



BRISBANE 2002

*Pocket Program sponsored by*

**CYTEC**

# POCKET PROGRAM

6TH INTERNATIONAL ALUMINA  
QUALITY WORKSHOP

8-13 SEPTEMBER 2002

BRISBANE CONVENTION &  
EXHIBITION CENTRE

## MONDAY 9 SEPTEMBER 2002

0700 Registration

Venue: Plaza Terrace Room

Chair: Daniel Thomas

0845 Welcome **Daniel Thomas** Workshop Chair, AOW 2002

0855 Official opening **Hon Stephen Robertson MP** Minister for Natural Resources and Minister for Mines, QLD

0915 Keynote address: **Sam Walsh** Comalco Aluminium Limited, QLD

---

0945 Morning tea – trade exhibition

---

Venue: Plaza Terrace Room

1015 Introduction to technical presentations **Sringeri Chandrashekar** Technical Program Chair, AOW 2002

Chair: Steve Rosenberg

1025 *Effects of morphology on alumina strength and dustiness* **Dag Olsen** Hydro Aluminium Research Centre, Norway

1055 *Hydrate characterisation techniques for probing the link between hydrate properties and SGA quality* **Dean Ilievski** CSIRO Minerals, WA

1125 *Developments in calcination technology for smelter grade alumina* **Benny Raahauge** FFE Minerals, Denmark

1155 *Alumina Technology Roadmap: Update* **Ivan Anich** Comalco Aluminium Limited, QLD

---

1200 Lunch – trade exhibition **Lunch sponsored by Alcan Engineering**

---

2

Venue: Plaza Terrace Room

Chair: Dave Buick

**Session sponsored by Bokela**

1300 *Dry bauxite residue by Hi-Bar Steam Pressure Filtration* **Reinhard Bott** Bokela, Germany

1330 *Improved thickener for red mud* **Guy Peloquin** Alcan International, Canada

1400 *Disposal of hydroxide sludge solids from alumina, smelter and fabrication plant effluents* **Max Rogers** Australian Process Technology, WA

Venue: P3/P4

Chair: Steve Healy

*Mechanistic investigations of gibbsite growth* **Christopher Vernon** CSIRO Minerals, WA

*Identification of hydrate active organics (HAO) present in spent Bayer liquors by state-of-the-art analytical methods* **Frederic Picard** Alcan International, Canada

*New performances in seed filtration by modern disk filters: a feasibility review* **Juergen Hahn** Bokela, Germany

---

1430 Afternoon tea – trade exhibition

---

Venue: Plaza Terrace Room

Chair: Trevor Peters

1500 *Transformation of organics inputs to alumina refineries* **Michael Wilson** University of Technology, NSW

1530 *Precipitation modeling of Worsley Alumina (Western Australia)* **Derek Antrobus** Worsley Alumina, WA

1600 *Hydrate strength – agglomeration, growth and oxalate impacts* **Daniel Thomas** Queensland Alumina Limited

1630 Introduction to Trade Exhibitors & Wrap up

1730 Sessions close

---

1930 City lights workshop dinner – @ Riverside **Dinner sponsored by FFE Minerals & FLSmidth Airtech A/S**

---

3

## TUESDAY 10 SEPTEMBER 2002

0700 Registration

Venue: Plaza Terrace Room

**Session sponsored by Comalco Aluminium Limited**

0800 Introduction **Sringeri Chandrashekar** Technical Program Chair, AQW 2002

0815 Invited address: *Alumina quality: a smelter perspective* **Tony Filmer** Comalco Aluminium Limited, QLD

Chair: Vincenzo Rosino

0845 *Australia leading the light metals age* **Ron Knapp** Australian Aluminium Council, ACT

0915 *Pressure decantation technology: The Kaiser Gramercy experience* **Jean Doucet** Alcan International, Canada

0945 *Closure and rehabilitation of Alcoa's Kwinana refinery residue storage areas* ABC **Rob Robless** Alcoa World Alumina Australia, WA

---

1015 Morning tea – trade exhibition **Morning tea sponsored by Filtration Fabrics & Testori**

---

4

Venue: Plaza Terrace Room

Chair: Aileen O'Connell

1045 *Organics removal from alumina industrial liquor: application of the catalytic wet oxidation process to natural and synthetic Bayer liquors* **Suresh Bhargava** RMIT, VIC

1115 *The Comalco bauxite activation process* **Mike Hollitt** Rio Tinto Technology, QLD

