

# **International Zinc Conference 2012 and the International Zinc Oxide Industry Conference 2012**

**Rancho Mirage, California, USA  
19-22 February 2012**

ISBN: 978-1-62276-426-6

**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 International Zinc Association  
All rights reserved.

Printed by Curran Associates, Inc. (2012)

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

<b>Zinc in Fertilizers...A Growing Market: Zinc Nutrient Initiative Update</b> .....	1
<i>Andrew Green</i>	
<b>A Bright Future for the Zinc Industry</b> .....	13
<i>Andrew Michelmore</i>	
<b>Indian Zinc Oxide Industry - An Overview</b> .....	23
<i>Anirudh Jhunjhunwala</i>	
<b>EU ZnO Regulatory Update</b> .....	45
<i>Christine Spirlet</i>	
<b>The Tire Industry: Global Trade and Economic Update</b> .....	54
<i>Dennis Byrne</i>	
<b>Zinc Market Outlook - Hold on Tight</b> .....	75
<i>Duncan Hobbs</i>	
<b>Opportunities in Non-traditional Zinc Markets</b> .....	89
<i>Frank E. Goodwin</i>	
<b>GAMSBURG - Opportunity Defined!</b> .....	102
<i>N/A</i>	
<b>Last Year, We Forecast Mounting Deficits from 2014</b> .....	113
<i>Graham Deller</i>	
<b>Challenges for Future Zinc Supply - Why Selwyn is Investing in Zinc</b> .....	125
<i>N/A</i>	
<b>Horsehead's New Zinc Plant and its Impact on the Zinc Oxide Business</b> .....	139
<i>Jim Hensler</i>	
<b>Tire Industry Project - Update on the Risk Assessment Research and Implications for Zinc</b> .....	149
<i>Julie Panko</i>	
<b>Zinc Utilization in Animals Feeds</b> .....	164
<i>Karen Wedekind</i>	
<b>Applications of Zinc to Improve Soil, Crop, Human and Animal Health</b> .....	178
<i>Kevin Moran, Peter Robinson</i>	
<b>ZnO Properties in Mortar &amp; Concrete</b> .....	201
<i>Neal S. Berke</i>	
<b>Rolling Forward - Rolled Zinc for Architecture - A Different Look at Zinc</b> .....	209
<i>N/A</i>	
<b>New Global Zinc Mine Projects</b> .....	226
<i>Paul White</i>	
<b>Global Zinc Oxide - Market Update</b> .....	244
<i>Stefan Schlag</i>	
<b>ZnO Varistors - Materials, Markets &amp; Outlook</b> .....	252
<i>N/A</i>	
<b>IZA Conference - Mosaic Overview and MicroEssentials® Premium Products</b> .....	256
<i>N/A</i>	
<b>Hot-Dip Galvanizing in North America - A Galvanizer's Perspective</b> .....	269
<i>N/A</i>	
<b>China's Zinc Market Outlook</b> .....	294
<i>Feng Juncong, Tang Wujun, Jin Xiangyun</i>	
<b>From Nanogenerators to Piezotronics - New Science and Technology from ZnO Nanostructures</b> .....	308
<i>Zhong Lin Wang</i>	
<b>Author Index</b>	