Research, Development and Innovation Capabilities

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Company overview

- ✓ **RAMEM** is a Spanish **SME intensive in R&D** for 10 years.
- ✓ **IONER** is **RAMEM´s brand** for Aerosol and Nanoparticle products.
- ✓ **RAMEM** develops **own technology** for **Nanoparticle research** and **Aerosol Science**.
- ✓ **RAMEM** is project partner of **4 different FP7 programs**, **1 Eurostars** program and several Spanish National and Regional programs.
- ✓ **RAMEM** has **engineering and production** capabilities for **mechanical design** and **control electronics.**

- ✓ High Resolution **Differential Mobility Analyzer**: HRDMA: Information about **size** and chemical **composition** of **NanoParticles**
- ✓ Parallel plate technology for **minimizing losses**.
- ✓ Detection of chemical species and analysis of ultra-small nanoparticles, smaller than 1nm**. Size range:0,5 to 7nm.**
- ✓ High sensitivity and resolution. **Resolution of 50**. **Transmission of 35%**
- ✓ Pre-industrial **prototype**
- ✓ **Chargers or Ion sources**
  - ElectroSpray (ESI)
  - Corona Discharge (CD)
  - UV light for organics
- ✓ **Detectors**
  - Aerosol Electrometer
  - Ultralow current electrometers (fA)

Prototyping

- ✓ **RAMEM** is willing to work in **Prototyping** and **short series** production: Bring Research into market.
- ✓ **RAMEM** expertise includes **electronic design** and manufacturing of the electronics to control prototypes. **Control Hardware and Software** development.

Small Angle X-Ray Scattering. European Synchrotron Radiation Facility (BM-16) Grenoble

Quadrupole Movers with submicron repeatability for European XFEL

Active R&D projects

- FP7: Lotus project: Localization of Threat Substances in Urban Society: http://www.foi.se/en/Customer--Partners/Projects/LOTUS1/LOTUS/
- FP7: Buonapart-E: **B**etter **U**pscaling and **O**ptimization of **Na**no**part**icle and Nanostructure Production by Means of **E**lectrical Discharges: http://www.buonapart-e.eu/
- Eurostars: GANS: Gas Aerosol Nucleation Spectrometer: http://www.gans-project.eu/
- FP7: NanoDefine: Development of an integrated approach based on validated and standardized methods to support the implementation of the EC recommendation for a definition of nanomaterial. http://www.nanodefine.eu/
- FP7: GIFT: Generic Integrated Forensic Toolbox for CBRN incidents

Thank you

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