1145 *Latest developments in circulating fluid bed calcination based on operating experience of large calciners* **Hans Werner Schmidt** Lurgi Metallurgie GMBH, Germany

Venue: P3/P4

Chair: Benoit Cristol

**Session sponsored by Hatch**

*Bohemite reversion: predictive test and critical parameters for bauxites from different geographical origins* **Monique-Authier Martin** Alcan International, Canada

*Extraction kinetics of Weipa monohydrate bauxite* **Benyan Pei** Queensland Alumina Limited

*Momentum change in digestion relief headers* **Quoc-Khanh Tran** Hatch, WA

---

1215 Lunch – trade exhibition **Lunch sponsored by Worley Chemicals and Minerals**

---

5

- Venue: Plaza Terrace Room  
Chair: Monique Authier-Martin
- Venue: P3/P4  
Chair: John Farrow
- 1315 *The development of a site wide KPI and information system for Nabalco* **Des O'Sullivan** Nabalco, NT ✓
- 1345 *A generic system of plant impurity balance models* **Geoff Riley** Alcoa World Alumina, WA ✓
- 1415 *The development of real time simulations for operator training at Nabalco* **John Gorst** Nabalco, NT ✓
- ✓ *Manipulating the water balance of vegetation on bauxite residue storage areas* **Judy Eastham** Alcoa World Alumina Australia, WA
- ✓ *Bauxite residue desulphurisation system (BRDS) at Eurallumina* **Franco Leoni & Cesare Penco** Eurallumina, Italy
- ✓ *Solubility concentrations of arsenic, fluorine, phosphorus and vanadium in evaporated Bayer liquor* **Gabriella Sipos** Alcan Gove, NT
- 
- 1445 Afternoon tea – trade exhibition

6

- Venue: Plaza Terrace Room  
Chair: Alan Drury
- Venue: P3/P4  
Chair: Jan Harrison
- 1515 *Supernatant liquor neutralisation with seawater and Bayer tailings mud via deep cone thickener* **Natasha Haggard** Alcan Gove, NT
- 1545 *High titanium bauxites: specific features of mineral composition and behaviour in Bayer cycle (by the example of Indian bauxites)* **Alexander Suss** VAMI Research Institute, Russia
- 1615 *Carbonation of bauxite residue* **David Cooling** Alcoa World Alumina Australia, WA
- ✓ *Understanding growth of DSP in the presence of inorganic ions* **Peter Smith** CSIRO Minerals, WA
- ✓ *Laboratory testing for secondary effects of bayer process additives* **Amanda Taylor** Queensland Alumina Limited
- ✓ *Collaborative research for the international alumina industry* **Tony Bagshaw** AMIRA International, WA
- 
- Venue: Plaza Terrace Room
- 1650 Day 2 wrap-up and Technical tour briefing **Alan Kane** Queensland Alumina Limited
- 
- 1745 Happy hour – trade exhibition **Happy hour sponsored by Madison Filter**

7

## WEDNESDAY 11 SEPTEMBER 2002

### TECHNICAL TOUR

- CAR, QAL Refinery and BSL Smelter tour
- Gladstone Industry and Environment tour

Tour 2 - Benny Pei  
5.30am

## THURSDAY 12 SEPTEMBER 2002

- 0800 Registration  
Venue: Plaza Terrace Room
- 0830 Introduction **Ian Harrison** Alcoa World Alumina Australia, WA
- 0845 Invited address. *The 'P' in the safety equation: How to focus people attitudes positively in a technical operating environment*  
**Ron Yung** Prospect Consulting Group Pty Ltd, QLD  
Chair: Rolf Arpe
- 0930 *Caustic embrittlement in the Bayer industry* **Gerald Roach** Alcoa World Alumina, WA
- 1000 *Hydrodynamics of dense hydrate suspensions in precipitators* **Valerie Esquerre** Aluminium Pechiney, France
- 
- 1030 Morning tea - trade exhibition

Venue: Plaza Terrace Room  
Chair: Neil Davey  
**Session sponsored by FFE Minerals & FLSmidth Airtech A/S**

