

# **World Nuclear Fuel Cycle Conference (WNFC 2017)**

Toronto, Canada  
25 - 27 April 2017

ISBN: 978-1-5108-5237-2

**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© (2017) by Nuclear Energy Institute  
All rights reserved.

Printed by Curran Associates, Inc. (2018)

For permission requests, please contact Nuclear Energy Institute  
at the address below.

Nuclear Energy Institute  
1201 F St., NW, Suite 1100  
Washington, DC 20004-1218  
USA

Phone: (202) 739-8000  
Fax: (202) 785-4019

[www.nei.org](http://www.nei.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: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

# TABLE OF CONTENTS

<b>Canada's Most Important Cities</b> .....	1
<i>T. Gitzel</i>	
<b>The Global Nuclear Industry: Towards the Harmony Goal</b> .....	10
<i>A. Rising</i>	
<b>Meeting Today's Challenges, Seizing Opportunities for the Future</b> .....	26
<i>N/A</i>	
<b>Mining Producers' Behaviour in Today's Depressed Market</b> .....	32
<i>J. Peythieu</i>	
<b>Conundrum Brewing</b> .....	36
<i>N/A</i>	
<b>Canada's Uranium Mining Industry: Production Capability, Policy and Public Support</b> .....	45
<i>T. Calvert, C. Slobodin</i>	
<b>Assessing US Uranium Resources - Techniques to Estimate Future Uranium Supply</b> .....	57
<i>S. Hall</i>	
<b>Husab - From Construction to a Mining Giant</b> .....	70
<i>S. Davies</i>	
<b>The Next Generation Uranium Producer</b> .....	87
<i>N/A</i>	
<b>New Markets / New Solution</b> .....	96
<i>R. Rizvi</i>	
<b>US and THEM: The Need to Work Together to Ensure the Safe Transport of Radioactive Materials</b> .....	106
<i>J. Mulkern</i>	
<b>Preparatory Works at Loviisa NPP for Spent Fuel Transportation for Final Disposal</b> .....	121
<i>O. Koskivirta</i>	
<b>Synergetic Fuel Cycles in CANDU and Fast Neutron Reactors</b> .....	130
<i>D. Meneley</i>	
<b>Impact of the Maritime Reorganization on the Class 7 Worldwide Logistics: Status of the Current Situation and Way Forward</b> .....	138
<i>N/A</i>	
<b>A Producer's Perspective in Challenging Times</b> .....	145
<i>J. Dobchuk</i>	
<b>Mulga Rock Project</b> .....	154
<i>M. Young</i>	
<b>The Canyon Mine - A Developed Uranium Mine in the US Ready to Produce</b> .....	174
<i>N/A</i>	
<b>Berkeley Energia - A Reliable Low Cost Supplier to Global Utilities From the Heart of the European Union</b> .....	186
<i>H. Schumann</i>	
<b>Emirates Nuclear Energy Corporation - Fuel for the UAE Peace Nuclear Energy Program</b> .....	194
<i>J. Hashmi</i>	
<b>Commercial Potential of Dual-Component Nuclear Power System</b> .....	205
<i>M. Baryshnikov</i>	
<b>The AFCR™ and Its Contributions to the Back End of the Fuel Cycle</b> .....	214
<i>C. Cottrell</i>	
<b>U.S. Used Nuclear Fuel Management Moving Forward</b> .....	224
<i>R. McCullum</i>	
<b>From Growth to Sustainability</b> .....	236
<i>N/A</i>	
<b>Nuclear Power Economics and Project Structuring</b> .....	243
<i>M. Caplan</i>	
<b>Renewal of Uranium Scrap Recovery Facilities &amp; Capabilities at AREVA's Richland Plant</b> .....	251
<i>C. Yeager</i>	
<b>Author Index</b>	