Accepted Manuscript

Mathematical Modeling and Experimental Coupling of Solution Layer Crystallization on a Vertically Cold Surface

I.S. Ioannou, S.S. Kontos, P.G. Koutsoukos, C.A. Paraskeva

PII:	S1383-5866(17)33258-6
DOI:	https://doi.org/10.1016/j.seppur.2017.12.038
Reference:	SEPPUR 14271
To appear in:	Separation and Purification Technology
Received Date:	6 October 2017
Revised Date:	4 December 2017
Accepted Date:	18 December 2017



Please cite this article as: I.S. Ioannou, S.S. Kontos, P.G. Koutsoukos, C.A. Paraskeva, Mathematical Modeling and Experimental Coupling of Solution Layer Crystallization on a Vertically Cold Surface, *Separation and Purification Technology* (2017), doi: https://doi.org/10.1016/j.seppur.2017.12.038

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Mathematical Modeling and Experimental Coupling of Solution Layer Crystallization on a Vertically Cold Surface

I. S. Ioannou, S. S. Kontos, P. G. Koutsoukos, C. A. Paraskeva

- Corresponding Author: C. A. Paraskeva
- ✤ Phone:+ 30 2610 997252
- ✤ Fax: + 30 2610 997574
- E-mail: takisp@chemeng.upatras.gr

Department of Chemical Engineering, University of Patras, Rion, Patras, GR 26504, Greece and

scri

Institute of Chemical Engineering Sciences, Foundation for Research and Technology, Hellas (FORTH/ICE-HT), Stadiou Str., Platani, Patras, GR 26504, Greece

Highlights

Recovery of Ferulic Acid from aqueous solutions by solution crystallization Solution of energy and mass balance coupled with the crystallization theory

- Temperature distribution in the crystalline thickness and the liquid solution
- Determination of the growth parameters for the optimization of the recovery rate
- Potential application of the model for the separation of phenolics from OMW

Download English Version:

https://daneshyari.com/en/article/7043897

Download Persian Version:

https://daneshyari.com/article/7043897

Daneshyari.com