

INTERNATIONAL  
ASSOCIATION  
FOR THE PROPERTIES  
OF WATER & STEAM

**IAPWS**



**NEW ZEALAND**  
*Association for the Properties of*  
**WATER & STEAM**

# SYMPOSIUM 2024

27-29 August 2024, Crowne Plaza Queenstown



Production and use in New Zealand of steam and water/steam chemistry related issues from fossil, geothermal, biomass and electrical boiler systems.

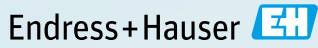
11:00 am - 5:30 pm	Tuesday 27th	Half day (including evening networking drinks)
8:30 am - 6:00 pm	Wednesday 28th	Full day (including a symposium dinner)
9:00 am - 1:30 pm	Thursday 29th	Half day

Registration open from 11:00am on Tuesday 27th at Crowne Plaza, Queenstown

**Information and Registration online at:**

[na.eventscloud.com/ereg/newreg.php?eventid=793510&](http://na.eventscloud.com/ereg/newreg.php?eventid=793510&)

NZAPWS 2024 IS PROUDLY SPONSORED BY:





**The New Zealand Association for the Properties of Water and Steam (NZAPWS) 2024 Symposium is a three day event following on from the highly successful 2022 meeting held in Rotorua.**

Half days on the Tuesday and Thursday are provided to facilitate travel to and from the event and to gently encourage full attendance across the whole program.

The Symposium consists of presentations and discussions relating to the production and use in New Zealand of steam and water/steam chemistry related issues from fossil, geothermal, biomass and electrical boiler systems from users, suppliers, researchers and others involved in industry with both a wide selection of national and international presenters, experts and sponsors. Networking and informal discussion time is also included to further facilitate experience and knowledge sharing as well as the opportunity to visit sponsor displays.

THE SYMPOSIUM IS SUPPORTED BY THE INTERNATIONAL ASSOCIATION FOR THE PROPERTIES OF WATER AND STEAM  
[www.iapws.org](http://www.iapws.org)

## WHO SHOULD ATTEND?

Engineers, scientists, operators, vendors and managers who work with, manage, design or maintain power, geothermal and industrial steam plants.

## KEY INTERNATIONAL AND DOMESTIC PRESENTERS INCLUDE:

**Monika Nielsen**, Denmark, Chairperson Nordic IAPWS, Incoming IAPWS President, Orsted Lead Chemistry Specialist - Chemistry, Bioenergy

**David Addison**, New Zealand, Chairperson NZAPWS, IAPWS Power Cycle Chemistry Chairperson, Principal Consultant Thermal Chemistry Limited

**Livio Compagnino**, Switzerland, Swan Analytical Instruments, Technical Support Manager

**Scott Bryan**, USA, Product Manager - Water Treatment & Coating Additives, Cortect

**Robert Barrack**, New Zealand, Technical Director, Process Systems, Aurecon

**Scott Waddell**, New Zealand, Project Manager, Matara Valley Milk

**Dave Rodman**, Australia, Snr Industry Technical Consultant, Nalco

**Anita Zunker**, New Zealand, Engineering Manager PEI Group

**Justin West**, Australia, Principal Consultant, Industrial Water Solutions, Australia

**Matt Harris**, Australia, Principal Scientist, AGL,

**Luc Turner**, Australia, Solutions Manager, Solutions, Endress & Hauser

For further information contact the NZAPWS Chairperson, David Addison.

Email: [david.addison@thermalchemistry.com](mailto:david.addison@thermalchemistry.com) Phone: **+64 21 843 762** with any questions.

# NZAPWS SYMPOSIUM 2024 PROGRAM

## DAY 1 TUESDAY 27<sup>TH</sup> AUGUST

11:00 - 12:00	<b>REGISTRATION OPEN</b>	MECCA
12:00 - 13:00	<b>LUNCH - SPONSORED BY PUROLITE</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
13:00 - 13:20	<b>Intro to NZAPWS 2024 Symposium</b>	David Addison NZAPWS Chairperson
13:20 - 14:00	<b>Orsted's electrode boiler experiences and water/steam issues - steam and hot water</b>	Monika Nielsen Orsted/Nordic IAPWS, Lead Chemistry Specialist - Chemistry, Bioenergy
14:00 - 14:25	<b>Accelerating NZ's energy transition with demand flexibility</b>	Daniel Pereira and Jade Jackson Talley's Group Limited, Energy Projects Engineer and Simply Energy, Head of Energy Transition
14:25 - 14:50	<b>New Zealand's first high pressure electrode boiler installation</b>	Scott Waddell Mataura Valley Milk, Project Manager
14:50 - 15:00	<b>Sponsor presentation - Energy Plant Solutions</b>	 ENERGY PLANT SOLUTIONS
15:00 - 15:10	<b>Sponsor presentation - Cortec (AS Harrison)</b>	 CORTEC CORPORATION Pioneering the world's water technologies
15:10 - 15:45	<b>AFTERNOON TEA - SPONSORED BY AURECON</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
15:45 - 16:10	<b>Critical Considerations when purchasing a demineralisation plant</b>	Judy Weir Thermal Chemistry Limited, Chemistry Consultant
16:10 - 16:35	<b>Introduction of ammonia into dairy plant steam treatment via IAPWS Technical Guidance Documents</b>	Thomas Fillary Visentia, Chemical & Process Engineer
16:35 - 17:00	<b>VPCI® technology compared to other preservation options</b>	Scott Bryan Cortec, Product Manager - Water Treatment & Coating Additives
17:00 - 17:25	<b>Battery storage and electrode boiler integration</b>	Brendon Stephenson Energy Plant Solutions, Director
17:25 - 17:30	<b>Wrap up of Day 1</b>	David Addison NZAPWS Chairperson
17:30 - 19:30	<b>NZAPWS WELCOME RECEPTION - SPONSORED BY UTREX</b> Atrium at Crowne Plaza	



