

# THE AUSTRALIAN POWER INSTITUTE

## A SPECIAL THANK YOU

API extends a sincere thank you to Colin Gwynne and his organizing committee who arranged this exciting technical program as well as provided great opportunities to network with like-minded industry colleagues. API also wants to thank the sponsors and exhibitors of this conference for their generous support. Finally, a genuine appreciation and thank you to the Meetings Manager conference organizing team for pulling everything together and making the 2014 PowerChem such a success.



### 2014 Conference Committee

Kirk McNaughton, Colin Gwynne, Des McInnes, Shane Carruthers & Alec Liddell (Not pictured)



## 2014 POWER STATION CHEMISTRY CONFERENCE

API PowerChem Conference is the biennial event for power station chemists and their suppliers, which API is proud to be able to offer. The 2014 program began on the evening of Sunday 25 May and concluded on Wednesday 28 May at the Novotel Twin Waters on the Sunshine Coast.



This year's events were well supported by experts and eminent speakers from around Australia and also the world. The conference was composed of a diverse range of key speakers, exhibitors, and three days of presentations.

The primary aim of the conference was to provide up-to-date professional development for those working in the industry as well as those associated with it. The format of the conference allowed close interaction between speakers, presenters, exhibitors and delegates, with a number of training courses also available.

The conference dinner, sponsored by Veolia Water Solutions & Technologies, allowed for an enjoyable networking opportunity and provided a platform for international industry professionals to come together and share knowledge.

As the international energy sector is currently undergoing a period of high technological development and change, the continuing demand for technical expertise is crucial for developing and making a successful transition.



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*"This conference is the only forum of its kind in the PowerChem industry and therefore is the perfect opportunity to network by renewing contacts and building new relationships with nationwide and international industry colleagues." – Colin Gwynne (Aurecon)*

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## TOPICS DISCUSSED

A diverse range of topics were presented including:

- Reevaluation of amines for cycle chemistry
- Examples of contamination that can impact on specific parts of the cycle due to repeat events or mere complacency: These highlight the requirement for chemical expertise to diagnose and apply corrective actions.

Other topics included the impact of changes in legislation for recycled water, and the need for vigilance in managing and recording system changes and modifications, especially for the benefit of those people that follow us.



## CONFERENCE OUTCOMES & FINDINGS

Developments were presented in smart sensor technologies and also in analytical procedures allowing greater resolution and understanding of existing chemical phenomenon.

Professionals improved their understanding of the application of geothermal issues, specifically in aboveground traditional generation equipment, with contaminants such as antimony and silica.



Participants looked at how the industry demand for plant fuelled by coal and gas varies in different markets, and how this has resulted in greater focus in operational flexibility and plant storage.

The conference presented further clarification and adoption of specific technologies for water treatment and associated processes, such as:

- Ion exchange condensate polishing
- Ultra-filtration and Reverse Osmosis
- The management of aging bulk chemical storage systems to comply with changing laws and to improve safety
- Selenium removal

The conference was also presented with considerations for the selection of suitable condenser tube material as a follow up to material selections for other heat exchangers in the previous conference.

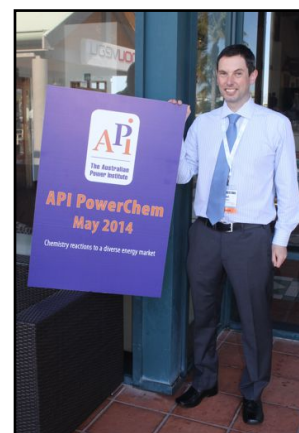
## INDUSTRY CHALLENGES

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*One of the many challenges the power chemical industry faces today is the high demand for technical professionals while also taking into consideration the loss of talent and understanding that current professionals tend to face over the years if not given the opportunities for updated training.*

*– Paul McCann (E.ON New Build Technology Limited, UK)*

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## MESSAGE FROM OVERSEAS

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*“Some of the challenges facing power station chemists in the U.S which Australian Chemists will also need to address include:*

- *The reliability and protection of assets*
- *The impact of cycling on assets*
- *The importance of protecting assets put into storage*
- *Increasing flexible operations and mitigation of damage to chemistry offline.”*

*– Stephen Shulder (EPRI, USA)*

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## CONFERENCE FEEDBACK RESULTS

93.4% of Participants rated the overall experience of the conference “Excellent/Good”.

97.9% of participants said that they would be likely to recommend this program to colleagues.

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*“API PowerChem provides invaluable lesson's learnt opportunities to chemical staff no matter their level of experience within the power industry.”*

*“The conference was very well organised and provided a good venue to talk with industry colleagues about their experiences and learn about their innovations that may be applicable to our utility.”*

*“An essential tool in the on-going development of power station chemistry staff. An important opportunity for power station chemists to benchmark their knowledge and to review and discuss current site chemical issues.”*

*A great way to meet like-minded people within the industry and share knowledge and experiences. A good balance between new and existing chemical topics with a real feeling of being at the forefront of the industry with new research presented. Highly enjoyable and a valuable training module*

*This is the best venue for Power station chemists to meet on a professional level to discuss the technical issues they face on a day-to-day basis.*

*API provides the guidance required to ensure best practices for Chemistry control for power generation. In addition, one has the benefit of finding out the latest technologies available to help ensure best chemistry practice.*

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### CONTACT US

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