



ADCPS IN ACTION IN AUSTRALIA!

Teledyne RD Instruments Users' Conference
Water Resources and Marine Measurements

May 12-14, 2015



Presented to you by:



TELEDYNE
RD INSTRUMENTS
Everywhere you look™

THANK YOU TO THIS YEAR'S SPONSORS...



TELEDYNE RESON
Everywhereyoulook™

Teledyne Reson is a leading provider of high-quality underwater acoustic solutions. With global presence and service-facilities, they specialise in the design, development, manufacture and commissioning of advanced multibeam sonar systems, sensors, transducers, hydrophones and survey software. Teledyne Reson operates in the hydrographic, offshore, dredging, defense and security and marine research business areas.

www.teledyne-reson.com



**TELEDYNE
ODOM HYDROGRAPHIC**
Everywhereyoulook™

Teledyne Odom has over 30 years' experience manufacturing high performance sonar systems with a hard earned reputation for durability, precision and customer service. From portable dual frequency single beam echo sounders to fully integrated multibeam systems, Teledyne Odom Hydrographic has equipment to meet the most challenging demands.

www.odomhydrographic.com



**TELEDYNE
OCEANSCIENCE**
Everywhereyoulook™

Teledyne Oceanscience supplies the oceanographic community with deployment platforms for environmental monitoring instrumentation. The company's major products are remotely-controlled and tethered instrumentation deployment boats for echo sounders and ADCPs, the UnderwayCTD that provides affordable and compact profiling from a moving vessel, and the popular Sea Spider and Barnacle seafloor platforms. Teledyne Oceanscience also supply turnkey remote hydrographic survey boat systems, typically including environmental monitoring or bathymetry equipment, GPS positioning and data telemetry.

www.oceanscience.com



**TELEDYNE
IMPULSE**
Everywhereyoulook™

Teledyne Impulse designs and manufactures high reliability electrical and optical interconnection systems for harsh environment applications. The company's dry mateable, wet mateable and underwater mateable connectors are proven performers currently employed in subsea instrumentation, sensors and control systems, ROVs, AUVs, and seismology applications.

www.teledyneimpulse.com



DeepWater
BUOYANCY

DeepWater Buoyancy creates subsea buoyancy products for leading companies in the oceanographic, seismic, survey, military and offshore oil & gas markets. Customers have relied on DeepWater Buoyancy's products for over thirty years, from the ocean surface to depths exceeding six thousand meters.

www.deepwaterbuoyancy.com



**JAMES COOK
UNIVERSITY**
AUSTRALIA

The Marine Geophysics Laboratory has existed at James Cook University, Australia, since 1989. Borne of the research interests of Professor Peter Ridd, the laboratory is now active in both research and consulting. Staff members come from a wide range of backgrounds but share a passion for science and a commitment to delivering internationally respected products and services.

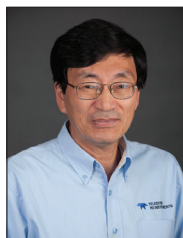
www.jcu.edu.au

Welcome!

to ADCPs in Action in Australia



Jim Rogers
Director, Water
Resources



Hening Huang
Water Resources Sales
Manager, Asia Pacific



Darryl Symonds
Director, Marine
Measurements



Marc Sherman
Sales Manager, Marine
Measurements



Neil Hodges
Chief Executive Officer



Darren Burrows
Chief Technical Officer
UVS General Chair

Teledyne RD Instruments is the pioneer and world leader in Acoustic Doppler Current Profiling (ADCP) technology.

Originally founded in 1982 through the development of the industry's first ADCP, Teledyne RDI's product line has grown to include a full line of ADCPs for inland and oceanographic applications, Doppler Velocity Logs (DVLs) for navigation applications, as well as CTD (Conductivity, Temperature, and Depth) and carbon sensors.

It has been our pleasure to serve our customers for these past 30 plus years, and a true honour to work with our long-time representative, UVS, in Australia. We look forward to bringing our highly successful AiA users conferences to our friends and customers Down Under. Cheers!

UVS Pty Ltd. has been a supplier of quality subsea equipment and services to many markets since 1973. Our long term relationships set us apart and provide us with strong connections to development laboratories and engineering teams worldwide.

Our partnership with Teledyne RDI to host the "ADCPs in Action" conference in Australia is an example of our relationship in action. This event has a well-deserved reputation for bringing ADCP users together for a rich exchange of information and learning. Australia has consistently been an early adopter of new technologies, and hosting this event locally is yet another example of the commitment of UVS, T-RDI and our local practitioners to share, learn, and improve our utilization of ADCP technology. We're sure you'll enjoy the exciting program we've compiled, and look forward to your feedback and sharing the lessons learned.

