

# **International Zinc Conference 2013 and the International Zinc Oxide Industry Conference 2013**

**Cancun, Mexico  
24-27 February 2013**

**ISBN: 978-1-62748-279-0**

**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© (2013) by the International Zinc Association  
All rights reserved.

Printed by Curran Associates, Inc. (2013)

For permission requests, please contact the International Zinc Association  
at the address below.

International Zinc Association  
1822 East NC Highway 54, Suite 120  
Durham, NC 27713 USA

Phone: +1 919 361 4647  
Fax: +1 919 361 1957

[contact@zinc.org](mailto:contact@zinc.org)

**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

## INTERNATIONAL ZINC CONFERENCE

<b>Implementation of New IMO Regulations .....</b>	1
<i>Mik Gilles</i>	
<b>Copenhagen Consensus: Where Can We Do Most Good First? .....</b>	16
<i>Bjorn Lomborg</i>	
<b>Challenges and Opportunities: A Latin American Perspective .....</b>	23
<i>Xavier Garcia De Quevedo</i>	
<b>Grid-Scale Energy Storage: A Multi-Billion Dollar Zinc Market .....</b>	39
<i>Steve Hellman</i>	
<b>Impact through Action: Key IZA Developments .....</b>	48
<i>Stephen Wilkinson</i>	
<b>Unlocking Value in the Concentrate Market.....</b>	76
<i>Steve Ball</i>	
<b>Opportunities for Zinc Growth in India .....</b>	85
<i>Kenneth De Souza, Rahul Sharma</i>	
<b>Zinc Die Casting World Perspective .....</b>	100
<i>Ryan Winter</i>	
<b>Zinc Metal Production &amp; Cost Trends .....</b>	122
<i>Jim Pedersen</i>	
<b>Developments in General Galvanizing.....</b>	133
<i>Frank E. Goodwin</i>	

## JOINT SESSION

<b>Zinc Nutrient Initiative .....</b>	145
<i>Andrew Green</i>	
<b>Carry on Regardless: Market Impact on LME Metals of Stock Holding and Financing.....</b>	160
<i>Duncan Hobbs</i>	
<b>Zinc Market Outlook: Long Term Clear; Short Term Less Certain .....</b>	178
<i>Graham Deller</i>	
<b>Outlook for the Zinc Concentrate Market.....</b>	190
<i>Christopher Parker, Andrew Thomas</i>	
<b>China Market Update.....</b>	198
<i>Huw Roberts, Claire Hassall</i>	

## INTERNATIONAL ZINC OXIDE INDUSTRY CONFERENCE

<b>Guayule as an Alternate Source of Natural Rubber .....</b>	207
<i>William S. Niaura</i>	
<b>Global Zinc Oxide: Market Update .....</b>	219
<i>Stefan Schlag</i>	
<b>Metallic Waste Solutions Pty Ltd .....</b>	230
<i>Ray Shaw</i>	
<b>Amelioration of Secondary Zinc Oxide.....</b>	251
<i>Jürgen Antrekowitsch, Stefan Steinlechner</i>	
<b>The Exploration &amp; Development of Zinc Oxide Deposits: A Focus on Guatemala.....</b>	265
<i>Pamela Strand</i>	
<b>Zinc Oxide Market in East Asia .....</b>	283
<i>Wei-Chung Chen</i>	
<b>Increasing Zinc Plant Efficiency by Utilizing MZR Technology .....</b>	297
<i>Mark Bright, Peter Jetten</i>	
<b>Improving Zinc Uptake in Crops through Innovative Application Technology.....</b>	315
<i>Kerry Green</i>	

**ZnO Regulatory Update.....**..... 342

*Christine Spirlet*

**Author Index**