

عنوان مقاله:

Study of Decolorization Variety by Electrocoagulation Process in the Removal of Dye Solution Containing Remazol Yellow G: Optimization of Effective Parameters Using the Taguchi Method

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

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نویسنده:

Maryam Rajabi - Department of Applied Chemistry, Faculty of Science, Semnan University, Semnan ۳۵۱۹۵-۳۶۳, Iran

خلاصه مقاله:

The Taguchi method was applied as an experimental design to determine optimum conditions for color removal from azo dyes solutions containing remazol yellow G by electrocoagulation (EC) using iron and steel electrodes as anode and cathode, respectively. An orthogonal array (OA) experimental design that allows to investigate the simultaneous variations of four para (initial remazol yellow G concentration, initial pH of the solution, time of electrolysis and current density) having three levels was employed to evaluate the effects of experimental parameters. Performance measure analysis was followed by perform determine the optimum levels and relative magnitude of the effect of parameters. The desired characteristic for response has been maximum decolorization, therefore, Taguchi's 'the larger the better' performance formula yellow G concentration, 100 current density, 1 mAcm⁻².

کلمات کلیدی:

Electrocoagulation; Decolorization; Remazol yellow G, Taguchi method

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