

# **TOGETHER**

ECOTECH'S MAGAZINE ABOUT ENVIRONMENTAL MONITORING

# 2018 Issue 4

- Serinus® Gas Analyers Approved by LCSQA in France
- World-first Small Sensor Environmental Test Chamber Relies on Reference Quality Serinus® Gas Analysers
- TOGETHER Magazine Back Issue Online Now
- Monitoring Vibration to Preserve History
- Air Monitors Strengthened Across UK
- Mercury Tracker 3000 XS Debuts at Australasian Oil & Gas
- Together We Create Solutions That Shape the World
- Shared Commitment, Honesty & Respect The Keys to Successful International Relationships
- Learning For Life with The Smith Family
- Dilution Extractive Continuous Emission Monitoring System on Show at CEM India
- Creating Careers out of Cadetships
- Meticulous & Precise NATA Accredited Laboratories & Services





Serinus® Gas Analyers Approved by LCSQA in France

About LCSQA: The LCSQA is the result of a strong collaboration between three partners whose businesses complement each other to ensure the technical coordination of the air quality monitoring system in France: the National Institute of the Industrial Environment & Risks (INERIS), the National Laboratory of Metrology and Testing (LNE) and the Ecole Nationale Douai (IMT Lille Douai).

Learn more at www.lcsqa.org

ECOTECH became part of the ACOEM Group in 2017 and opened its European head office in Lyon, France the same year.

ECOTECH immediately commenced the process of seeking regulatory approval for its range of Serinus® ambient and trace gas analysers from the Laboratoire Central de Surveillance de la Qualité de l'Air (LCSQA) – the peak body responsible for the technical coordination of France's air quality monitoring system.

On 15 March 2018, the LCSQA steering committee confirmed that Serinus $^{\circ}$  analysers complied with French national standards and regulations.

"This is a significant milestone for ECOTECH Europe to celebrate. It helps accelerate our ability to deliver products and services to industry, academia and government agencies across France," said Felicity Sharp, Head of ECOTECH Europe.



ECOTECH is a global pioneer and leading authority on the design, manufacture, installation and operation of ambient and trace gas analysers. The ECOTECH range of Serinus® gas analysers is the result of more than 40 years' experience and knowledge gained from operating significant air quality monitoring networks around the world.



Lyon, France is the home town and global headquarters of ACOEM Group.

The Serinus® range boasts instruments that perform with precision to the highest standards across a diverse range of applications.

The Serinus® range approved by LCSQA includes:

- Serinus® 10 Ozone (O3) analyser
- Serinus® 30 Carbon Monoxide (CO) analyser
- Serinus<sup>®</sup> 40 Oxides of Nitrogen (NO<sub>2</sub>) analyser
- Serinus® 50 Sulfur Dioxide (SO<sub>2</sub>) analyser.

For more information about Serinus® gas analysers approved by LCSQA for air quality monitoring in the French market, please contact Arnaud Lopez on +33 6 21 60 87 76 or email arnaud.lopez@acoemgroup.com



[LCSQA approval of Serinus® gas analysers] helps accelerate our ability to deliver products and services to industry, academia and government agencies across France.



World-first Small Sensor Environmental Test Chamber Relies on Reference Quality Serinus® Gas Analysers

Main pic: Ambilabs® Small Sensor Test Chamber with integrated reference quality ECOTECH Serinus® gas analysers.

Ambilabs® is an authorised distributor of ECOTECH products in the USA, Canada and the Caribbean.

US-based Ambilabs® has developed an industry-first Small Sensor Chamber that can accurately mimic global ambient environmental conditions using ECOTECH Serinus® gas analysers as its reference system.

The uniquely designed Ambilabs® Test Chamber is the result of 24 months of research and development to create a Small Sensor Test Chamber that produces, replicates, sustains and sequences through the whole spectrum of ambient environmental conditions for thorough product testing and analysis at reference quality.

The first Ambilabs® Test Chamber was completed in 2016 and commissioned by the South Coast Air Quality Management District (SCAQMD) for their AQ-Spec Laboratory located in Diamond Bar, California. SCAQMD is the air pollution control agency for Orange County and urban portions of Los Angeles, Riverside and San Bernardino counties, considered to be an area in the US containing a wide mix of air pollutants of concern, and with a large range of different emissions sources.



With the growing number of low cost, near-reference and/or small sensors entering the market, SCAQMD was looking for a cost-effective, reliable and fast-track way to test small sensors under a variety of different environmental conditions.

