

Horizon Europe - Partner search template

Call and topic ID: [HORIZON-CL4-2022-RESILIENCE-01-10: Innovative materials for advanced \(nano\)electronic components and systems](#)

Type of action: *Research and Innovation Action*

Call Deadline: 30.3.2022

Budget: *The total indicative budget for the topic is EUR 20.00 million (per project between EUR 3.00 and 5.00 million)*

Proposal title: *Ultrasensitive radiation detectors with enhanced functionalities (working title)*

- **Short description of the project concept**

The idea of the proposal is to develop very sensitive and/or single-photon detectors (applicable with compact cryogenics) both for mid-IR and THz spectral ranges: From the applications point of view, applying the two spectral ranges equipped with very sensitive (and fast) detectors could be used to enhance the sensitivity and selectivity/substance identification e.g. in environment monitoring (including aerospace), pharmaceutical industry, medical chemistry, materials and bio science, monitoring harmful particles/aerosols, gases...

Partner expertise searched:

Type of a partner sought (industry, sector, size etc) and geographical preference	Preferably a company, from any of the relevant industry sectors (environment monitoring (including aerospace), pharmaceutical industry, medical chemistry, materials and bio science) if they have such measurement/analysis challenges/needs (e.g. in pharmaceutical industry the detection of polymorphs in drug discovery and manufacturing processes might be relevant); <u>preferably from the mid or Southern Europe or from the widening countries.</u>
Role of a partner in the proposal (e.g. use case provider, demonstration/validation partner, developer etc).	Applications specialist/use case provider that is able to give an interesting (potentially commercially relevant) measurement challenge for the validation measurements and the required specifications (we have already another partner to do the actual validation/demonstration measurements), enable to build/describe a business case for the application
Proposed involvement (WP leader, Task leader, task participant)	task participant or task leader

Contact details

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