

7th ANZ Cyanobacteria Workshop

ONLINE

29-30
SEPTEMBER

PROGRAM



TIME (AEST)	SESSIONS
10:30	Welcome Anas Ghadouani University of Western Australia Arash Zamyadi WaterRA
10:35	Opening Remarks Karen Rouse WaterRA
10:40	Developing guidance for assessment and evaluation of harmful algal blooms, and implementation of control strategies in source water John Albert Water Research Foundation Eric Wert Southern Nevada Water Authority Arash Zamyadi WaterRA
CHARACTERISATION & RISK	
11:00	Can comparative genomics of cyanobacteria give insights into local risks? Anusuya Willis CSIRO (Australia National Algae Culture Collection)
11:15	Seasonal characterisation of Microcystis bloom dynamics in the Hunter region through Metaproteomics Caitlin Romanis University of Newcastle
11:30	Individual-based modelling of the vertical distribution of Microcystis aeruginosa blooms in a shallow lake Mohammad Hassan Ranjbar Griffith University
11:45	Q&A
12:00	BREAK
12:15	SPECIAL SESSION: REGULATORS' PERSPECTIVE Restructuring New Zealand's cyanobacteria management frameworks for drinking-water supplies Jonathan Puddick & Susie Wood Cawthron Institute
DETECTION & IDENTIFICATION	
13:00	First report of anatoxin-a production by the freshwater filamentous cyanobacterium Microcoleus in Australia Paul Wright Tweed Shire Council Barbara Sendall QLD Health Glenn McGregor QLD Dept. Environment & Science
13:15	Cryptic diversity and phenotypic plasticity: implications for bloom monitoring and management Glenn McGregor QLD Dept. Environment & Science Barbara Sendall QLD Health
13:30	Q&A
13:45	BREAK
14:15	Metabolic profiling to identify fundamental differences in toxic and non-toxic cyanobacterial strains David Beale CSIRO & Vijay Vilas Dhamale Swinburne University of Technology
14:30	Impact of nutrient loads on the fluorescence signature of key cyanobacterial and harmful algae Sara Imran Khan WaterNSW
14:45	The FlowCam Cyano: A rapid detection and screening tool for HAB Monitoring Programs Polly Barrowman Hunter Adams Simon Rembold Yokogawa Fluid Imaging Technologies
15:00	Algal dashboard: Integrating routine and online data for cyanobacterial management Florence Choo SA Water
15:15	Q&A
15:30	BREAK
MONITORING	
15:45	Modern machine learning tools to predict cyanobacteria in Chichester Dam Azadeh Golshan Hunter Water
16:00	Detection of algal blooms using in-situ hyperspectral reflectance and early results of forecasting Klaus Joehnk & Tapas Biswas CSIRO
16:15	A persistent smell, where is the geosmin coming from in Hope Valley Reservoir? Florence Choo & Peter Hobson SA Water
16:30	Q&A
16:45	DAY 1 CLOSE

TIME (AEST)	SESSIONS
SOURCE MANAGEMENT	
10:30	The poorly understood impacts of terrestrial DOM on cyanobacterial blooms Michele Burford Griffith University
10:45	Identification of dominant algae producers of unexplained odours in source water Jin Zhu UNSW Sydney
11:00	Bio-manipulating diatom growth to reduce Total Phosphorus and Cyanobacteria density Simon Tannock AlgaEnviro
11:15	Evaluating ultrasonicator performance for low impact cyanobacteria management Liam Vaughan & Arash Zamyadi WaterRA
11:30	Rapid ensemble modelling of cyanobacteria and geosmin, evaluating changes in management Jeff Newman, Alicja Makarewicz, Leon van der Linden, Rob Daly & Peter Hobson SA Water
11:45	Q&A
12:00	BREAK
12:15	SPECIAL SESSION: REMOTE SENSING AND INTELLIGENT WATER Introducing the AquaWatch Australia Mission Alex Held CSIRO Kyriakos Kandris & Apostolos Tzimas Primewater
REMOTE SENSING	
13:00	Cyanobacteria Research: what does the Australian water industry need? Nick Crosbie Melbourne Water
13:15	The utility of remote sensing for detecting harmful algal blooms in small waterbodies Shuang Liu UNSW Water Research Centre
13:30	Q&A
13:45	BREAK
TREATMENT	
14:15	NHASP Partnership: Research projects and future directions Bojan Tamburic UNSW
14:30	Hydrogen peroxide pre-oxidation of <i>Microcystis aeruginosa</i> and associated organic matter Xiaoran Chu UNSW
14:45	Biological activated carbon for management of biogenic taste and odour Rafael de Medeiros Paulino UNSW
15:00	Turning BAC; assessing GAC filter performance for taste and odour removal Emma Sawade SA Water
15:15	Q&A
15:30	BREAK
MANAGEMENT STRATEGIES	
15:45	Myponga's bloomin' challenge Kelly Newton SA Water
16:00	AlgaeWatch™ – an innovative software tool for the cyanobacterial risk management of water bodies Annette Davison D2K Information Lindsay Hunt Jarvis Hunt Consultancy
16:15	Inland-water cyanobacteria: New monitoring, reporting, modelling and ecological research Tsuyoshi (Yoshi) Kobayashi NSW Dept. Planning, Industry and Environment Simon M. Mitrovic UTS Daniel L. Roelke Texas A&M University
16:30	Q&A
16:45	DAY 2 CLOSE

PrimeWater and CSIRO AquaWatch

End User Consultation Workshop: HABs Early Warning

Moving from Thresholds to Impact based
Forecasting & Management

Friday 1 October

11.00am - 2.00pm (AEST)

Online via Zoom for registered participants

Proudly supported by WaterRA

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