To test numerous small sensors in the field to the high standard required would have taken several years. However, with the new Ambilabs® Small Sensor Test Chamber. SCAOMD is now able to conduct extensive laboratory-based testing and analysis in a far shorter time-frame, often as little as just a few weeks, yet still exposing sensors to a diverse range of air pollutant conditions that is similar to what would be experienced in the field.

In addition to standard temperature and humidity control, the Ambilabs® Small Sensor Test Chamber can be easily configured with automated gas dilution and particle generator systems to provide specific atmospheric conditions to test the robustness of sensors and components. Coupled with five different ECOTECH Serinus<sup>®</sup> gas analysers, the Ambilabs® Small Sensor Test Chamber also tests for accuracy, precision and linearity.

#### Small sensor reference quality benchmark

The ECOTECH Serinus® range includes a variety of gas analysers that measure "representative" air in urban, industrial and rural areas. These measurements are used to determine the level of human exposure to pollutants.

For the Ambilabs® Small Sensor Test Chamber, Serinus® gas analysers accurately measure to reference quality:

- Sulfur Dioxide (SO<sub>2</sub>)
- Ozone (O<sub>2</sub>)
- Carbon Monoxide (CO)
- Hydrogen Sulfide (H<sub>.</sub>S)
- Nitrogen Oxide (NO).

Since the Ambilabs® Test Chamber was installed, SCAOMD has achieved impressive results. So much so that they have been eager to share its capabilities with other US and international agencies.

(Continues on page 6)





With the growing number of low cost. near-reference and/or small sensors entering the market. **SCAOMD** was looking for a cost-effective. reliable and fasttrack way to test small sensors under a variety of different environmental conditions.





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Using Serinus® gas analysers and calibration system for the **Small Sensor Test Chamber** provided the solution [Ambilabs®] needed to ensure that various gas levels were consistently accurate and at reference quality.

(Continued from page 5)

SCAQMD conducted tours of their facility showcasing the Ambilabs® Small Sensor Test Chamber at their 2017 "Making Sense of Sensors" conference attended by more than 250 government, industry, academic and research organisation delegates from the environmental monitoring community. "US government environmental agencies and industry were looking for a way to test small sensors and components in a more efficient, effective and less time-consuming way," said Andy Tolley, Ambilabs® Business Manager.

"Using the latest ECOTECH Serinus® gas analysers and calibration system for the Ambilabs® Small Sensor Test Chamber provided the solution we needed to ensure that various gas levels were consistently accurate and at reference quality. They are definitely an essential component in any high-precision solution and make the Ambilabs® Small Sensor Test Chamber a one-of-a-kind in the market. As a result, we're now fielding requests from other environmental agencies and research facilities across North America," he added.

Ambilabs® also sponsored the inaugural UC Davis Air Quality Research Center's Air Sensors International Conference at the Oakland Convention Centre, California in September 2018. The Ambilabs® Small Sensor Test Chamber was on display and Ambilabs® Andy Tolley spoke to delegates interested in learning more about the test chamber or seeking advice about precision reference instrumentation – for test chambers or colocation verification systems within small sensor networks.

To learn more about the Serinus® equipped Ambilabs® Small Sensor Test Chamber contact ECOTECH at email@ecotech.com or Ambilabs® at info@ambilabs.com

For more information about ECOTECH Serinus® gas analysers visit www.ecotech.com/product/gases/ambient-trace







#### Did you know every TOGETHER magazine and more is available online now at https://digitalkiosk.ecotech.com?

Never miss an issue again by subscribing to ECOTECH at www.ecotech.com/subscribe

Story highlights from back Issue 3 (pic right) include:

- Emergency Response Vehicle Accurately Monitors Visibility & Particulate Levels During Wild Fires in North America
- What Do an Acoustic Consultant, a Noise Monitoring Expert & an Air Quality Scientist Have in Common?
- Collaborative Air Quality & Climate Research Expedition Powered by ECOTECH Instruments
- ACOEM Environment Opens Office in Sweden.

Published three times a year, TOGETHER is ECOTECH's magazine about environmental monitoring for staff and friends. Subscription is free.



If you'd prefer a limited-edition print version of TOGETHER magazine for your personal library, email your full contact details to together@ecotech.com and we'll post it to you.



# **Monitoring Vibration to Preserve History**

Main pic: Wat Tham Phra Phothisat temple in Thailand.

ECOTECH and 01dB are stablemates in a special division of ACOEM called ACOEM ENVIRONMENT

ACOEM ENVIRONMENT brings together two respected leaders in the fields of environmental monitoring to create the first globally integrated offering of products and services across noise, vibration, air, dust and water pollution monitoring.

