



The Australian  
Power Institute

# API PowerChem 2016

Conference, Exhibition and Training Courses

Novotel Wollongong Northbeach, NSW  
Sunday 22 to Thursday 26 May 2016

## Maintaining chemistry equilibrium in a changing power industry



[www.etches.com/ehome/powerchem2016](http://www.etches.com/ehome/powerchem2016)

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Photos courtesy of the Novotel Wollongong Northbeach

**Golf or Cycling:** Join your fellow delegates for a social round of golf at a local course. Specific location and tee off times will be provided closer to the Sunday 22nd May Conference. Green fees will apply. OR Join your fellow delegates for a social cycle around the local area. A limited number of bicycles can be hired from the Hotel. (Hire costs at own expense.)

## Sunday 22nd May

**Time:** 6:00 pm – 8:30 pm

**Location:** The Deck

**Dress code:** Casual

**Cost:** Inclusive for conference delegates.

Additional guests: \$100.00

Proudly Sponsored by: **Purolite**



## Welcome Reception

*Get settled in for a great couple of days at the Conference at a Drinks and Finger food Welcome Reception hosted by Purolite on Sunday 22nd May.*

*Held on the newly renovated rooftop venue, The Deck, giving you a chance to take in the stunning ocean views looking over North Wollongong Beach, come and sample some of the Hotel's great cuisine and catch up with friends and colleagues.*

**Starting at 6.00pm, food will be served through to 8.30pm.**

**The team at Purolite are looking forward to seeing you there.**

## Day 1 Monday 23rd

<b>8:00</b>	<b>Registration</b>
<b>SESSION 1</b>	
<b>9:00</b>	<b>Welcome and opening remarks</b> Mike Griffin, Chief Executive Officer The Australian Power Institute
<b>9:15</b>	<b>Keynote Speaker: Fossil power plant corrosion control 2016: amine applications</b> Mike Caravaggio, Program Manager: Boiler and Turbine Steam and Cycle Chemistry Electric Power Research Institute (EPRI), USA
<b>9:50</b>	<b>Deposition and internal oxide growth in supercritical boilers</b> Andrew Howell, Senior System Chemist Xcel Energy, USA
<b>10:15</b>	<b>Morning Tea</b>
<b>10:45</b>	<b>Corrosion monitoring using an on-line analyser in conventional fossil fuel power plants or HRSGs</b> Tomi Maatta, Product Manager Applikon MEP Instruments
<b>11:10</b>	<b>Use of data historian software and LIMS to monitor power station chemistry</b> Kathy Miller, Chemical Services Supervisor Muja Power Station, Synergy
<b>11:35</b>	<b>Challenges and trends in chloride/sulfate detection in power plants</b> Kirk Buecher, Director Power Solutions METTLER TOLEDO
<b>12:00</b>	<b>Questions</b>
<b>12:15</b>	<b>Lunch - Exhibition area</b> <i>Lunch is sponsored by:</i>



<b>SESSION 2</b>	
<b>1:15</b>	<b>Keynote Speaker: International experiences with HRSG cycle chemistry</b> Dr André Zeijseink, Director, AZES, The Netherlands
<b>1:50</b>	<b>An assessment of condensate polishing plant performance by simulation of a condenser tube leak</b> David Plozza, Chemical & Environment Officer GDF-Suez Loy Yang B Power Station
<b>2:15</b>	<b>The importance of anion resin kinetics in condensate polishing</b> Bill Carlin, Senior Technical Service Engineer Dow Water & Process Solutions
<b>2:40</b>	<b>Questions</b>
<b>2:50</b>	<b>Afternoon Tea - Exhibition area</b>
<b>SESSION 3</b>	
<b>3:10</b>	<b>Condensate polishing – Ammonium form operation</b> Derrick Lau, Technical Marketing Manager LANXESS, Singapore
<b>3:35</b>	<b>Conventional resin cation exchangers versus EDI for CACE measurement in power plants – Feasibility and practical field results</b> Lukas Staub, Group SCO SWAN Analytische Instrumente AG
<b>4:00</b>	<b>Operating condensate polishers in ammonia cycle in a high pH environment - our struggle</b> Samantha Schulz, Technical Officer – Scientific AGL Loy Yang
<b>4.25</b>	<b>Detecting vacuum leaks and water leakages in the condenser using modern tracer gas techniques - "Is shaving cream better than SF<sub>6</sub>?"</b> Stephen Butcher, Business Development Manager Conco Systems
<b>4:50</b>	<b>Questions</b>
<b>5:00</b>	<b>Close of day one</b>