- 1100 *Environmental compliance of stationary calciners for alumina: now and in the future* **Henrik Vittrup Pedersen** FLSmidth Airtech A/S, Denmark
- 1130 *The MOELLER Direct Pot Feeding System for a smooth and constant pneumatic transport of secondary alumina to the electrolyte cells* **Carsten Duwe & Timo Letz** Moeller Materials Handling GmbH, Germany
- 1200 *The application of a planned customer-supplier alliance at Alcoa's Kwinana Refinery: implications for productivity, profitability and OH&S* **Terry Vallow** Madison Filter, WA

8

Venue: P3/P4  
Chair: Arvind Bhasin  
**Session sponsored by Albany International**

Alumina liquor clarification: filter media classification and development using in-line, pilot scale, portable filter testing equipment **Michael Neate** Albany International, NSW

Capacity of clay seals to retain residue leachate **Geoffrey Thomas** Alcoa World Alumina, WA

Falling film technology for liquor concentration, experiences from a recent start-up **Stuart Ainscow** Messo, Switzerland

- 
- 1230 Lunch - trade exhibition **Lunch sponsored by Ondeo Nalco**

9

Venue: P2 Chair: Warren Staker	Venue: P3/P4 Chair: Lesley Dewhurst
1330 <i>Project environmental risk management</i> <b>Margot Jupp</b> Alcoa World Alumina, WA	<i>Maintaining an oxalate free precipitation circuit at Aughinish Alumina</i> <b>Aileen O'Connell</b> Aughinish Alumina, Ireland
1400 <i>Revegetation of Bayer process residue disposal areas in CVG-Bauxilum</i> <b>Vladimir Hartmann</b> CVG-Bauxilum, Venezuela	<i>Upgrading of a conventional precipitation layout in Eurallumina refinery</i> <b>Alfredo Teodosi</b> Eurallumina, Italy
1430 <i>The use of bauxite residue to control diffuse phosphorus pollution in Western Australia: a win-win-win outcome</i> <b>Rob Summers</b> Department of Agriculture, WA	<i>Fluoride chemistry in the bayer process</i> <b>Darrel Wilson</b> Worsley Alumina, WA
<hr/>	
1500 Afternoon tea – trade exhibition	

10

Venue: P2 Chair: Art Bursle	Venue: P3/P4 Chair: Lyndon Armstrong
1545 <i>Improving red mud flocculation at Aughinish Alumina Limited</i> <b>Guy Peloquin</b> Alcan International, Canada	<i>Odour emission reduction case study at Alcoa's Wagerup Alumina Refinery</i> <b>Stephen Cox</b> Alcoa World Alumina, WA
1615 <i>Effects of flocculation conditions on the dewaterability of hematite and red mud suspensions</i> <b>Janine Hulston</b> University of Melbourne, VIC	<i>Odour destruction for digestion vent gases</i> <b>Gerry Graham</b> Queensland Alumina Limited
1645 <i>Adsorption of polyacrylates on hematite: in situ examination by FTIR-ATR at high and low pH</i> <b>Phillip Fawell</b> AJ Parker CRC For Hydrometallurgy/CSIRO Minerals, WA	<i>Assessing odour impacts of an alumina refinery by source measurement, dispersion modelling and field odour surveying</i> <b>Patrick Coffey</b> Alcoa World Alumina, WA
1715 Day 4 Wrap up by Session Chair	Day 4 Wrap up by Session Chair
<hr/>	
1745 Sessions close	
<hr/>	
1930 Dreamtime Gala Dinner – Plaza Terrace Room <b>Dinner sponsored by Comalco Aluminium Limited</b>	

11

## FRIDAY 13 SEPTEMBER 2002

0800 Registration

Venue: Plaza Terrace Room

**Session sponsored by Queensland Alumina Limited**

0830 Introduction **Paul Potter** Worsley Alumina, WA

0840 Invited address: **Barry Carbon** Ministry for the Environment, New Zealand

Chair: Gerald Roach

0920 *New strategies for the management of bauxite refinery residues (red mud)* **David McConchie** Virotec International  
Geochemical Research Group, NSW

0950 *Old-fashioned process equipment in new clothes: filter revamping in running brownfield plants* **Thomas Langeloh** Bokela,  
Germany

---

1020 Morning tea – trade exhibition

---

12

Venue: Plaza Terrace Room

Chair: Jacques Mordini

1050 *Effect of bauxite and digestion conditions on iron in SGA* **Gerald Roach** Alcoa World Alumina, WA

1120 *The application of Cerafil® ceramic filter elements for particulate removal on a liquor burning application for Worsley Alumina Pty Ltd* **Peter Prinsloo** Worsley Alumina, WA

