

Reversible colour-change polymer film

The ICN2 has patented a polymer film coating for glass and plastic surfaces that allows reversible colour changes in response to variations in temperature, exposure to light or both.

Based on polymeric core-shell nanocapsules containing commercially-available photochromic dyes, this is the first time such multi-responsiveness has been achieved in solid materials.

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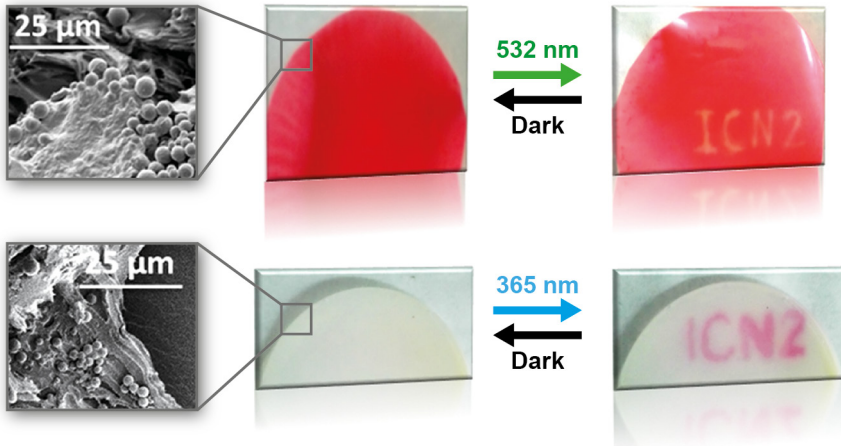
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These reversible colour-change film coatings for glass, plastic and other substrates respond to two stimuli: **temperature and light**. The following changes are possible:

1. Colourless to coloured upon exposure to UV light
2. Coloured to colourless upon exposure to visible light at room temperature
3. Coloured to colourless and/or vice versa in response to temperature changes (configurable between 0 and 65°C)
4. All-in-one: all of the above with the same coating

Main features

- ▶ Extremely fast colouration and fading response
- ▶ Responsiveness to UV light, visible light and/or temperature variations
- ▶ For use on glass, plastics and other substrates
- ▶ No external agents needed