

TOGETHER

ECOTECH'S MAGAZINE ABOUT ENVIRONMENTAL MONITORING

2019 Issue 5

- Congrego®: Not All Data Loggers are Created Equal
- Protecting Mines & Tailings Dams with Dynamaster® Blast & Vibration Monitoring Systems
- Serinus® equipped Google Street View Cars Monitor Air Quality in London
- The Smith Family Says a Great Big "Thank You" to Their Supporters





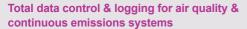
Congrego®: Not All Data Loggers are Created Equal

Congrego® is a next generation data logger created by the environmental monitoring industry for the environmental monitoring industry.

A one-stop interface for all your equipment, Congrego® lies at the heart of an accurate and efficient environmental monitoring system. Created by the environmental monitoring industry, for the environmental monitoring industry, ECOTECH releases the Congrego® data logger – Next generation data control and logging specifically for air quality & continuous emission systems. Congrego® is the culmination of 40+ years of pioneering research, commercial experience and operational insight.

ECOTECH has been at the forefront of designing and developing data collection and control software for ambient air and emission monitoring applications since the 1980s.

ECOTECH originally entered the data logger market because it found that off-the-shelf data loggers couldn't be relied upon to accurately capture environmental instrument data to their satisfaction. The level of precision and reliability ECOTECH required did not exist.



"No other data logger can provide the same breadth of instrument compatibility or the peace of mind that comes with knowing that your data is accessible, accurate and secure at all times," said Nicholas Dal Sasso, ECOTECH's Managing Director. "It makes the job of complying with global emissions standards and regulations that much easier," he added.

Congrego® created by the monitoring industry, for the monitoring industry

According to Grant Kassell, ECOTECH's Research & Development Manager, Congrego® is a game-changer. "Environmental monitoring is at the heart of what we do. The success of our business and the critical monitoring services that ECOTECH provides demands a data logger like Congrego®, "said Grant, "Its intuitive user-interface design and customisable dashboard let our customers decide how. when and where they view their data," he added.



"Integrating Congrego® into your monitoring station means less costly site visits, greater monitoring efficiency, total control of your ECOTECH and non-ECOTECH instruments and the versatility to view data whether connected to the internet or not," commented James Agius, ECOTECH's Head of Global Sales & Marketing. "Congrego® is also backed by ECOTECH's fully-accredited, expert technical support team."

For more information about Congrego® please contact email@ecotech.com or visit www.ecotech.com/congrego





Integrating Congrego® into vour monitoring station means less costly site visits, greater monitoring efficiency, total control of your **ECOTECH** and non-ECOTECH instruments and the versatility to view data whether connected to the internet or not.



Protecting Mines & Tailings Dams with ECOTECH Dynamaster® Blast & Vibration Monitoring Systems

ECOTECH Dynamaster® blast & vibration monitoring solutions are an integral safety component for Australia's mining industry.

Tailings dams are an essential component of mining infrastructure, holding the water that is used during ore mining and processing. Although governed by strict regulations in Australia, tailings dams can still fail or collapse. But risks can be mitigated through accurate blast and vibration monitoring.

Tailings dam failures can be triggered by a number of man-made and natural causes including blasts, vehicle movement, earthquakes or other seismic activity.

These failures can lead to operational down time, mine suspensions or closures and tragically, even loss of life and environmental catastrophes when waste contaminates water sources.

Whilst failures of this type are rare in Australia, events like the devastating January 2019 disaster in Minas Gerais, Brazil is an important reminder of the need for mining operations to be vigilant in their monitoring operations.



How do you ensure that the integrity of tailings dams is not compromised by excessive vibration or earth movement?

Certified & Accredited

ECOTECH's blast & vibration monitoring system, which is certified to international recognised quality standards, can help provide valuable data to minimise potential failures.

ECOTECH is the only NATA and ISO17025 accredited company for blast monitoring and data collection in Australia.

Real-world experience has garnered ECOTECH a reputation for excellence in this field with its Dynamaster® blast & vibration monitoring system.

ECOTECH operates the largest network of blast and vibration monitoring systems for mines in Australia, providing a heightened level of protection for mine sites and tailings dams. It provides significant resources to protect numerous mining companies and communities nationally.

"Having the right tools to mitigate risk and improve safety outcomes is essential," said Michael Preston, ECOTECH Strategic Business Development Manager. "That's why our Dynamaster® system is the only blast & vibration monitoring system in the country operated to internationally recognised quality standards. Not to mention the dedicated team of ECOTECH engineers and Dynamaster® technicians further setting us apart."

"Dynamaster's reliability and continuous high-data capture rate is designed to give peace of mind and significantly reduce the risk of non-compliance with regulations," said Michael.

