



## Example CAPPA Projects

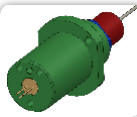
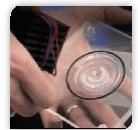
### *An overview of some of CAPPA's previous and current industry projects*

*Below is a non-exhaustive list giving examples of the types of projects CAPPA has worked on previously with industry partners. These vary from small consultancy projects to large multi-annual, multi-partner projects, and demonstrate how photonics provides solutions for many applications.*

#### AgriFood and Dairy

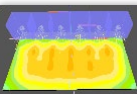
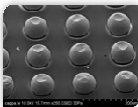


- Spectroscopic development of a maturity model for cheese (ZZ Ltd)
- Milk quality analysis (Agri industry)
- Sol-gels for optical pH monitoring in fish farms (Faaltech)
- Analysis of milk powder rehydration (Teagasc)



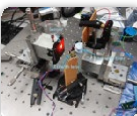
#### Medical Devices and Healthcare

- Swallowable capsule for detection of internal bleeding (Enterasense)
- Process development and improvement (Alcon)
- Contamination identification and lens fabrication quality analysis (Alcon)
- UV disinfection of drinks bottles (Inferneco)
- UV sterilisation configuration for portable baby bottle steriliser (Shasta)
- Medical tools integrated to photonic devices (Lake Region)
- Development of on-site infection detection system (Veterinary)
- Swept-source lasers for Optical Coherence Tomography (Superlum)



#### Pharmaceuticals

- Product formulation and contamination analysis (Astellas)
- Glass transition temperature analysis of polymer material (DePuy)
- Solid dose drug identification in dried micro-needles (LeoPharma)
- Spectroscopic cleaning verification (PMTc)



#### General Photonics

- Emergency Lighting Signage (Alba Lighting)
- Sealant Quality for Electrical Casing (Dexgreen Ltd)
- Optical design and simulation for a laser range finder (SensL)
- Development of anti-reflection optical coatings (Superlum)
- H2020 proposal preparation helped win the company €4.2M EU funding (PMD)
- Database development for warehouse tracking (Aldi Irl.)
- Large-scale optical displays (Epi-Light)
- Optical simulation and design of telescope lens train (Blackrock Castle Observatory)
- Cross-section analysis of encapsulated product (Boston Scientific)
- Hardware/software interface development (Gas Analysis Services)
- Golf aid for shot alignment (Egan Golf)