- 01dB is an expert in noise and vibration monitoring.
- ECOTECH is a global leader in the design, manufacture, operation and maintenance of air, water, gas, meteorology, blast, fine particulate and dust monitoring systems.

When the Prime Minister of Thailand calls, ECOTECH stablemate and noise and vibration monitoring experts o1dB steps up to accept the challenge – to help preserve a gem of Thailand's cultural and religious history.

Wat Tham Phra Phothisat is a Buddhist temple complex situated in a lush forest landscape in the Saraburi province of Central Thailand. This serene location is made up of a series of structures and an ancient cave in the surrounding cliff face. The cave is home to a priceless 7th century bas-relief of Buddha and Hindu gods from the Dvaravati period as well as a stone stela inscribed with religious scripture that is over 1000 years old.

The tranquillity of this area was threatened recently when mining operations began within a short distance of the temple site. The 'Ajarn' or Abbot of the temple became increasingly worried about the effect that daily mining blasts would have on these priceless artefacts.

A journalist covered the story in a local publication which led to a more detailed investigation by the Thai Government.



#### 01dB forges strong relationships built on a foundation of trust

Thailand Pollution Control Department (PCD), the national agency within Thailand's Ministry of Natural Resources and Environment, has enjoyed a long working relationship with o1dB, initiated and nurtured by ACOEM Asia Managing Director, Patrice Pischedda. Patrice is a global expert in noise and vibration monitoring, with 20 years' experience servicing government departments and environmental agencies in the Asia-Pacific region.

PCD has invested in a number of o1dB permanent monitoring systems (DUO and CUBE) on a variety of construction projects. After consultation with Patrice, PCD was quick to recommend o1dB's new ORION vibration monitoring system as the best way to assess the impact that the mining explosions were having on the site. ORION was used in conjunction with an external sensor, the triaxial seismometer, to capture the most accurate vibration data.

Ultimately, the goal was to establish whether the mining company was adhering to DIN4150 regulation standards and that the resultant peak particle velocity (PPV) was within an acceptable range.

ORION's portability and ease of use was a great advantage for this monitoring project. Within a few days PCD could assess that the vibration impact on the site was within the legal parameters and report back to the Government and the temple authorities. PCD will carry on maintaining the integrity of this historic site and has already utilised ORION to ensure compliance of environmental regulations by industry at other sites.

"We are proud of the role that ORION played in assisting the PCD to preserve these important historic artefacts," said Patrice.

(Continues on page 10)





[The Thailand Pollution Control **Department** was quick to recommend o1dB's new **ORION** vibration monitoring system as the best way to assess the impact that the mining explosions were having on the **fancient** cave and the priceless artefacts insidel.



ACOEM Group

About ORION: ORION by 01dB offers an unparalleled, all-in-one vibration monitoring system with integrated sensor, 3G modem, Wi-Fi and GPS. It is robust, waterproof, easy to configure and use, and features seven measurement channels and smart integration of vibration standards.

- · Robust & hard-wearing
- · Easy to configure
- · Metrological perfection
- · Easy to install
- · Always connected.

#### (Continued from page 9)



01dB ORION's portability and ease of use was a great advantage for this monitoring project

#### **Helping the Thailand Pollution Control Department** achieve its mission

Additionally, in central Bangkok, a construction project came to the attention of the PCD when neighbours and residents of an adjacent condominium raised their concern over vibration and noise levels. PCD set up an ORION monitor in an area within the condominium complex over a period of weeks to cover the entire duration of piling works. The data captured was used to ascertain whether the vibration from the piling blasts were within the legal limits or could cause structural damage to the residential building.

o1dB provided PCD with expert advice based on ORION's data. Although the noise and vibration levels were within an acceptable range, the timeframes were not, and as a result the PCD imposed tighter restrictions on the construction company to ensure that no work was carried out on weekends.

"Having developed a strong working partnership, o1dB continues to provide ongoing support and advice to PCD, and ORION has now become the vibration monitoring instrument of choice for Thailand's environmental authority,' added Patrice.

Learn more about ORION at www.ecotech.com/product/noise-vibration-monitoring





01dB's ORION – helping the Pollution Control Board to preserve the 10th century stela at Tham Phra Phothisat, Thailand.



7th century carvings at Tham Phra Phothisat, Thailand



**ORION** has now become the vibration monitoring instrument of choice for Thailand's environmental authority.



# **Air Monitors Strengthened Across UK**

More than 40 towns and cities in the UK are at or have exceeded air pollution limits set by the World Health Organization (WHO) reported BBC News on 4 May 2018. Areas that exceeded this level included London, Manchester and Swansea.