Day 1: Tuesday, May 12, 2015

Activity	Time	Marine Measurements (Compass)	Water Resources (Boardroom)
Registration / Continental Breakfast	0800 - 0900	Southport Yacht Club – Compass Room	
Welcome & Keynote Speaker	0900 - 0915	Intro & Welcome: Neil Hodges (UVS CEO) Conference & Admin: Jen Benson (Conference Chair)	
What's New	0915 - 0945	Lead Sponsor Presentation: What's New at Teledyne RDI: New Technology Overview	
	0945 - 1030	Co-sponsor Round Up: 10-minute introductions to latest enabling technologies	
Break	1030 – 1100	Break / Networking / Co-sponsor Exhibits	
Plenary Training Session	1100 - 1215	Plenary Training Session: The ABCs of ADCPs – Teledyne RDI's concise Doppler primer. This is a great introduction to Doppler theory for new users, and a useful refresher for our more seasoned pros.	
Lunch	1215 - 1330	Lunch / Networking	
Training	1330 - 1400	ADCP Data Review / Analysis <ul style="list-style-type: none">Data Types and Displays: Attitude, Velocity, Correlation, Echo IntensityMethodology for Data Reviewing: Key Data Quality Indicators	New! RiverPro ADCP Introduction and detailed overview of Teledyne RDI's newest ADCP designed specifically for your local shallow river projects
	1400 - 1430		RiverRay ADCP An introduction to RiverRay's newest features for enhanced field data
	1430 - 1500		
Break	1500 - 1530	Break / Networking / Co-sponsor Exhibits	
Training	1530 – 1600	Introduction to Waves <ul style="list-style-type: none">Background of Waves MeasurementsADCP Wave MeasurementsADCP Wave Parameters Output Daily Q&A Roundup	New! QA/QC Software Training: Has Your Data Been Qualified? Hands on introduction to Teledyne RDI's newest ADCP software. Now you can analyse your collected field data using custom-scaled parameters to ensure data accuracy / acceptability. Daily Q&A Roundup
	1600 – 1630		
	1630 - 1700		
Networking / Dinner	1700 - 1800	Networking in the Exhibition Space at the Southport Yacht Club	
	1800 - 2130	Buffet Style Dinner at Southport Yacht Club	

Day 2: Wednesday, May 13, 2015

The following product demonstrations will be conducted all day, as booked: Teledyne Reson T20P, Teledyne Odom MB1, Teledyne Optech Laser Scanner, Teledyne RDI RiverPro with Teledyne Oceanscience Z-Boat Integration

Activity	Time	Marine Measurements (Compass)	Water Resources (Boardroom)
Registration / Continental Breakfast	0800 - 0900	Southport Yacht Club – Compass Room	
Customer Presentations Darryl Symonds Marine Measurements Chair Jim Rogers Water Resources Chair	0900 - 1030	Oleg Makarynskyy ADCP Measurements for Suspended Sediment Estimates in a Meso-Tidal Harbour Environment Rebecca Cowley Use and Quality Control of ADCPs on the Indonesian Through-Flow and East Australian Current Deep Water Moorings David Williams Using Acoustics to Measure Sediment Transport in Darwin Harbour A Le Royer Measuring Boat Wakes in Sydney Harbour Using Sentinel V ADCP E Watterson Determining Circulation of the Great Barrier Reef Lagoon Using ADCP Sentinel V Data	Mark Randall Measuring the unmeasurable: Capturing extreme flow events using the DL25 Channel Master logger Richard Gardiner Configuring ChannelMaster Doppler for remote operation via data-loggers Ray Maynard Burnett River Floods ADCP Lessons
Break	1030 - 1100	Break / Networking / Co-sponsor Exhibits	
Training	1100 - 1200	Teledyne Reson, Odom, and Oceanscience Product Overviews <ul style="list-style-type: none"> Reson T20P Odom MB1 Z-Boat & MB1 Integration 	Teledyne RDI Product Overviews <ul style="list-style-type: none"> RiverPro Z-Boat & RiverPro Integration
Lunch	1200 - 1300	Lunch / Networking	

Day 2: Wednesday, May 13, 2015 (continued)