## Monday 23rd: Conference Dinner

The API PowerChem Conference Dinner will be held in the Norfolk Room of the Novotel Wollongong Northbeach

**Time:** 7:00 pm – 11:00 pm **Dress code:** Smart Casual

**Cost:** Inclusive for conference delegates, additional guests: \$140.00



## Day 2 Tuesday 24th

PANEL DISCUSSION & OPEN FORUM	
9:15	<b>Cycle Chemistry</b>
10:15	<b>Morning Tea - Exhibition area</b>
SESSION 4	
10:45	<b>Keynote Speaker: Risk management of Legionnaires' disease hazards at power stations</b> Clive Broadbent, Director Clive Broadbent & Associates Pty Ltd
11:20	<b>Comparative assessment of microbiological control programs for open cooling water systems</b> Frank Gall, Industry Technical Consultant, Nalco - An Ecolab Company Kathy Miller, Chemical Services Supervisor, Muja Power Station, Synergy
11:45	<b>Potable water management at power station sites</b> Dr Michael Ten Lohuis, Manager - Queensland Water Treatment Services
12:10	<b>Questions</b>
12:20	<b>Lunch - Exhibition area</b>
SESSION 5	
1:20	<b>Investigating microbial induced corrosion (MIC) in an auxiliary cooling water system</b> Bruce Leitch, Chemist - Water and Chemistry Team AGL Macquarie
1:45	<b>Assessing cooling water options using a pilot cooling tower cycle study</b> Sebastian Knowles, Production Chemist EnergyAustralia NSW
2:10	<b>Simple, low installed cost filtration of cooling tower makeup water</b> Peter Ellersdorfer, Process Engineer VWT Australia, Projects
2:35	<b>Questions</b>
2:45	<b>Afternoon Tea - Exhibition area</b>
3:10	<b>Delaying the inevitable – understanding scale inhibition</b> John O'Rourke, Director Water Treatment Services
3:35	<b>Performance analysis and in-situ results of commercial azoles applied to cooling systems</b> Justin West, Monitoring Solutions Leader GE Water
4:00	<b>Questions</b>
4:10	<b>The Latest IAPWS &amp; AUSAPWS Updates</b> Gary Joy, Chair of AUSAPWS
5:10	<b>Close of day two</b>

## Day 3 Wednesday 25th

SESSION 6	
9:00	<b>Cost effective brine volume reduction using brine squeezer</b> John Flynn, National Business Development Manager Osmoflo
9:25	<b>Water recovery and desalination using membrane distillation with waste thermal energy</b> Noel Dow, Research Officer Institute for Sustainability and Innovation, Victoria University
9:50	<b>New ion exchange resin technology for reduction of regeneration cost for make-up demineralization plants</b> James Rosie, Business Manager Australasia Purolite
10:15	<b>Morning Tea - Exhibition area</b>
10:40	<b>Condensate polisher ion exchange resin failure: identification, tools and solutions</b> Dr Jason Dwyer, Senior Process Engineer IonX Global
11:05	<b>Low cost health and safety enhancements for power plant water systems</b> Andrew Layson, Engineering Manager VWT Australia, Projects
11:30	<b>Questions</b>
PANEL DISCUSSION & OPEN FORUM	
11:40	<b>Water</b>
12:25	<b>Closing remarks</b> Mike Griffin, Chief Executive Officer The Australian Power Institute
12:40	<b>Conference closes</b>
12:40	<b>Lunch - Nouveau Restaurant</b>

### TECHNICAL TOUR.... 1.30 - 5.30pm

**For delegates not participating in the training component, join the Technical Tour on Wednesday afternoon to the Tallawarra Power Station and Port Kembla Steelworks...**

Tallawarra Power Station is a state-of-the-art Alstom KA26 single shaft 420MW power station. The plant tour will include new Wet racks and on-line monitoring instrumentation, a reverse osmosis and electrodeionisation Water Treatment Plant, and a salt water Cooling Water system that utilises thermal shock for fouling control.