Source: www.bbc.com/news/ health-43964341 Air Monitors Ltd becomes an official UK distributor for ECOTECH environmental monitoring instruments including the Serinus® range of world-class reference quality gas analysers.

The ECOTECH Group has enjoyed a long and successful working relationship with Air Monitors Ltd, a privately-owned UK-based company that specialises in the sale, service and maintenance of world-class environmental monitoring technologies. As a distributor for the ECOTECH range of Serinus® gas analysers and Aurora® integrating nephelometers, Air Monitors Ltd has always provided UK customers with exceptional after-sales service and ongoing local support for ECOTECH equipment.

#### Building on the strengths of existing relationships

2018 marks a new chapter in the partnership between the two companies, as Air Monitors Ltd is awarded the official role of major distributor. Now selling the full range of ECOTECH environmental monitoring instruments and systems across the United Kingdom.

Air Monitors is headquarted in Gloucestershire, South West England, with a regional office in Scotland. Their products are MCERTS approved, and they boast a large team of dedicated and knowledgeable sales, maintenance and technical support staff, with expertise in equipment calibration, reporting and data analysis services. "We pride ourselves on our commitment to offering environmental monitoring solutions made up of the finest products, technology and services designed to comply with British and European environmental regulations and standards," commented Jim Mills, Managing Director of Air Monitors Ltd.

"Being able to sell, install and maintain the entire range of ECOTECH instruments, we are confident that we're providing industry, government and research organisations with value-added services and the best possible options in environmental monitoring."

#### **Boosting ECOTECH's global footprint**

With established offices in France and Sweden, for ECOTECH, deepening the relationship with Air Monitors Ltd in the UK represents another example of the company's commitment to servicing the European market and expanding operations in the region.

"Local knowledge, global expertise," stated Felicity Sharp, Head of ECOTECH Europe. "Working together with likeminded people. Going beyond thought leadership to find commercial insight. Building new solutions together. This is how we help our distributors and their customers succeed."

"This is an opportunity to reinforce and build on the synergies that have long existed between our two companies"

"Air Monitors Ltd's experience in the UK environmental monitoring market and extensive familiarity with ECOTECH products ensures that customers in England, Scotland, Wales and Northern Ireland receive superior service and advice when purchasing ECOTECH instruments," she added.

For more information about ECOTECH contact Felicity Sharp on +33 6 6544 1064 or felicity.sharp@ecotech.com For more information about Air Monitors Ltd contact Jim Mills on +44 1684 857 530 or jim@airmonitors.co.uk





This is an opportunity to reinforce and build on the synergies that have long existed between our two companies.



Distributed exclusively in Australia by ECOTECH, the Mercury Tracker 3000 XS is 50% smaller and 50% lighter than its predecessor, the 3000 IP.

The new Tracker 3000 XS, from Mercury Instruments, was on show for the first time anywhere in the world on the ECOTECH stand at the Australasian Oil & Gas (AOG) 2018 exhibition in Perth.

AOG provided the perfect platform for ECOTECH to introduce the game-changing Mercury Tracker 3000 XS, a new ultralight and compact mercury vapour analyser, distributed exclusively in Australia by ECOTECH.

#### Precision engineering, high performance & lower cost

Designed by Mercury Instruments, the trusted German brand recognised as an international market leader in manufacturing state-of-the-art mercury analysers, the 3000 XS maintains the same functionality and performance as its successful predecessor, the 3000 IP, but in a more convenient, lightweight casing and only half the size. The Mercury Tracker 3000 XS also comes at a lower cost and possesses enhancements like integrated GPS coordinates and upgraded software. Rather than monitoring a timed



sample, it can monitor continuously to ensure greater accuracy and higher safety levels for oil and gas industry employees.

Key features of the Mercury Tracker 3000 XS portable mercury analyser include:

- · Direct reading mercury vapour meter
- 50% smaller and lighter than 3000 IP
- Shock proof and corrosion resistant for heavy duty outdoor applications
- High precision dual-beam UV-photometer
- Electrodeless low-pressure mercury lamp
- Sensitivity 0.1 μg/m³ (0.01 ppb)
- Continuous operation (no cycles)
- Rechargeable battery pack with 5 hours operation
- · Integrated GPS.

#### **ECOTECH** working with industry to solve problems

ECOTECH's mercury and hydrogen sulfide monitoring solutions specialist, Andy Park, works closely with the oil and gas industry to ensure that portable HG, H<sub>2</sub>S and O<sub>2</sub> monitoring and processing instruments meet the stringent occupational health and safety needs of its customers.