The following product demonstrations will be conducted all day, as booked: Teledyne Reson T20P, Teledyne Odom MB1, Teledyne Optech Laser Scanner, Teledyne RDI RiverPro with Teledyne Oceanscience Z-Boat Integration

Activity	Time	Marine Measurements (Compass)	Water Resources (Boardroom)
Training (1300 - 1500)	1300 - 1400	Sentinel V: In Search of the Perfect Wave Review of a data collected off the California Coast by Scripps Institute of Oceanography will highlight the current and waves measurement capability of the new 5-Beam Sentinel VADCP. Data will be reviewed and analysed using TRDI standard software packages such as WINADCP and Velocity.	GPS Accuracy and Integration GPS connections will be discussed and demonstrated, with an accuracy comparison between differential sources.
	1400 - 1430		ISM Compass Calibration: Best Practices Procedure, techniques, and tips will be discussed and demonstrated.
	1430 - 1500	Long Range Data Review: Get the Full Profile and Facts Review of data collected around the world from Long Ranger ADCPs and Ocean Surveyor ADCPs will reveal the long range current and echo intensity profiles that are possible. Data will be reviewed and analysed using TRDI standard software packages such as WINADCP and Velocity.	System Communications: USB/Serial, Bluetooth A practical trouble shooting session with hands on experience.
Break	1500 - 1530	Break / Networking / Co-sponsor Exhibits	
Training	1530 - 1600	Citadel CTD (Conductivity, Temperature, Depth) A. Primer: CTD measurements B. Samples of Citadel CTD applications and measurements – strengths and constraints)	Section-by-Section (SxS) Pro Software A training session on Section-by-Section (SxS) Pro, including the latest fixes/ enhancements
	1600 - 1630		
Event Wrap-Up	1630 - 1700	Event Wrap-Up Join us for an informal gathering and feedback from delegates. Make the next event better!	

Day 3: Thursday, May 14, 2015

Activity	Time	Marine Measurements (Compass)	Water Resources (Boardroom)
Bring Your Dodgy Data! Darryl Symonds Marine Measurements Chair Jim Rogers Water Resources Chair	0900 - 1200	One-on-One as Booked Data to be submitted prior to the event	One-on-One as Booked Data to be submitted prior to the event



UPCOMING EVENT



**TELEDYNE
MARINE**



**TECHNOLOGY
WORKSHOP
2015**



Explore, Learn, Share at the
2015 Teledyne Marine Technology Workshop!

October 4-7, 2015 • Catamaran Resort
San Diego, CA, USA

tm-techworkshop.com



TELEDYNE MARINE
Everywhereyoulook™



RiverPro ADCP

Intelligent River Discharge Measurement System



Introducing the RiverPro, Teledyne RDI's newest member of a growing family of Acoustic Doppler Current Profilers for inland Water Resources applications. The 1200 kHz RiverPro has been purpose-built to provide two specific demands:

- ADCP for shallow river applications (20 cm to 25 m range)
- Upgrade path for our current industry gold-standard Rio Grande ADCP users (more info to follow on this upgrade.)

Like our next-generation RiverRay ADCP, the RiverPro offers users a 5-beam solution, auto-adaptive sampling, user-friendly interface, and Teledyne RDI's unsurpassed quality, service, and support.

The RiverPro has also been designed to fit into our RiverRay float, allowing users to swap out their ADCPs based upon their environment, eliminating the need to purchase and transport a second float. Learn more at www.rdinstruments.com/riverpro.



Confirm the Integrity of Your ADCP Data

Teledyne RDI's new Q-View software bridges the gap between the requirement for high-quality field measurements and the time-intensive analysis that is typically required to ensure that your collected data meets your quality criteria.

This new software application seamlessly integrates with your WinRiver II software, providing you with real-time feedback during data collection, and back in the office when reviewing your data for your unique Quality Assurance program.

With its comprehensive, automatically-generated professional reports, Q-View provides you with the information you need to efficiently and consistently make the right decisions based on your collected data. Learn more at www.rdinstruments.com/qview.



Sentinel V 5-Beam ADCP with Waves Measurement Capability



As well as providing high-quality measurements of vertical motions, the vertical fifth beam on **Sentinel V** ADCPs enhances several other measurements, including **wave field parameters**, single-beam echo sounder, bathymetric data, and turbulence. Not only does the vertical fifth beam permit more robust measurements of range-to-surface but its associated array resolves higher frequency waves than previously. Learn more at www.rdinstruments.com/followV.aspx.





Thank you for joining us at
ADCPS in Action in Australia!



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