

# PHOTOCHROMIC POLYMERS

**Intelligent windows, photosensitive visors, invisible safety products, dynamic windshields... All this is possible with photochromic polymers applied to easily obtainable moldable matrices.**



Source: www.sxc.hu

Laboratory

Idea

Prototype

Scale-up

Market

▶ Product

## Description

Polymers whose color and transparency change in response to UV light or electric current, otherwise maintaining their original color / transparency. Available in liquid and solid form.

## Problem

The development of materials that help optimize light in closed spaces has gained ground, although technologies for this purpose are scanty. The production of photosensitive glasses is hampered by their melting temperature. The existing photochromic polymers contain high concentrations of the elements responsible for altering transparency/color, which increases costs and reduces transparency. Matrices containing these elements are usually solid or semi-solid, making their application on irregular surfaces difficult or unfeasible. Moreover, the process for obtaining these compositions is complex and costly.

## Proposed solution

The technology consists of incorporating photochromic and electrochromic materials into commonly used polymers. These materials are incorporated in relatively small concentrations and at low temperatures. The matrices can be incorporated into paints and varnishes or they can be transformed into the solid state in a variety of shapes.

## Contact

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