AOG helped ECOTECH showcase this top-of-the-line instrument. "Its continuous operation, accuracy, high performance, smaller size and lighter weight casing make the Mercury Tracker 3000 XS the new instrument of choice for rig and refinery maintenance," said Andy. "We also understand the significant role that ongoing costs such as calibration and maintenance can and do play when making purchasing decisions about environmental monitoring equipment."

"Because the accuracy drift over time in the Mercury Tracker 300 XS is negligible compared to other makes, the recommended annual calibration service for the 3000 XS can be pushed out beyond 12 months, making it a lower maintenance option," he added.

To order the Mercury Tracker 3000 XS or learn more about ECOTECH's range of portable monitoring units, contact Andy Park at andy.park@ecotech.com

Its continuous operation, accuracy, high performance, smaller size and lighter weight casing make the **Mercury Tracker** 3000 XS the new instrument of choice for rig and refinery maintenance.







# Shared Commitment, Honesty & Respect The Keys to Successful International Relationships

Main pic (L-R): Sithiphorn Associates' Somchit Srisuwatchree, Sales Department Manager and Dr Percha Hengtrakul, Managing Director join Patrice Pischedda, ACOEM Asia Managing Director (far right) at the Thai-French Smart Cities Symposium in Bangkok on 2 July 2018.

About Sithiphorn Associates: Sithiphorn was established in 1976 and is one of the leading scientific equipment distributors in Thailand and ASEAN region with more than 220 staff and 10,000 customers.

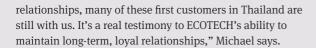
Learn more at www.sithiphorn.com

ECOTECH manages every business relationship with a unique blend of professionalism, strong interpersonal skills, empathy, respect and honesty.

It's a genuine belief in "success through connection" that enables ECOTECH's International Business Manager for Asia, Michael Zeng, to cultivate and maintain the strong international relationships that have led to ECOTECH's global expansion, including the successful merger with French giant ACOEM in 2017.

Michael joined ECOTECH after a successful career in the renewable energy sector, and now manages all sales and customer interaction in Asia, including China, Taiwan, Korea, Japan and South East Asian nations, such as Vietnam and Thailand. He supports ECOTECH's existing distributor network and helps develop new distributors in other countries.

"ECOTECH began exporting to South East Asia, specifically Thailand, over 20 years ago. Due to our strength in nurturing



#### **Delivering tailored solutions for local** environmental challenges

ECOTECH is a manufacturer that delivers more than just a product. Michael says this is a major contributor to the success of international relationships.

"In Australia, we not only manufacture our products, but will integrate them into a system, providing a one-stopshop solution. We are able to share this knowledge and experience with our international distributors," Michael said.

"Through our long-standing relationships, we understand environmental challenges, particularly in those countries that are rapidly industrialising and need to adapt to meet changing community needs," he added.

"Our customers appreciate the fact that we can talk frequently about any issues or urgency in project delivery. Over time we have come to know and understand each other. Effective communication is a critical ingredient in successfully maintaining these relationships."

#### We are like family

For many distributors, ECOTECH has become an extended part of their family. As long-standing, generational family businesses, the strong, trusted personal connections they have forged are crucial in their day-to-day business dealings.

Bringing people together and sharing knowledge and expertise freely is something ECOTECH is particularly passionate about. For example, ECOTECH routinely hosts a worldwide distributor conference that customers travel from all over the globe to attend. The 2018 event will be hosted in Lyon, France this October.

"I find it very rewarding to develop close relationships with our distributors. Over time, many customers have become personal friends," says Michael.

(Continues on page 20)





Through our long-standing relationships, we understand environmental challenges, particularly in those countries that are rapidly industrialising and need to adapt to meet changing community needs.





Pic: Michael Zeng, ECOTECH Business Manager Asia. Michael has a Master of Science from the University of Western Australia and an MBA from the Australian Graduate School of Management (AGSM).

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Our customers support us in our vision to solve problems, achieve growth and work for the greater good. (Continued from page 19)

#### Breakthough sales opportunity in Laos

ECOTECH's new business partnership in Laos is a perfect illustration of how the company benefits constantly from these unique relationships.

This new relationship marks the first time ECOTECH has sold into Laos – and came due to an opportunity identified by one of ECOTECH's long-term and most successful distributors in Thailand, Sithiphorn.

"As our first ever export country, Thailand is a strong and loyal supporter for us. A distributor with an office in Laos spotted the opportunity, reported back to us and with their help, we secured the sale. We were delighted that our distributor shared this connection with us," Michael commented.

