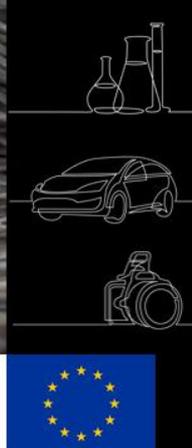


sub-wavelength nanostructures fabricated on a pilot manufacturing line using self-assembling block copolymers

SUNPILOT



Q4-2019 Newsletter: Photonex Europe and K2019

December 2019

Fourth quarter 2019 provided great opportunities to promote the SUN-PILOT objectives to supply chain partners and prospective customers within the optics and automotive plastics industry.

WP7 leader Elucidare Limited attended Photonex Europe in Coventry (UK) and the colossal K2019 Plastic Exhibition in Dusseldorf (Germany). Both events confirmed a growing awareness of and appetite for nanotexture surfaces and cost-effective production methods.

Funded through the European Union's Horizon 2020 research and innovation programme, SUN-PILOT will develop pilot-scale industrial processes for producing nanotextured products. Our primary commercial applications are in the optics and automotive industries.

Billed as the UK's premier event for photonics, imaging, lasers, and optical technologies, PHOTONEX Europe provided a great opportunity for WP7 coordinator Elucidare Limited to discuss SUN-PILOT objectives with optical components producers and end-users.

With presentations on a wide range of photonic topics from quantum computing to silicon photonics and hyperspectral imaging, PHOTONEX provided opportunities to engage with commercialisation partners across the supply chain and within numerous industry applications.

www.elucidare.co.uk photonex.org



SUN-PILOT discussed at optics exhibition

Elucidare discusses AR options with vendors at trade show

Optical component specialists Manx Precision Optics and UQG Optics presented a wide range of optical components including lenses, prisms, windows etc. While Manx offers an AR coating service, UQG does not. Both companies reported that fused silica is the most popular material.

UniKLaser Limited outlined the causes the ramifications of UV optical coating degradation. Manufacturing bespoke UV lasers operating in the 250-350nm range, this business could benefit from environmentally robust nanotextured AR treatments.

www.mpo.im uqgoptics.com uniklasers.com



WP7: Networking with optics vendors

PHOTONEX proved a great networking opportunity

For more information contact: info@sunpilot.eu

 sunpilot.eu



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Sustainability, vehicle fuel efficiency, and stylistic opportunities associated with the advent of autonomous driving. These were some of the recurrent themes at K2019. As resin producers embrace recovered monomers into their supply chain, Elucidare foresees growing appetite for functionalised surfaces achieved through nanotexturing as an alternative to traditional lamination solutions.

Elucidare also discussed SUN-PILOT objectives and its role in boosting polymer recycling and vehicle performance with K2019 exhibitors.

k-online.com elucidare.co.uk



Elucidare discusses SUN-PILOT at K2019
Sustainability and stylistic opportunities at plastics show

K2019 is the largest exhibition dedicated to the plastics industry worldwide. It is held once every three years in Dusseldorf, Germany.

German coating specialist Stahl exhibited its PolyMatte range of micronized surface treatments. Aimed mainly though not exclusively at the automotive market, PolyMatte confers otherwise inert hard plastics and laminates with the tactile properties of soft leather, velvet, etc. PolyMatte achieves these tactile properties by depositing micronized particles onto the substrate rather than etching textures into the surface.

stahl.com

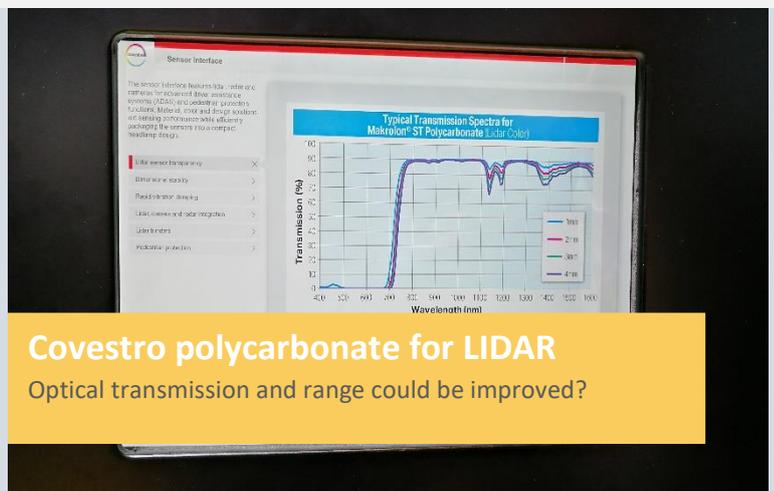


Stahl exhibited microtextured coatings
Transform the optical and tactile properties of plastic films

Injection moulded optics is not officially a SUN-PILOT application. Nevertheless, K2019 provided irresistible opportunities to discuss the optical and environmental benefits from nanotextured plastic optics.

Polymer specialist Covestro exhibited its polycarbonate resins used in the production of automotive optics such as headlamps and sensors. LIDAR is a particularly interesting application, where one fifth of the light energy – and maximum operating distance – is wasted due to Fresnel reflections. Surface nanotexturing could reduce these losses and improve the detection range correspondingly.

plastics.covestro.com



Covestro polycarbonate for LIDAR
Optical transmission and range could be improved?

