

NEW METHODS TO ACCESS BARRIER PROPERTIES
OF TEXTILE MATERIALS FOR CLOTHES
AGAINST HARMFUL ARTIFICIAL UV RADIATION

Grzegorz OWCZAREK, Grażyna BARTKOWIAK
Agnieszka WOLSKA, Grzegorz GRALEWICZ

ABSTRACT *Some amounts of ultraviolet radiation are beneficial for humans but excessive exposure can cause many negative health effects to the skin and eyes and also can affect the immune system. Exposed area of skin should be covered by working or protective clothes with low UVR transmission. It concerns both exposure to natural UV or prolonged exposure to artificial UV. Currently, there are no clear criteria to assess textile clothing for workers exposed to artificial UV radiation. Ultraviolet protection factor (UPF) is adequate for effectiveness protection against solar radiation but does not take into consideration UV range from 190 to 290 nm which is characteristic for some types of artificial sources.*

Keywords: *personal protective equipment, UV radiation, workplace hazards*