#### A mutual commitment to succeed

One of the key reasons for ECOTECH's success in international relationships is the genuine, shared commitment to help each other succeed.

"Our customers support us in our vision to solve problems, achieve growth and work for the greater good. What ECOTECH brings to relationships is a deep understanding of the power of connection. We work collaboratively, across different cultures and languages and offer a full understanding of specific local needs. The longevity and quality of our international relationships has played an enormous part in ECOTECH's ongoing success,"

Across the world, through the strength of international relationships, ECOTECH is creating a better place to live, now and for future generations.

Contact Michael Zeng to learn more about ECOTECH in Asia on +61 400 267 674 or michael.zeng@ecotech.com





ACOEM Group



everyone's family

## Learning for Life with The Smith Family

#### Did you know that you can volunteer for The Smith Family?

The Australian-based children's charity, which focuses on furthering education to stop the poverty cycle in families, runs regular events to encourage sponsors and individuals to help out. In addition to their famous Winter and Christmas Appeals, there are many other ways that you can help during the year:

- One-off donations
- Sponsor a child
- · Host a gift collection
- · Mentor a young person
- Fundraising
- · Workplace giving, and much more.

"Volunteering was a lot of fun, the other volunteers were very friendly, and The Smith Family were so accommodating," Jackie said. "On a personal note, it made me realise how lucky I am, and to see first-hand the positive impact ECOTECH is having on young people's lives," she added.

To learn more about The Smith Family, and how you can sponsor young people in need by providing access to The Smith Family's Learning for Life education support programs, please visit www.thesmithfamily.com.au

Pic (L to R): ECOTECH volunteers Maree Dalzotto. Head of People & Safety, Jackie Edwards, Safety Advisor, and Claire Frost, Marketing Coordinator.

Volunteering with The Smith Family is rewarding and helps participants better understand the circumstances sponsored kids are going through.



# Dilution Extractive Continuous Emission Monitoring System on Show at CEM India

About AIC: Analyser Instrument Co (AIC) is a leading system integrator of Continuous Emission Monitoring Systems (CEMS) and Continuous Ambient Air Quality Monitoring Systems (CAAQMS) in India.

AIC is the authorised ECOTECH distributor in India for the CEM markert.

AIC have 50 employees spread across India for sales and aftersales service. AIC integrates and manufactures complete systems, including analyser shelters, in-house at their 2500m² facility.

Learn more at www.aicplindia.com

ECOTECH, a global leader in air quality monitoring, were proud to participate at Continuous Emission Monitoring (CEM) India to showcase the Dilution Extractive Continuous Emission Monitoring System (CEMS) alongside its exclusive Indian CEMS distribution partner, Analyser Instrument Co Pvt Ltd (AIC).

ECOTECH CEMS offers the latest technology coupled with ECOTECH's 40 years of experience in the field.

The CEM India conference and exhibition in New Delhi is India's flagship emissions monitoring event offering delegates in-depth information on Indian pollution regulation and policy, monitoring guidelines, calibration and quality control.

#### One system with multiple applications

ECOTECH has been designing, manufacturing, supplying, operating and maintaining the highest quality emission monitoring systems for a variety of applications and

industries worldwide since the early 1980s. These industries include:

- Smelting
- · Power generation
- Refineries
- Steel
- Chemical
- Minerals processing.

ECOTECH CEMS utilises extractive dilution probe technology, ensuring consistent reliability, repeatability and precise measurement. This method is widely used for continuous emissions monitoring of SO<sub>2</sub> and Nitrogen Oxides (NO<sub>2</sub>), CO, H<sub>2</sub>S and NH<sub>2</sub>. It can also be combined with a zirconium oxide sensor for the continuous measurement of O.

The extractive dilution system can be configured as a mobile or fixed installation.

ECOTECH combines the dilution extractive technology with its proven range of Serinus® ambient gas analysers for accurate, real-time monitoring. Due to the high sensitivity of Serinus® analysers, measurements are more accurate as water vapour and gases cannot condense and impact on representative sample extraction.

#### **Exceeding industry standards with precision** monitoring & real-time data collection

ECOTECH CEMS is approved for use by multiple environmental authorities worldwide and provides real-time data to demonstrate compliance with standards set by emission regulators and pollution control authorities.

International approval of the ECOTECH range of Serinus® gas analysers includes:

- US EPA approval (EQOA-0809-187)
- EN approval TÜV (936/21221977/C)
- EN approval MCERTS (MC100165/06)
- LSCQA approval (France)
- Australian Standard (AS 3580.6.1-2016)
- Russian approval (56053-13).

