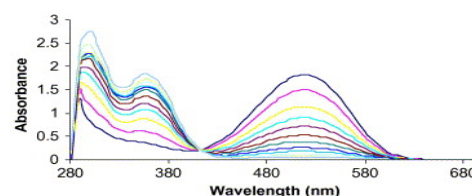
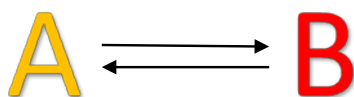


## Synthesis and Use of Photochromic Compounds as Smart Switchable Glazing for Ultraviolet Shielding

Abdullah Mohamed Asiri

*Chemistry Department, Faculty of Science, King Abdulaziz University, Jeddah, Saudi Arabia*

**Abstract:** Photochromism is a reversible transformation of a chemical species induced in one or both directions by absorption of electromagnetic radiation between two forms, A and B, having different absorption spectra. The Photochromic performance of some organic photochromic compounds will be studied in depth in polymer matrices. The rate constant and half-life of both coloration and bleaching will be demonstrated and the effect of organic UV absorbers doped in the polymer matrices will also be presented. The fatigue studies of the undoped and doped photochromic polymer Films will be highlighted. The prepared films demonstrate the easy and stable method of how the photochromic materials can be used in commercial applications.



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**Corresponding author:**  
Abdullah Mohamed Asiri

**E-mail:**  
aasiri2@kau.edu.sa