Port Kembla Steelworks is an integrated steelmaking operation with an annual production capacity of approximately 2.6 million tonnes of crude steel. Port Kembla Steelworks manufactures slab, hot rolled coil and plate products and is the largest manufacturer and supplier of flat steel in Australia.

(Program subject to change)



## Training Courses: Wednesday 25th (2:00 pm - 5:30 pm) & Thursday 26th (9:00 am - 5:00 pm)

Training is provided in small groups to ensure maximum delegate participation and value. **Courses are only run if minimum numbers are met.**

### T1 Assessing and Optimizing Steam/Water Cycle Corrosion Control in Power Plant Applications

Mike Caravaggio, Program Manager: Boiler and Turbine Steam and Cycle Chemistry

Electric Power Research Institute (EPRI), USA

Topics to be included:

- fundamentals of iron and copper metal oxide formation and implications for corrosion control under power plant conditions
- monitoring and controlling pH, dissolved oxygen and chemical additions to minimize corrosion rates
- designing and optimizing corrosion product monitoring studies
- incorporating inspection results into the plant corrosion control program
- case studies in corrosion control improvements

### T2 Power Cycle Instrumentation

This training course will be presented by a number of speakers and is being coordinated by SWAN Analytical Instruments.

Topics to be included:

- On-line analytical measurements in power generation
- Cooling towers monitoring
- Water treatment instrumentation
- Sample conditioning arrays including SWAS (containerised steam water analysis systems)
- Hydrogen monitoring for corrosion activity
- New products

**UNFORTUNATELY THIS TRAINING SESSION HAS BEEN CANCELLED AS WE HAVE NOT REACHED THE MINIMUM NUMBER OF PARTICIPANTS REQUIRED**

### T3 Ion Exchange and Reverse Osmosis

This training course will be presented by a number of speakers and is being coordinated by Derrick Lau, LANXESS and Steve Brown, Vitachem.

Water treatment in today's modern world requires highly technical, high performance separation products to achieve increasingly stringent treated water qualities, or to provide the lowest cost of water production. However, more than one separation technology is often applied to achieve the demanded water quality. In this course, we will discuss the basic theory of ion exchange and reverse osmosis, operation of make-up water and condensate polishing systems and a comprehensive design software.

**Sponsorship packages still available...**

**Visit the conference website for details:**

**[www.etches.com/ehome/powerchem2016](http://www.etches.com/ehome/powerchem2016)**

GOLD



SILVER



### HOW TO GET TO THE VENUE:

- The Novotel Wollongong Northbeach is 85 km from Sydney's CBD. The journey will take approximately 1 1/2 hours by car.
- Trains go hourly from Sydney's Central station to North Wollongong Station, or change at Wolli Creek if boarding a train at Sydney's Airport.
- A complimentary conference bus will leave the Sydney Domestic Airport at 3.30pm on Sunday, and return at 2pm on Wednesday and 5.30pm on Thursday (prebooking required)
- Commercial shuttle services are also available including:  
South Coast Scenic Tours: [info@scstours.com.au](mailto:info@scstours.com.au) / [www.scstours.com.au](http://www.scstours.com.au)  
Leisure Coast Limousine: [Serviceleisurecoastlimo@bigpond.com.au](mailto:Serviceleisurecoastlimo@bigpond.com.au) / [www.leisurecoastlimousine.com.au](http://www.leisurecoastlimousine.com.au)

**Register now... [www.etches.com/powerchem2016](http://www.etches.com/powerchem2016)**

### Conditions and Cancellations:

If you are unable to attend, a substitute delegate is welcome at no extra charge. Where no substitute is available, a fee of \$165 (incl GST) will be deducted from your registration fee for cancellations received by The Meetings Manager in writing at least 28 days prior to the event. Thereafter no refunds will be made. **Additional Terms & Conditions can be found at [tmm.com.au](http://tmm.com.au)**

### Our Privacy Policy:

By registering for this conference, relevant details will be held on a database by API and The Meetings Manager and provided to the Conference 'Gold' Sponsor. An attendee list will be provided to all participants (name, position and organisation only). If you do not wish your information to be used in this manner, please advise The Meetings Manager.

