Author's Accepted Manuscript

The constant composition method for crystallization of calcium carbonate at constant supersaturation

R. Beck, M. Seiersten, J.-P. Andreassen



www.elsevier.com/locate/jcrysgro

 PII:
 S0022-0248(13)00395-3

 DOI:
 http://dx.doi.org/10.1016/j.jcrysgro.2013.05.038

 Reference:
 CRYS21605

To appear in: Journal of Crystal Growth

Received date: 5 March 2013 Revised date: 30 May 2013 Accepted date: 31 May 2013

Cite this article as: R. Beck, M. Seiersten, J.-P. Andreassen, The constant composition method for crystallization of calcium carbonate at constant supersaturation, *Journal of Crystal Growth*, http://dx.doi.org/10.1016/j.jcrys-gro.2013.05.038

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 galley proof before it is published in its final citable 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

1	The constant composition method for crystallization of
2	calcium carbonate at constant supersaturation
3	
4	R. Beck ^{a,b,*} , M. Seiersten ^b , JP. Andreassen ^a
5	
6	^a Department of Chemical Engineering, Norwegian University of Science and Technology,
7	7491 Trondheim, Norway
8	^b Institute for Energy Technology (IFE), Box 40, 2027 Kjeller, Norway
9	G
10	Phone: +4773594025
11	E-mail: Phlegmon@gmx.net
12	*Corresponding author.
13	E-mail addresses: ralfbeck45@gmail.com, marion.seiersten@ife.no,
14	jensp@chemeng.ntnu.no
15	
16	CCX C
17	Abstract
18	
19	The exact control of supersaturation is of great importance when studying the formation of
20	crystalline and amorphous matter. The constant composition method is suitable for the study
21	of crystallization processes at constant supersaturation by controlled addition of titrants to a
22	crystallizer to maintain constant pH. Not all aspects necessary for successful operation of this
23	method are obvious from the existing literature, and the method is often used in an incorrect
24	way. The focus of the present work is to highlight pitfalls associated with the constant

Download English Version:

https://daneshyari.com/en/article/8152212

Download Persian Version:

https://daneshyari.com/article/8152212

Daneshyari.com