All analysers in the system are connected digitally to a data acquisition system, enabling remote communications and

(Continues from page 24)





In partnership **[ECOTECH &** AIC] have been responsible for supplying **CEMS** integrated by AIC to a number of major organisations [in India for decades], in particular in the petrochemical industry.

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ECOTECH
gas analyser
based CEMS
provide long
term solutions
for Indian
industries,
backed up by
exceptional
sales and
service support.

(Continued from page 23)

operation of the system. The software seamlessly integrates with the CEMS to manage data collection, perform correction calculations, calibrate analysers and generate reports.

#### Proud partnerships in India

ECOTECH has been working with AIC for more than a decade in India. In partnership, they have been responsible for supplying CEMS integrated by AIC to a number of major organisations, in particular in the petrochemical industry.

Examples include the Indian Oil Corporation Ltd (IOCL), India's largest commercial enterprise and operators of 50% of India's refineries; Mangalore Refinery and Petrochemicals Limited (MRPL); and Oil and Natural Gas Corporation Limited (ONGC).



ECOTECH continues to work with industry and government authorities to help lead the way in air quality monitoring and environmental solutions in India.

According to Sanjeev K. Gupta, Director of AIC, the company was initially attracted to ECOTECH due to expertise in the field and high quality of gas analysers.

"The feedback we have had over the years from our customers has been extremely positive, especially in terms of ease of operation and accuracy. ECOTECH gas analyser based CEMS provide long-term solutions for Indian industries, backed up by exceptional sales and service support," commented Mr Gupta.



## Working with industry to monitor emissions

Each ECOTECH CEMS is custom designed and purpose built to suit the individual needs of customers and their specific applications.

ECOTECH invests heavily in research and development and manufactures the majority of the components and analysers that make up the CEMS. This allows ECOTECH to offer an unparalleled level of product knowledge and on-the-ground support and maintenance for the Indian market.

"We enjoyed joining our Indian colleagues and being part of the CEM India event," said ECOTECH International Business Manager for India and the Middle East, Manoj Kumar.

"At ECOTECH, we are committed to utilising the latest technology to enhance our monitoring products and provide the best systems on the market. We welcome the opportunity to discuss ways to further improve how air quality is monitored in India," he added.

To learn more, please contact Manoj Kumar at manoj.kumar@ecotech.com and look out for CEM India returning in 2019.



The feedback we have had over the years from our customers has been extremely positive, especially in terms of ease of operation and accuracy.



# **Creating Careers out of Cadetships**



Graduating engineers
David Mimery (main pic)
and James Merry pictured
with their proud parents.

ECOTECH prides itself on providing career development opportunities for its team members, nurturing young talent and investing in their growth within the company. With its cadetship program, ECOTECH lays the foundation for up-and-coming engineers to learn about the industry and develop skills while being mentored by senior staff.

Two of ECOTECH's rising stars recently graduated with engineering degrees from their respective universities after working with the company since they were in high school.

James Merry joined ECOTECH in 2010 after accepting a cadetship which encouraged him to study while working part time. Beginning in Year 12, James successfully balanced his final year of high school with TAFE courses and many hours learning the ropes at ECOTECH. When he enrolled in a Bachelor of Mechanical Engineering degree at Swinburne University, James continued working one day a week and during semester breaks at ECOTECH, moving



from the Production department to Systems and then Research & Development.

Early on, James identified his niche in production and in 2013 was offered a permanent position as production engineer, with more responsibility and a steady salary that made completing the remainder of his degree on a part-time basis that much easier.

"The welcoming culture of ECOTECH, with the feeling of being part of a family, has made this experience a really positive one," said James.

David Mimery also began with ECOTECH during Year 12, in 2012. The flexibility of the cadetship program made it possible to balance his hours at ECOTECH with his studies and working part time at a second job. He credits managers like Viral Chitroda and James Agius for personally guiding him through the transition of study to work and introducing him to the engineering industry.

For David the most appealing part of the cadetship was being able to rotate through various departments to get real insight into the way ECOTECH operates - from Production to Testing, Systems, Service, and Research & Development.

Like his colleague James Merry, David also gained a permanent role as a production engineer prior to graduating with a Bachelor of Mechatronics Engineering from Monash University. He credits the incredible support he received from his mentors, and the resources that he had access to, for his to success in completing his degree.

"Being immersed in both the technical and business sides of the organisation was eye-opening for me," he commented. "From working on highly technical projects to servicing customers and giving back to the community, I have seen how this company has adapted, grown and evolved, which makes me extremely optimistic about the future and my career at ECOTECH," he added.

