

DUO2 PTY LTD PRESENTS

AERATION DOWNUNDER 2018

OCTOBER 31ST | PARKROYAL PARRAMATTA |
RUSE MACARTHUR ROOM



DuO2ptylimited@bigpond.com



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Register here



MORNING

8.30 AM

REGISTRATION

9.00 AM

INTRODUCTION

9.30 AM

**AERATION SYSTEM
PERFORMANCE
VERIFICATION**

Mr Ian Trillo, Asesoria Technica y Control SA (Spain)

- The new ASCE Standard ASCE/EWRI 18 “Guidelines for In-Process Oxygen Transfer Testing”
- The revised ACSE Standard ASCE/EWRI 2-xx
- “Measurement of Oxygen Transfer in Clean Water”
- How to specify the new standards
- Changes in the revised ASCE/EWRI 2-xx
- Questions and Discussion

11.00 AM

**FINE BUBBLE DIFFUSER
CLEANING & MAINTENANCE**

Mr Tom Lawson, AquaAudit

- Procedures for Acid Dosing fine bubble aeration systems
- Assessment of performance Before/After
- Maintaining optimal performance of existing systems
- Questions and Discussion

12.30 PM

LUNCH

AFTERNOON



1.00 PM

IDENTIFYING EFFICIENCIES AND OPTIMISING COSTS – AERATION DIFFUSER BENCHMARKING AT OXLEY CREEK STP

*Amin Malekizadeh,
David Fligelman,
Christie Cole*

- Technical Paper (abstract available on request)
- The replacement of diffusers at the Oxley Creek WWTP
- Clean Water Benchmarking for different diffuser types.
- In-Process Oxygen transfer testing & evaluation of the different diffuser types
- Questions and discussion

2.30 PM

HYPERBOLOID MIXER TECHNOLOGY

*Dr Marcus Hoefken, CEO Invent
Umwelt - und Verfahrenstechnik*

- The hyperbolic concept
- Using Hyperboloid mixer in WWTP
- Aeration using the hyperboloid concept
- Questions & Discussion

4.00 PM

CLOSE

WITH THANKS TO:

CHRISTIE COLE (SENIOR PROCESS ENGINEER, TYR GROUP)

After having spent many years as an Operations Engineer for a municipal utility, Christie understands the complexities involved in application of design nuances to operations and the importance of maintaining a focus on operability and efficiency.

Christie's formal education is from the University of Queensland where she graduated from Environmental Engineering (Honours) in 1999.

DAVID FLIGELMAN (DIRECTOR, TYR GROUP)

David founded Tyr Group Pty Ltd in 2006 to specialise in biological nutrient removal processes, water recycling and biosolids treatment. With an extensive background in Operations, David is especially focussed on operability, maintainability, and process efficiency as key components of successful treatment facilities.

David holds degrees in Chemistry and Chemical Engineering from the University of Melbourne.

DR MARCUS HÖFKEN (CEO, INVENT UMWELT UND VERFAHRENSTECHNIK, GERMANY)

Dr. Marcus Höfken is the CEO and founder INVENT Umwelt- und Verfahrenstechnik AG in Germany, A graduate engineer with majors in combustion engines and fluid dynamics and a Doctorate in fluid dynamics using laser doppler anemometry.

During his Doctorate studies Marcus developed and introduced the hyperboloid concept for mixing and aeration. The hyperboloid mixer and mixer/aerator has become recognised worldwide as a high performance energy saving system for the municipal and industrial water and wastewater markets.

Today Invent is a worldwide operating group with more than 120 employees which focusses on innovative energy efficient products in the field of mixing and aeration.

TOM LAWSON (AQUA AUDIT)

Formerly managing director of Aquatec-Maxcon, Tom has over 50 years of experience in the water industry. He has been a specialist in diffused air aeration systems since 1987, and was one of the first to introduce membrane diffusers into Australia. He founded Aqua-Audit in 1998 to provide diffuser condition monitoring and maintenance services, and has now completed tests on over 100 WWTPs in Australia and New Zealand.

In addition to dosing diffusers with formic acid and taking before-and-after backpressures, Tom and his colleagues now do extensive off-gas test work to measure oxygen transfer efficiencies in situ.

AMIN MALEKIZADEH (SENIOR PROCESS ENGINEER, QUU)

Senior Process Engineer at Oxley Creek STP run by Queensland Urban Utilities. He has more than 15 years' experience in design and operation of domestic wastewater treatment plants in Queensland and South Australia.

Amin holds a Bachelor of Chemical Engineering from Sharif University and Master of Environmental Engineering from Griffith University.

MR IAN TRILLO (ATC SPAIN)

A professional Engineer dedicated to Sanitary Engineering (Wastewater Treatment), both in technical and management positions. Co-Owner and current Technical Director of Asesoría Técnica y Control SA (Spain), private engineering and consultant company in the field of municipal wastewater treatment.

Lecturer on Wastewater Treatment at the Spanish Ministry of Public Works training courses. Member of the ASCE Standards Committee (American Society of Civil Engineers) on Oxygen Transfer in Wastewater Treatment Plants. Specialized in Treatment Processes, Aeration, Aeration Controls and Energy Optimization.