

عنوان مقاله:

Free Chemicals - Sonoelectrochemical Treatment as a Biocompatible Procedure for Decolorization of Anthraquinone Dyes

محل انتشار:

مجله اصلاح زیستی نانو نساجی ایران، دوره 1، شماره 1 (سال: 1401)

تعداد صفحات اصل مقاله: 12

نویسندگان:

Mohammad Hassan Ehrampoosh - *Department of Environmental Health Engineering, Shahid Sadoughi University of Medical Sciences, Yazd, Iran*

Atefeh Rezaee - *Department of Environmental Health Engineering, Shahid Sadoughi University of Medical Sciences, Yazd, Iran*

Ahmadabadi - *Research and Development Center, Nano Kimia Kavir Yazd Company, Yazd, Iran*

خلاصه مقاله:

Dye compounds are known as one of the most important environmental pollutants. Up to now, several methods have been offered to eliminate these pollutants from industrial wastes especially in the textile industry. A method that has received a great deal of attention in recent years is sono- electro- chemical method. In this study, using the Central Composite Design, the interactive effects of four important variables including pH, initial dye concentration, time and applied potential on sono- electro- chemical decolorization of Basic Blue 4Y were optimized and investigated. Based on the obtained results in the absence oxidant agents, the best index for decolorization in optimal conditions including pH of 9.0, initial dye concentration of 303.3 μM , time of 93 min, and a potential of 0.81 V corresponding to the design by % the CCD was 98%. It was experimentally found to be 96.0 %, and the Chemical Oxygen Demand (COD) was 97

کلمات کلیدی:

Sonoelectrochemical, Basic Blue 4Y, Free Chemicals, Degradation

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1594863>