Title \_\_\_\_\_ First name \_\_\_\_\_ Last name \_\_\_\_\_

Preferred name for name badge \_\_\_\_\_

Position \_\_\_\_\_ Organisation \_\_\_\_\_

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Telephone ( ) \_\_\_\_\_ Mobile \_\_\_\_\_ Email \_\_\_\_\_

## Registration fees (GST Inclusive)

	API Members Earlybird (to 6 April)	API Members Full Price	Non Member Earlybird (to 6 April)	Non Members Full Price
Conference Only (Mon, Tues, Wed am)	\$2310^ <input type="checkbox"/>	\$2625^ <input type="checkbox"/>	\$2625^ <input type="checkbox"/>	\$2940^ <input type="checkbox"/>
Conference and Training (Mon - Thurs)	\$3192* <input type="checkbox"/>	\$3696* <input type="checkbox"/>	\$3696* <input type="checkbox"/>	\$4200* <input type="checkbox"/>
Training Only (Wed pm - Thurs)	\$1680* <input type="checkbox"/>	\$1995* <input type="checkbox"/>	\$1995* <input type="checkbox"/>	\$2310* <input type="checkbox"/>

Conference registration fee includes Welcome Reception (Sun), Conference Dinner (Mon), morning/afternoon teas, lunches, and web presentation access.

^Please indicate if you will be participating in the Technical Tour on Wednesday afternoon Yes ☐ No ☐

\*Please tick which **Training Course** you will be attending (if applicable to your registration type) T1 ☐ T3 ☐

A shuttle bus will operate between Sydney Airport and the Venue.  
Please tick if you are likely to want to use it: 3.30pm Sunday from Sydney ☐ 2pm Wednesday from Venue ☐ 5.30pm Thursday from Venue ☐

**Golf / Cycling** (please tick box if you wish to join in a social activity on Sunday 22 May at your own expense - details to follow) Golf (green fees) ☐ Cycling (own expense) ☐

**Dietary or Mobility Requirements:** (please advise if you have any special needs)

**Social functions** (Welcome Reception & Conference Dinner inclusive for conference delegates. Guest are welcome at an additional charge.)

Welcome Reception Attending ☐ Not attending ☐ Guest @ \$100 per person (indicate no.) ☐ Guest Name/s \_\_\_\_\_

Conference Dinner Attending ☐ Not attending ☐ Guest @ \$140 per person (indicate no.) ☐ Guest Name/s \_\_\_\_\_

**Accommodation: Novotel Wollongong Northbeach:** 2-14 Cliff Road, North Wollongong, NSW (rates are per room per night)

For more information please go to <https://www.etches.com/ehome/powerchem2016/venue/>

Residential Room \$189.00 ☐ Ocean View Room \$209.00 ☐ Breakfast \$25 ☐ (per person, per night)

Arriving \_\_\_\_\_ / \_\_\_\_\_ Departing \_\_\_\_\_ / \_\_\_\_\_ Suites available on request (subject to availability). Contact The Meetings Manager for details.

Please provide credit card details to guarantee your booking. You will be responsible for paying your account directly to the hotel on your departure. **Cancellation of your accommodation within 14 days of your arrival date will incur the full cost of your accommodation booking.**

**Payment Details:** \*By registering for the API PowerChem conference, you agree with the Terms & Conditions located at [www.tmm.com.au](http://www.tmm.com.au)

A cheque payable to The Meetings Manager Pty Ltd will be posted ☐ CCV \_\_\_\_\_

Please invoice me, I would like to pay by EFT ☐

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