

# **Citrus Engineering Conference 2012**

**Lake Alfred, Florida, USA  
15 March 2012**

**ISBN: 978-1-62276-265-1**

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2012) by the Citrus Engineering Conference  
All rights reserved.

Printed by Curran Associates, Inc. (2012)

For permission requests, please contact the Citrus Engineering Conference  
at the address below.

Citrus Engineering Conference  
c/o Jose Reyes  
700 Experimental Station Road  
Lake Alfred FL 33850

Phone: (863) 956-1151  
Fax: (863) 956-4631

[jireyes@ufl.edu](mailto:jireyes@ufl.edu)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2634  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

# TABLE OF CONTENTS

## ABSTRACTS

<b>Flash Distillation of D-Limonene in the Citrus Industry</b> .....	1
<i>Danny Milla</i>	
<b>Juice Debitting: Basic Science, Optimization, and Recent Advances</b> .....	4
<i>Fred Ghanem</i>	
<b>Applicability of Greenhouse Gas Regulations to Citrus Industry Operations</b> .....	5
<i>John M. Beath</i>	
<b>Water Conservation and Wastewater Load Reduction in Citrus Processing</b> .....	6
<i>James Ashby</i>	
<b>Press Liquor Filtration</b> .....	7
<i>Bob Johnston</i>	
<b>Rheological Properties of Orange Pulp</b> .....	8
<i>Elyse M. Payne, José I. Reyes-De-Corcuera</i>	
<b>Ammonia Evaporative Condensers with Extended Surface Fins</b> .....	9
<i>Chris Dreher</i>	
<b>Leveraging Industrial Energy Optimization for Higher Profitability: Defining and Implementing a Foundation for Energy Management</b> .....	10
<i>Paul Fowler, Remo Guarnieri</i>	

## PAPERS

<b>Juice Debitting: Basic Science, Optimization, and Recent Advances</b> .....	12
<i>Fred Ghanem</i>	
<b>Water Conservation and Wastewater Load Reduction in Citrus Processing</b> .....	25
<i>James Ashby</i>	
<b>Press Liquor Filtration</b> .....	41
<i>Bob Johnston</i>	
<b>CEC Transactions Titles Since 1955</b> .....	62
<i>N/A</i>	
<b>Author Index</b>	