstrates raster

scanning imaging and its application to Fourier transform spectroscopy and phase shifting interferometry at this range of wavelengths.



## THz scanning interferometer with enhanced resolution using amplitude control

### INFO

Contract: TE 148/ 2022  
Submission code: PN-III-P1.1-TE-2021-0949  
Contract duration: 24 months  
Starting date: 06.06.2022

Acronym: THEZSERACT  
Contractor: INFLPR  
Contracting authority: UEFISCDI

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