1150 *A new membrane process to purify Bayer liquors* **Lyndon Armstrong** Queensland Alumina Limited

1220 Official closing **Richard Yank** Queensland Alumina Limited Chairman (Designate)

1230 Wrap up **Daniel Thomas** Workshop Chair, AQW 2002

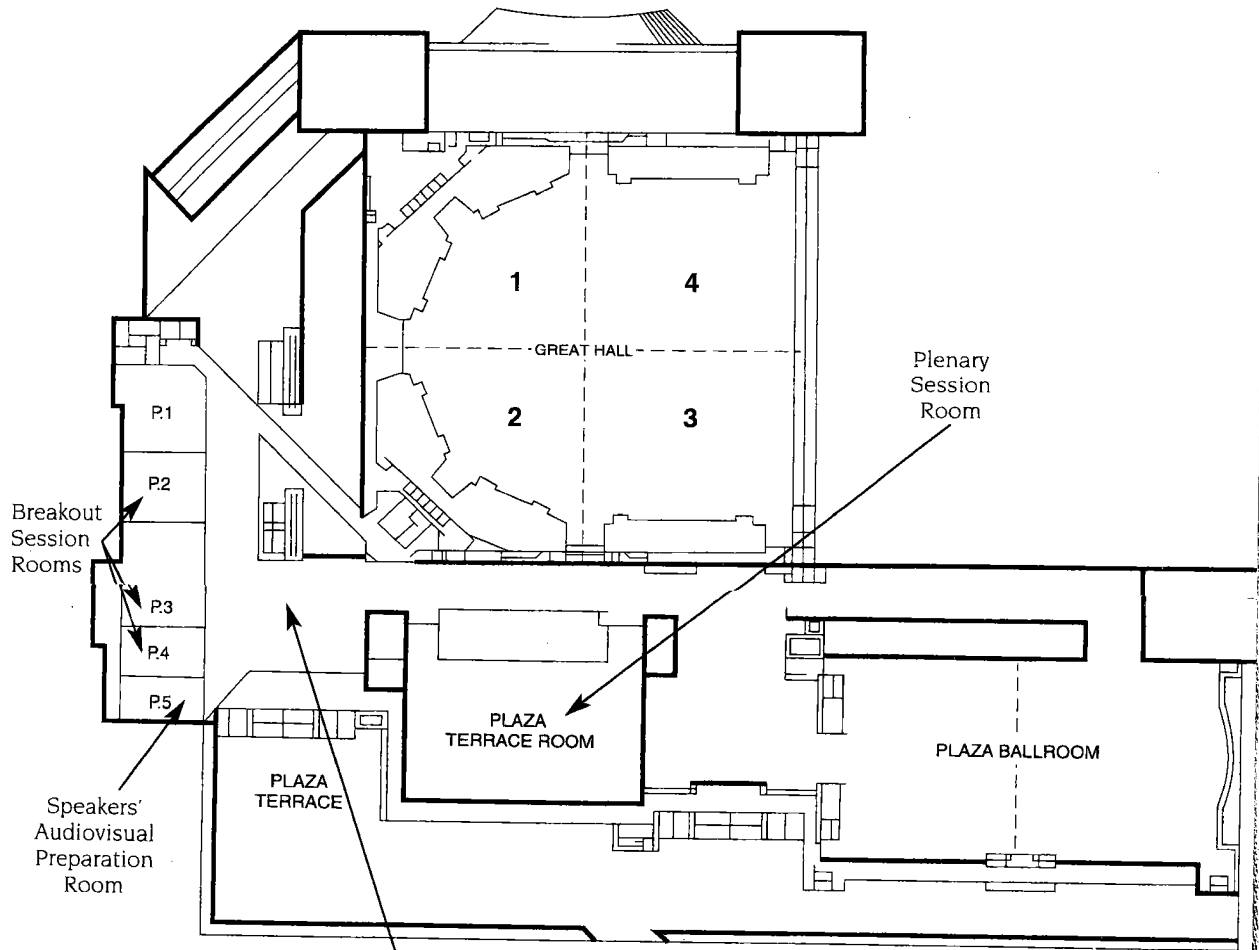
---

1245 Lunch – trade exhibition **Lunch sponsored by Bechtel**

---

13

# BCEC PLAZA LEVEL FLOOR PLAN



Trade Exhibition  
*Australia: A Lead Metals future??*  
*(Report 2-3 yrs)*