



POLLUX

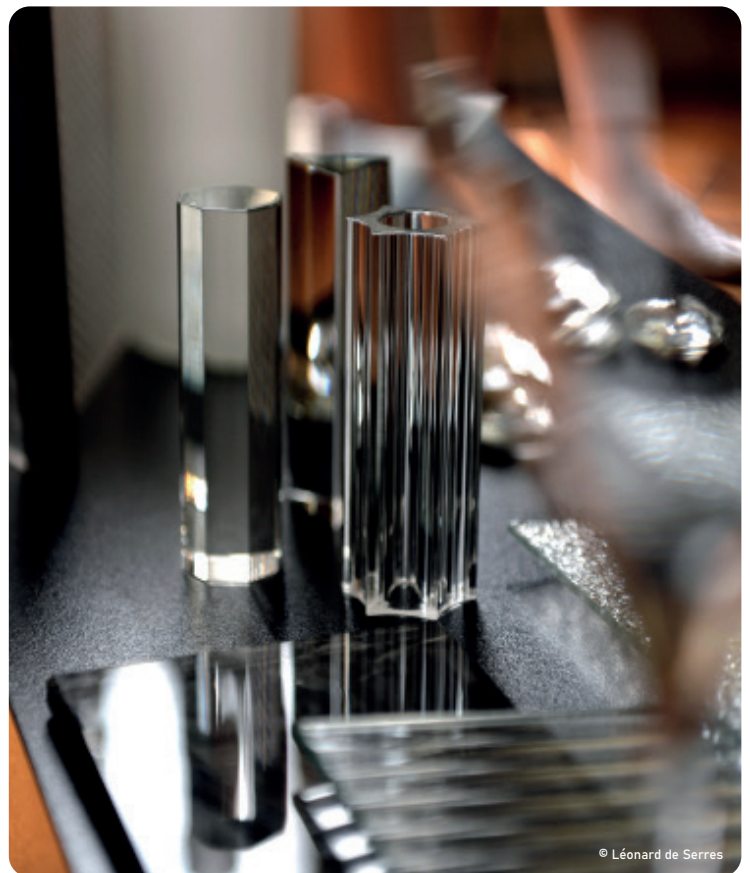
Creating a new scientific method that combines transparency characterization and sensory perception

This study at “the heart of the matter” harnesses material properties, the play on light and end requirements to develop translucent high-end polymers.

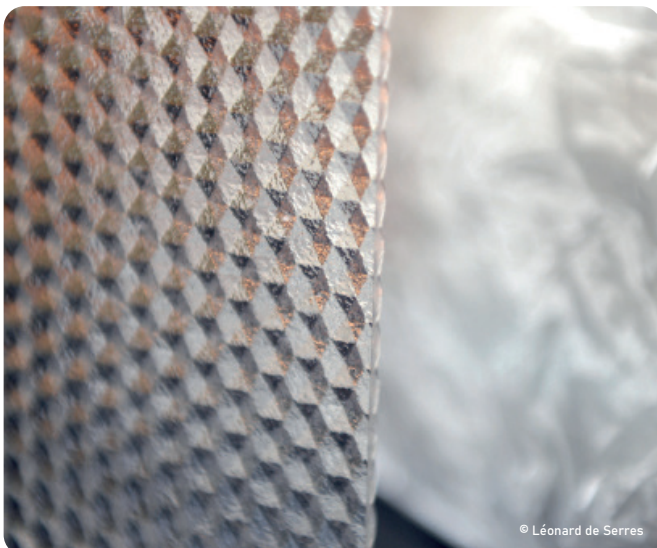
Carnot M.I.N.E.S Institute

Scientific / technological breakthrough

It is possible to incorporate nanoparticles in order to modify the properties of polymers (UV protection, for example), however as this operation modifies the diffusion of light, it also modifies their transparency. The transparency of these polymers is often lauded as being visible through the samples, or vaguely measurable on a spectrum visible under UV, sometimes with significant variations depending on the wavelength. POLLUX provides a set of instrumental data to account for the way in which the material's translucent sensorial property is perceived. POLLUX may be used to control the transparency of the polymer even when its properties have been modified.



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Competitive advantage for the economic stakeholders

The tool created is perfectly adapted to the cosmetics, packaging and bottling material sectors and makes it technically possible to combine UV or infrared protection with preserving the transparency of the container.