

## عنوان مقاله:

Dynamic Modeling of the Extracted Essential Oil from Spearmint Leaves by Using Supercritical Carbon Dioxide with Neural Network

## محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

An experimental flow-type apparatus has been designed for the extraction of essential oil from leaves with supercritical carbon dioxide. Supercritical oil extraction is separation technique in food and chemical industry, which exploit the solvent properties of oil near the critical point. Modeling of the yield and solubility of materials is an essential issue in supercritical oil extraction. Modeling of supercritical oil extraction with mathematical equations is very difficult because of the highly nonlinear relation between process variables and solubility. In this paper On the basis of the laboratory data, two types of artificial neural networks were applied to the simulation of the supercritical fluid extraction of spearmint oil. Simulation results show the advantages of applying artificial neural networks in modeling of nonlinear chemical processes.

## کلمات کلیدی:

Spearmint leaves, supercritical oil extraction, artificial neural network, carbon dioxide

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/46297>

