

# Production Update

Over the last 12 months a major focus within Syft has been the planning and implementation of major production improvements. The benefits of this change are being seen throughout the business and production capability is no longer the growth constraint it has previously been. This is a key milestone as Syft sheds the last traces of its 'start-up' mindset and establishes the operational expertise required to support a multinational business of scale.

The key focus has been on the standardisation and quality of process throughout every element of production. Rigorous standardisation protocols have been applied across the entire production process: our quality assurance processes, engineering drawings, standard operating procedures, training processes, testing procedures, and supplier audits. All of these have come together to ensure complete consistency in instrument builds. While improvement processes may sound easy to implement, in reality they are difficult to establish correctly and require a highly committed and disciplined workforce.

While completing all these changes, our staff also formalised and standardised Syft's Quality Management System in under six months, a feat that achieved high praise from the ISO9001

consultant who undertook an independent review of Syft's standards.

**After reducing our unit production time by nearly half in the past 12 months, our goal for the next 12 months is to halve production times again and see many more units despatched to customers.**

We take these successes for granted at Syft, due to the quality of our production team and our culture of constant improvement. However, for the staff to have achieved these improvements at the same time as supporting the launch of the Voice200Infinity instrument to complete the large Micron order was very impressive. I want to acknowledge the fantastic job done and extend my thanks to our dedicated team.

## COVID-19

*We want to let you know what we are doing in response to Coronavirus (COVID-19). The safety and wellbeing of Syft's staff, customers and suppliers, whether in New Zealand or overseas, is our highest priority.*

We have had well established procedures and protocols in place for some time. We have taken the opportunity to review these in the light of the specific circumstances surrounding COVID-19 to ensure they remain fit for purpose, ensure our staff and other parties to whom we owe a duty of care are well looked after, and enable Syft to operate with as little disruption as possible.

We're following the Ministry of Health's guidelines for employers around keeping our offices and manufacturing areas clean and safe.

Overseas and domestic travel has been stopped and we have ensured all staff have access to technology to ensure meetings can still be held, whether at work or from home. We are supporting our team with leave if they or family members have been impacted by self-isolation requirements or special circumstances.



Al Monro  
**Chairman**



Doug Hastie  
**Managing Director**

### INSIDE

02

Large order by Korea's National Institute of Environmental Research

02

Measuring megacity pollution levels

03

Meet some of our senior staff





## SIFT-MS units are being used in a wide variety of applications and across an increasingly diverse range of sectors

### Bowel cancer screening

Syft SIFT-MS units were recently in the news in relation to the transformational differences they are making in the detection of bowel and other gastro-intestinal cancers.

Research by Imperial College London has identified biomarkers that are present in the breath of people who have cancer. Syft's technology can detect compounds in air to a parts-per trillion level and has become a key component of the non-invasive testing programme that has been identifying cancer more accurately and earlier than current bowel screening tests and home kits. New Zealand trials are being started after the technology was successfully trialled over two years in the UK, seeing thousands of people being tested. The media release is available [here](#).



### Measuring megacity pollution levels

In order to understand more about pollutant measurement in a major city, a recent global research collaboration used four different "established" techniques together with a Syft Voice200Ultra to measure the level of pollutant nitrous acid (or HONO) in Beijing.

HONO is a challenging chemical to measure in field conditions due to the reactivity of the compound and the potential for measurement interference from other species. It is an important compound for air quality researchers due to its role in the formation of radicals that go on to produce other dangerous pollutants. It is reactive and has the potential to be affected by interference from other species.

The results obtained for the "established" techniques showed significant deviations in reported concentrations – up to two times – however the Voice200Ultra performed extremely well. In fact, the SIFT-MS results were the most reliable of any technique trialled.

To read more about the study and to access the research paper click [here](#).



### SIFT-MS is being used at the Egyptian Museum in Turin

Chemists from Pisa have teamed up with the archaeologists and curators of Turin's Egyptian Museum to investigate its tomb of Kha and Merit. As part of the investigation, the contents of thirty amphoras, vases and small vessels were investigated at a molecular level in a completely non-invasive, non-destructive way. A SIFT-MS unit was used to detect the volatile organic compounds still present in traces inside the amorphous materials in the containers or adsorbed by the ceramic.

The promising results of the first campaign have persuaded the staff of the Egyptian Museum to extend the study to a wider range of objects, including mummies which will soon be exposed in a dedicated area of the museum. The new study has included 30 additional items found in the 3500-year old tomb during the 1906 excavations.

While the SIFT-MS units are more commonly employed in the medical sector or in environmental monitoring of pollutants, it has recently proved suitable for applications in Heritage Science. The results will be complemented by analyses performed in the laboratory with more conventional techniques. To read the full article click [here](#).



## NIER Korea

Syft instruments are becoming increasingly well known for their semiconductor and medical industry applications but potentially the biggest growth area over the next 5 -10 years will be the environmental applications. The technology's unique attributes enable the rigorous and data rich measurement of air quality that can then be used to plan and deliver substantial improvements, benefiting the population and the environment.



