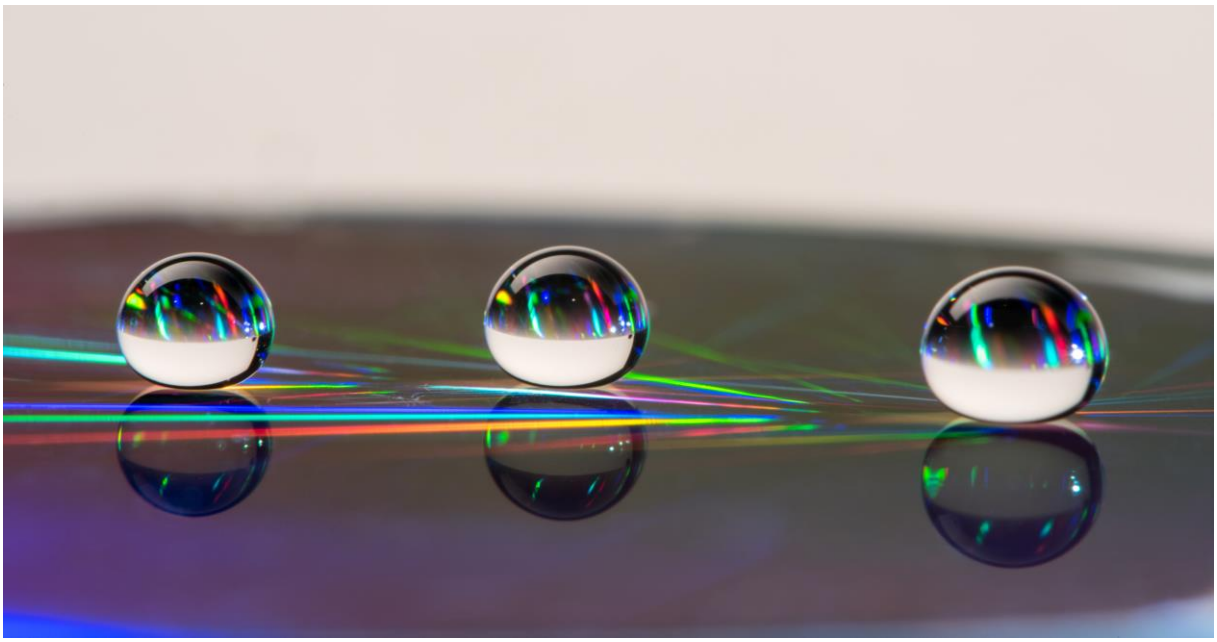
Name

Multifunction Anti-Glare and Ultra-Hydrophobic Windows (Fenêtres Multifonctionnelles Anti-Reflets et Superhydrophobes - F-MARS)



Catchline

Offer anti-glare and ultra-hydrophobic lenses to ensure good image quality in all weathers, day or night

Challenges

- To develop a new bio-mimetic approach which aims to endow a lens surface with anti-glare and ultra-hydrophobic properties
- Make technology compatible with operational environments and requirements
- Validate this approach with a demonstrator

Innovations

- Develop new technology processes for the nano-structuring of optical materials
- Develop encapsulation processes for implementing optical windows in harsh environments
- Theoretical study of fluidic aspects for optimal anti-fog functionality

Applications

All optronic sensors, including:

- Visible or infrared sensors mounted on autonomous vehicles (trains, cars)
- Surveillance systems for maritime and terrestrial applications
- LIDARS, including anemometers

Manufacturer: THALES