The fully integrated ECOTECH Dynamaster® system can be purchased or rented for long-term projects.

With the addition of a vibration frequency analysis feature, the Dynamaster® system also allows for accurate assessment of potential structural damage and control for future blasting.

ECOTECH is the only NATA and ISO17025 accredited company for blast monitoring and data collection in Australia.

(Continues on page 6)



6

Dynamaster's reliability and continuous high-data capture rate is designed to give peace of mind and significantly reduce the risk of noncompliance with regulations.

"

(Continued from page 5)

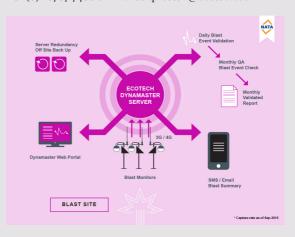
Specialist team of blast & vibration monitoring experts

A highly specialised team of blast and vibration monitoring experts work within the larger ECOTECH Environmental Reporting Services (ERS) department. They perform all data management and ensure remote supervision, on-site maintenance, validation and reporting, with diagnostics run at 5-minute intervals, 365 days a year.

A proprietary ECOTECH website provides full access to results within minutes of blasting or vibration activities, including email and SMS notifications.

Members of ECOTECH's dedicated blast & vibration monitoring team include data analysts, blast monitoring coordinators, a technical coordinator, a quality coordinator and highly experienced field service staff.

For more information about the ECOTECH Dynamaster blast & vibration monitoring system, contact Michael Preston on +61 (0)2 8707 7400 or michael.preston@ecotech.com



NATA Accreditation

ECOTECH's NATA accredited facilities and services comply with the requirements of ISO/IEC 17025:2005 and include Testing Laboratories; Calibration Laboratory; and Blast Monitoring Service.

Search for "ECOTECH" at www.nata.com.au/accredited-facility to see the complete list of ECOTECH NATA accreditations.





ECOTECH's distributor in the UK, Air Monitors Ltd, is delivering a landmark air quality monitoring solution as part of Breathe London, a new C40 Cities pilot program.

The C40 Cities Climate Leadership Group connects 96 cities that are leading the way towards a healthier and more sustainable future.

The group, representing 700+ million citizens, is committed to delivering on the most ambitious goals of the Paris Agreement at a local level and cleaning the air we breathe.

The winning London C40 Cities bid by Air Monitors Ltd, EDF Europe, CERC, NPL, Cambridge University and Google Earth Outreach, comprised a network of 100 multiparameter AQMesh air quality monitors, plus operating two Google Street View cars fitted with a comprehensive suite of analysers to measure air pollution. The Google Street View cars will drive around the city almost every day for the pilot period



The Google **Street View** cars are taking readings every second, or every 30 metres whilst driving, helping us find pollution hot-spots, so AQMesh pods can be positioned there and in other sensitive locations, such as schools and hospitals.

(Continues on page 8)



AQMesh is the tried and tested name in small sensor technology for commercial use. AQMesh is manufactured in the UK and distributed exclusively in Australia and India by ECOTECH.

(Continued from page 7)

of one year. ECOTECH is now the exclusive distributor for AOMesh in Australia and India.

In July 2018, the program, described by C40 Cities as "the world's most sophisticated air quality monitoring system," took to the streets of London with ECOTECH Serinus® 40 gas analysers on board delivering real-time, continuous analysis of nitric oxide (NO) and total oxides of nitrogen (NO) present in the city's air.

The Google Street View cars will also measure meteorological and air quality parameters including temperature, humidity, pressure, nitrogen dioxide (NO_2), ozone (O_3), carbon dioxide (CO_2), $PM_{2.5}$ particulates, nano-particles and black carbon.

Local production, global standard

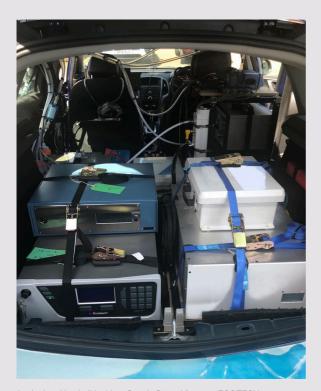
The Serinus® instruments were all manufactured in India and Australia as a collaboration between ECOTECH headquarters and its international offices. ECOTECH's Research and Development team worked closely with Air Monitors Ltd to customise the Serinus® firmware to ensure that the unique requirements of this vehicle-mounted monitoring solution were met.

Air Monitors Ltd is responsible for the wireless collection of data, which is automatically transmitted to its cloud-based data management system. Results are accessed by PC, tablet or smartphone, so that air quality can be consistently visualised and mapped in real time.

