

AusIMM International Uranium Conference 2015

Adelaide, Australia
9-10 June 2015

ISBN: 978-1-5108-2301-3

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© (2015) by Australian Institute of Mining & Metallurgy (AusIMM)
All rights reserved.

Printed by Curran Associates, Inc. (2016)

For permission requests, please contact Australian Institute of Mining & Metallurgy (AusIMM)
at the address below.

Australian Institute of Mining & Metallurgy (AusIMM)
P.O. Box 660
Carlton South Victoria 3053
Australia

Phone: 61 3 9658 6100
Fax: 61 3 9662 3662

publications@ausimm.com.au

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
Web: www.proceedings.com

CONTENTS

Keynote Presentations

- Uranium Processing – The Last and Next Decades *B Ring and M Maley*
- South Australia – Uranium Mining Approvals, Regulation and Key Initiatives *T Tyne*
- Uranium in Australia – An Evolving Socio-political Landscape *D Zavattiero*

Geology and Exploration

- A New Elephant in Uranium Country – The DASA Project, Republic of Niger *I Alisso, C Din, G A Flach, S G Roman, H Sanguinetti and P Wollenberg*
- Uranium Exploration for Sedimentary-hosted Roll Front in the Carpentaria Basin, Queensland (Australia) *G Andre, T Scroop and O Parize*
- The Arrow Uranium Deposit, South-west Athabasca Basin *A Browne*
- Exploration for Palaeochannel-hosted Uranium Deposits in South Australia – Return on Experience *R Chemillac, R Wilson and G Kern*
- Geophysical Targeting Potentially Uraniferous Stratigraphy under Cover – Ngalia Basin *P J Dunbar and B L Craven*
- Resource Estimation of Uranium Roll Fronts *M Gorzechowski, B Packer, A Smith and A Marsland-Smith*
- New Approaches to Exploration Targeting in the Alligator Rivers *J Merrillees and J McIntyre*
- A Particular Type of Uranium Mineralisation in the Madaouela Project, Niger *M Pagel, H Sanguinetti and B Tiougoun*
- Areva – Global Leader in the Nuclear Cycle *J Potter*
- Frome Basin Uranium Production *B Rava, A Marsland-Smith, B Packer, A Smith and M Gorzechowski*
- New Guides Led to New Models – A Continuing Return of Exploration Experience, Nunavut, Canada *J Robbins, Y Richards, C Carter, M Behaegel, A Benedicto and P Ledru*
- Early Phase Strategically Targeted Mining-scale Resource Evaluation *G Shirliff, S Kneer, D Guibal and C Murray*

Grade Control and Mining

- Identifying and Addressing the Challenges to *In Situ* Recovery *P L Breuer, L L Kuhar and D J Robinson*

Multi-functional Borehole Logging Tool Based on Pulse-neutron Generator Technology
H Maerten, A Marsland-Smith, B Packer, J Ross, R Garte, H Kalka and J Schubert

Grade Control Model Optimisation at Langer Heinrich, Namibia
D Princep

Production Efficiency and Solution Control in *In Situ* Recovery Mining
A Smith

Cigar Lake Ground Freezing
N Voykin, G Newman and L Newman

Policies, Community Relations and Safety

Who is Ultimately Responsible if the Safe Work System Fails in Uranium Mining?
P Bradley and P Healey

The World Nuclear Power Scene 2015
I Hore-Lacy

Uranium in South Australia – Politics and Reality
R K Johns

Nuclear Engineering and Uranium Mining Fundamentals – Postgraduate Training and Research Initiatives
W Timms, J Fletcher and D Laurence

Update on Uranium Mining and Regulation in Australia's Northern Territory
P Waggitt

Process

Operation of Integrated Column Leach and Solvent Extraction Circuit for the A-Cap Resources Letlhakane Deposit
S Burling, M Fainerman-Melnikova, K Soldenhoff and R J Ring

Innovation – Easier Said Than Done
D Butcher

Improvements in Hydrometallurgical Uranium Circuit Capital and Operating Costs by Water Management and Integration of Utility and Process Energy Targets
L W de Klerk, M P de Klerk and D van der Westhuizen

Process and Mineralogy

Mineralogical and Microanalytical Characterisation of Uranium Mineralisation
N J Cook, C L Ciobanu, K Ehrig, E Macmillan and A Netting

Uranium Mineralogy versus the Recovery of Uranium at Olympic Dam
K Ehrig, V Liebezeit, E Macmillan, C Lower, V S Kamenetsky, N J Cook and C L Ciobanu

Mineralogical and Chemical Aspects of Brannerite Leaching
R Gilligan, A N Nikoloski and A P Deditius

Competing and Exporting Equipment in a World Market
G Jobling

What is Green Uranium?
T Pool and B Jones

Geometallurgy of the Michelin Albitite-Type U Deposit, Labrador, Canada
A Wilde, D Princep and E Becker