The most appealing part of the cadetship was being able to rotate through various departments to get real insight into the way ECOTECH operates.

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Main pic: Wind Tunnel Calibrations Officer, Tim Sallai, performing an anemometer calibration using ECOTECH's NATA accredited wind tunnel.

Pic above: Horacio Viana, ECOTECH Customer Services Manager.



## Meticulous & Precise - NATA Accredited Labora

Maintaining the accuracy of wind instruments through calibration is a specialist service offered by Horacio Viana, Customer Services Manager, and his dedicated Calibration Services team at ECOTECH, using a NATA accredited wind tunnel designed by CSIRO (Commonwealth Scientific and Industrial Research Organisation).

Did you know ECOTECH'S wind tunnel, located in ECOTECH's Melbourne head office, is the only NATA/ISO 17025 accredited facility in Australia that can calibrate all types of anemometers, including hot wire, vane, cup and ultrasonic varieties?

The wind speed capacity of the wind tunnel ranges from as low as 0.3 metres per second to 30 metres per second (108 km per hour), the former being critical for measurement of wind speeds in clean rooms, air conditioning systems and for flow hoods.





tories & Services

#### The capacity to calibrate hot wire, vane, cup & ultrasonic anemometers sets ECOTECH apart

At seven metres in length, this is the largest NATA accredited wind tunnel of its type in Australia, with two specific testing areas, one for high speed and one for low speed.

The capacity for both low and high-speed testing means ECOTECH can deliver greater range and faster turnaround of results, without compromising accuracy and precision.

#### Helping to keep employees & communities safe

The process of calibration is meticulous, precise and executed in ECOTECH's NATA accredited facilities that comply with the requirements of ISO/IEC 17025:2005, as Horacio knows all too well.

ECOTECH customers trust the Calibration Services team to help ensure their instrumentation provides the most

(Continues on page 30)

**[ECOTECH]** has] the only NATA/ISO 17025 accredited facility in Australia that can calibrate all types of anemometers, including hot wire, vane, cup and ultrasonic varieties.



(Continued from page 29)

accurate measurements. Horacio and the team take this responsibility very seriously.

"Many of these measurements are critical to the health and wellbeing of customers, patrons and the general community," Horacio said.

# NATA accreditation & customer satisfaction critical to ECOTECH's success

Problem-solving and superior customer service are two of ECOTECH's core deliverables, especially in Calibration Services.



"Having NATA accreditation is very important to our customers. NATA accreditation means ECOTECH customers can have confidence that our processes, procedures and reports are meticulously accurate and conducted in accordance to a rigorous international standard."

"We are strongly committed to continuous improvement. If we see an area for improvement, we take the time to discuss

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At 7 metres in length ECOTECH's wind tunnel is the largest NATA accredited wind tunnel of its type in Australia.

this in detail. Customers appreciate our proactive approach and dedication to their success," Horacio said.

ECOTECH holds NATA accreditation numbers 14184 and 19650 for facilities located in Melbourne and Perth respectively. ECOTECH's NATA accredited facilities and services comply with the requirements of ISO/IEC 17025:2005 including:

- Testing Laboratories including ozone calibration
- Calibration Laboratory including temperature. RH, wind speed/wind direction and solar
- Blast Monitoring Service.

#### Experienced hands making a difference

Horacio is well qualified to lead his team of specialists in Calibration Services. He has acquired over 20 years of significant international expertise in relevant fields from prior roles in Mexico and his native Colombia before joining ECOTECH with diverse roles in the service department, research and development team and data collection.

In his current role, Horacio leads the Calibration Services team. "I want my team to enjoy what they do, and it's fantastic to see this reflected on a daily basis," he said.

Horacio says that ECOTECH is a dynamic organisation in a thriving industry, which has offered him many challenges and opportunities.

"I feel very strongly about the positive impact ECOTECH has on the world. Through our work in monitoring pollution, contamination and environmental factors, we are helping everyone to live a better life."

For more information about the NATA accredited testing and calibration services ECOTECH provides to customers in Australia and abroad call Horacio Viana on +61 3 9730 7800 or email@ecotech.com

NATA accreditation means ECOTECH customers can have confidence that our processes, procedures and reports are meticulously accurate and conducted in accordance to a rigorous international standard.

99



# TOGETHER

ECOTECH'S MAGAZINE ABOUT ENVIRONMENTAL MONITORING

2018 Issue 4

TOGETHER
WE CREATE
SOLUTIONS
THAT SHAPE
THE FUTURE



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