"The Google Street View cars are taking readings every second, or every 30 metres whilst driving, helping us find pollution hot-spots, so AQMesh pods can be positioned there and in other sensitive locations, such as schools and hospitals," commented Jim Mills, Managing Director of Air Monitors Ltd. "Having worked with ECOTECH for several decades, incorporating the Serinus® 40 in this ground-breaking project was an obvious choice," he added.

Commitment to improving air quality

"We welcome the opportunity to make a positive, longlasting contribution to improving London's air quality," said Felicity Sharp, Head of ECOTECH Europe.



Locked and loaded! Inside a Google Street View car, ECOTECH Serinus® 40 NOx gas analyser pictured bottom left.

"The C40 Cities pilot is another example of the way ECOTECH works together with distribution partners like Air Monitors Ltd to provide environmental solutions that help solve global problems," she added.

To learn more about the London C40 Cities air quality monitoring project, contact Jim Mills at jim@airmonitors.co.uk

For more information about ECOTECH AQMesh and ECOTECH Serinus® gas analysers, visit www.ecotech.com or contact Felicity Sharp at felicity.sharp@ecotech.com





Google Street View Cars | took to the streets of London with ECOTECH Serinus® 40 gas analysers on board delivering real-time. continuous analysis of NO and NO_v present in the city's air.



The Smith Family Says a Great Big "Thank You" to Their Supporters



Main pic: Anton Leschen, General Manager of The Smith Family in Victoria, addresses the audience.

Pic above: Financial, practical and emotional support assists Learning for Life students throughout their school years. ECOTECH was delighted to attend The Smith Family's annual event to thank their supporters and show the long-term difference that sponsorship can make to a disadvantaged child's life.

On 24 October 2018, ECOTECH was invited to attend The Smith Family's annual "Great Big Thank You" with key supporters from around Victoria. ECOTECH announced a major partnership with The Smith Family in 2018.

Stirring speeches by Anton Leschen, General Manager of The Smith Family in Victoria, and Dr Lisa O' Brien, CEO of The Smith Family, inspired the crowd with stories of success, hope and resilience from students on their flagship *Learning for Life* program. This program helps young Australians in need to participate more fully in their education through a three-step approach. Financial, practical and emotional support assists their educational journey throughout their school years.

The meaning of Learning for Life

The event was hosted by one of The Smith Family's Learning for Life students, a debating champion at university, who espoused the benefits of being on the program since she was in primary school.

Talented students on The Smith Family's program were central to the event. There was also an uplifting jazz performance by music student Olivia, who credits The Smith Family with assisting her to continue her musical journey at Monash University.

Together, we help children create better futures for themselves

ECOTECH has participated in multiple volunteer days with The Smith Family throughout 2018, including writing Christmas cards, reviewing student profiles and more.

"Like The Smith Family, we believe that every student should have access to education, no matter their circumstances," said Nicholas Dal Sasso, ECOTECH Managing Director.

"The gap in achievement and educational outcomes between kids in our most disadvantaged communities compared to their better-off peers is getting wider," says Dr Lisa O'Brien, CEO of The Smith Family, "these kids are doing it tough, and they really need our help," she added.

To learn more about The Smith Family and how you too can sponsor young Australians in need, please visit www.thesmithfamily.com.au



Learning for Life student Olivia enchanted the crowd with her rendition of classic jazz song "Polka Dots and Moonbeams".





everuone's familu

Like The Smith Family, we too believe that every student should have access to education, no matter their circumstances.

TOGETHER is a magazine published by ECOTECH Pty Ltd ABN 32 005 752 081. Subscription is free and available directly from ECOTECH.

Important Notice: The information contained in this magazine is given in good faith. To the maximum extent permitted by law, neither ECOTECH, its employees, contractors or distributors accept any liability for loss or damage arising as a result of any person acting on information contained in this magazine.

Specifications subject to change without notice. All trademarks and registered trademarks are the property of their respective owners, Ecotech, Serinus, Airodis, Aurora, Congrego, Integro, Spectronus are trademarks or registered trademarks of ECOTECH Ptv Ltd in the United States and/or other countries. © 2019 ECOTECH Pty Ltd. All rights reserved.



TOGETHER

ECOTECH'S MAGAZINE ABOUT ENVIRONMENTAL MONITORING

2019 Issue 5



ACOEM Group

ECOTECH Group (Global Head Office)
1482 Ferntree Gully Road Knoxfield VIC 3180 Melbourne Australia
+61 3 9730 7800 together@ecotech.com ecotech.com

TOGETHER
WE CREATE
SOLUTIONS
THAT SHAPE
THE FUTURE