# NZAPWS SYMPOSIUM 2024 PROGRAM

## DAY 2 WEDNESDAY 28<sup>TH</sup> AUGUST

8:30	-	8:35	<b>Welcome to Day 2</b>	David Addison NZAPWS Chairperson
8:35	-	9:00	<b>Industrial Plants - Non IAPWS chemistry operation vs how it should be</b>	Justin West Industrial Water Solutions, Principal Consultant
9:00	-	9:25	<b>The Decarb Toolkit for NZ Industry: How do the technology options stack up in NZ?</b>	Robert Barrack Aurecon, Technical Director, Process Systems
9:25	-	9:50	<b>Industrial plant water/steam analysis considerations</b>	Livio Compagnino Swan Instruments, Technical Support Manager
9:50	-	10:15	<b>Orsted's biomass boiler plants overview - wood pellets, wood strips, straw plants</b>	Monika Nielsen Orsted/Nordic IAPWS, Lead Chemistry Specialist - Chemistry, Bioenergy
10:15	-	10:25	<b>Sponsor presentation - Veolia</b>	
10:25	-	11:00	<b>MORNING TEA - SPONSORED BY ENDRESS &amp; HAUSER</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
11:00	-	11:25	<b>Mitigating technical risk on a New Zealand-first Electrode Boiler</b>	Miles Sinclair Aurecon, Technical Director, Process Systems
11:25	-	11:50	<b>Communicating Water/Steam issues to engineering management</b>	Bob Weir Pinpoint Business, General Manager
11:50	-	12:15	<b>Open technical discussion and questions</b>	
12:15	-	12:25	<b>Sponsor presentation - Windsor Energy</b>	
12:25	-	12:35	<b>Sponsor presentation - Swan Analytical Instruments</b>	
12:35	-	13:25	<b>LUNCH - SPONSORED BY PUROLITE</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
13:25	-	13:50	<b>Boiler Feedwater with Ammonia Treatment Project Overview - team work required for success</b>	Paul McDonald Fonterra, Clandeboye, Utilities Manager
13:50	-	14:15	<b>Efficient, compact SWAS solutions for industrial boiler applications</b>	Luc Turner Endress & Hauser, Solutions Manager, Solutions
14:15	-	14:40	<b>Impact of FFS on condensation rate in evaporator tubes</b>	Dave Rodman Nalco, Snr Industry Technical Consultant
14:40	-	15:05	<b>Flexible Renewable Utility Systems: intergrating biomass and electrode boiler in industry</b>	Dr Martin Atkins and Matthew Taylor Waikato University, Senior Lecture in Chemical and Process Engineering PHD student
15:05	-	15:15	<b>Sponsor presentation - Visentia (Waltron)</b>	
15:15	-	15:25	<b>Sponsor presentation - EMC Industrial Group</b>	
15:25	-	16:00	<b>AFTERNOON TEA - SPONSORED BY SWAN</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
16:00	-	16:25	<b>Flu gas condensation with carbon capture plants</b>	Monika Nielsen Orsted/Nordic IAPWS, Lead Chemistry Specialist - Chemistry, Bioenergy
16:25	-	16:50	<b>Computer modelling for enhancing steam plant Reliability and efficiency</b>	Paul Bosauder Sequence, Technical Director
16:50	-	17:15	<b>Latest IAPWS findings and research on electrode boiler corrosion and hydrogen issues</b>	David Addison Thermal Chemistry Limited, Principal Consultant
17:15	-	17:40	<b>Boiler Carryover - identification, consequences and management</b>	Anita Zunker PEI, Engineering Manager
17:40	-	17:50	<b>Wrap up of Day 2</b>	David Addison NZAPWS Chairperson
19:00	-	22:30	<b>NZAPWS Dinner - SPONSORED BY ECOLAB</b> 360 Restaurant at Crowne Plaza	

# NZAPWS SYMPOSIUM 2024 PROGRAM

## DAY 3 THURSDAY 29<sup>TH</sup> AUGUST

9:00	-	9:25	<b>98% sulphuric acid and stainless-steel pipework failure</b>	Matt Harris AGL, Principal Scientist
9:25	-	9:50	<b>Use of ODA for pre service boiler cleaning and boil outs</b>	Dylan Harrison Visentia, Industrial Water Chemist
9:50	-	10:15	<b>Comparison of water treatment technologies for high purity water</b>	Duncan Rosie Puro-lite, Technical Sales Manager (South Africa)
10:15	-	10:25	<b>Sponsor presentation - Duff &amp; Macintosh</b>	
10:25	-	10:35	<b>Sponsor presentation - Ixom</b>	
10:35	-	11:05	<b>MORNING TEA - SPONSORED BY SWAN</b> Atrium at Crowne Plaza	SPONSORS DISPLAYS
11:05	-	11:30	<b>Solenis dual chloramine technology: Local field experiences</b>	Peter Slijp Solenis, Technical Consultant
11:30	-	11:55	<b>Application examples and data from Veolia's latest FDA compliant, non-nitrogen filmer technology for boilers</b>	Nadim Yazdani Veolia, Product Application Engineer - Boilers and Cooling systems
11:55	-	12:20	<b>Film forming corrosion inhibitor applications for industrial Steam Plants - Pro's and Cons</b>	David Addison Thermal Chemistry Limited, Principal Consultant
12:20	-	12:30	<b>Wrap up of Day 3 and closing remarks</b>	David Addison NZAPWS Chairperson
12:30	-	13:30	<b>LUNCH - SPONSORED BY SOLENIS</b> Atrium at Crowne Plaza	



