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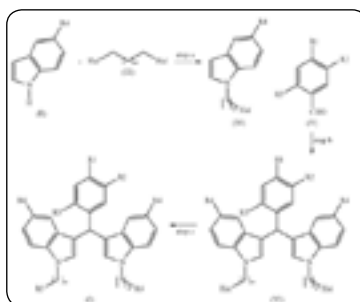
Biopolymers & Bioplastics

June 28-29, 2018 | Berlin, Germany

Synthesis of novel uv absorbers bisindolylmethanes and investigation of their applications on cotton-based textile materials

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Nowadays modified textiles, especially UV protective, antibacterial and antimicrobial ones have become the focus of great interest. In this study, several new UV absorbers -bis(indolyl)methane derivatives were synthesized and grafted onto polyvinyl alcohol polymer (PVA). Their application properties on cotton-based textile materials were determined; the UV protection factor values of the modified fabrics were measured (UPF); and the antibacterial features of the fabrics were tested.



Recent Publications

1. Ergindemir N, Aker A, Hamitbeyli A, Öcal N. (6 April 2017) Pub. No.: U.S. 2017/0096393 A1, Novel Bis-indolylmethanes, a Process for Their Preparation and Uses Thereof.
2. Ergindemir N, Aker A, Hamitbeyli A, Öcal N. (13 April 2017) Pub. No.: U.S. 2017/0101385 A1, Novel Isoxazoles a Process for Their Preparation and Uses Thereof.
3. Ergindemir N, Aker A, Hamitbeyli A, Öcal N., (2016) "Synthesis of Novel UV Absorbers Bisindolylmethanes and Investigation of Their Applications on Cotton-Based Textile Materials", *Molecules*, 2016, 21, 718.
4. Ergindemir N, Aker A, Hamitbeyli A, Öcal N., (2016) "Synthesis of Novel Heterocyclic Imine Type UV Absorbers for Application on Cotton Based Textile Materials", *Hindawi Publishing Corporation Journal of Chemistry*, Volume 2016, Article ID 6387305, 6 pages.
5. Ergindemir, N., Hamitbeyli, A., Eryılmaz, J., Çobanoğlu, Ö. Akdemir, Ö. (2012) "Nano-Structured Materials for Textile Industry", *Nano 2012*, XI. International Conference on Nanostructured Materials, 26-31 August 2012, Rhodes/Greece.

Biography

Hikmet Nil Bayrak has her expertise in organometallic and organic synthesis and passion in creating multifunctional textiles and improving the PPE's. Her patents on this field are granted. She is still working as research scientist in a R&D department of a textile company in Turkey, named Sanko Holding ISKO Division.

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