Instruments are now being used in many environmental applications throughout the world, but our largest single order occurred late last year when we delivered 15 instruments to Korea's National Institute of Environmental Research for use in environmental testing.

This is a fantastic result for our Korean office, and to Jihoon Lee in particular, our General Manager in Korea, and a world leader in the environmental application.

The instruments are used for air-quality mapping and pollution source identification. Analyte concentration measurements are taken whilst the vehicles are moving around the city and relayed to a central control vehicle, along with location and meteorological data, to generate a "heat-map" of the area. This approach enables air quality screening to be quickly completed, allowing a rapid response to complaints and pollution events.





**Jihoon Lee**  
Director of Sales: Asia

Jihoon was born in Korea and graduated in chemistry from the National University in Korea. His early work was in research and development in gas chromatography, including work on Korea's first thermal desorption system which was then commercialized. At Samsung he worked on a Micro contamination monitoring system

before moving to sales. In 2014 Jihoon joined Syft as a distributor and assisted with the development of applications for the semiconductor industry and for environmental research. In 2018, Jihoon became Syft's Asia sales director and is general manager of Korean office.



**Dan Glassenbury** BE(Hons)  
Production Manager

Dan was born and raised in Christchurch – a rarity for Syft which has a wonderful blend of ethnicities and cultures! Dan studied Mechatronics engineering at the University of Canterbury, with a focus on early stage development of medical products. He has had experience at the extreme end of standardisation and control, working in the aviation industry during his degree.

Dan first joined Syft as an intern in the summer of 2013, after searching for a high growth company with an ultra-high-tech product. During his internship he worked in production, feeding back design improvement ideas to the engineering team. Dan then joined Syft full-time and has been key in the growth of the production team. Outside of work he is a keen martial artist with over 12 years of Taekwondo under his belt.

Greg Jones began his career in the UK with General Motors as a Mechanical Design Engineer before moving into Production Engineering across multiple assembly plants throughout Europe.

On moving to TRW Automotive, a Tier 1 supplier of power steering to multiple automotive manufacturers, Greg held roles including Production Engineering Manager and the Quality Manager focussing on the implementation of effective quality management systems throughout the business, including supply chain and new product introduction with several automotive manufacturers.

In 2006, Greg and his wife moved to Christchurch. Prior to joining Syft Greg was Global Manufacturing Manager for a manufacturer of semi-trailers and container handling equipment manufacturer and established a facility and supply chain in China. He spent four years as Head of Production and Maintenance at an aviation start-up and then commenced his role as Senior Operations Manager at Syft. Greg is leading the transition and cultural shift to standardised manufacturing systems and processes.

**Greg Jones**  
Operations Manager



## key dates

**Mid June**  
ANNOUNCEMENT OF ANNUAL RESULT  
AND RELEASE OF ANNUAL REPORT

**Late August**  
SHAREHOLDER  
NEWSLETTER

**Early December**  
ANNOUNCEMENT OF  
FIRST HALF RESULT

**31 March 2020**  
END OF FINANCIAL YEAR

**Mid August**  
ANNUAL  
MEETING

**30 September**  
END OF FY21  
FIRST HALF



# New Directors

Syft is excited to welcome Professor Kate McGrath and Jeff McDowall to our board. Both new directors bring with them a wealth of knowledge and experience in their respective fields.



**Professor McGrath is currently Deputy Vice-Chancellor and Vice-President (Research) at the University of Technology Sydney.** In this role Kate provides the vision and leadership to build UTS's national and international profile in research training, external research engagement and innovation. She is responsible for the strategic direction, operations and support of research across the university.

With an extensive background in research and the translation and commercialisation of research and IP-led research partnerships with industry, Professor McGrath was previously Vice-Provost (Research) at Victoria University of Wellington and led the MacDiarmid Institute for Advanced Materials and Nanotechnology, a New Zealand Centre of Research Excellence. Kate has also had previous experience with the SIFT-MS technique at the University of Canterbury under the guidance of Professor Murray McEwan who was extensively involved in Syft's establishment.

Professor McGrath has been a director of university start-ups, not for profits and Callaghan Innovation, the New Zealand Government's innovation Crown entity.



**Jeff McDowall is the Chief Financial Officer at Air New Zealand where he was also Acting Chief Executive Officer for the period from September 2019 to February 2020.** Prior to joining Air New Zealand in 2000, Mr McDowall was a management consultant with PricewaterhouseCoopers in New Zealand, Singapore and the United States, and three years with Mobil Oil in New Zealand and the United Kingdom.

Jeff has a Bachelor of Commerce and Administration from Victoria University, is a member of Chartered Accountants Australia and New Zealand and a certified member of the Institute of Finance Professionals NZ.

## CONTACT

### Address

3 Craft Place, Middleton  
PO Box 28 149, Christchurch

### Phone / Email / Web

+64 3 338 6701  
investor@syft.com  
[www.syft.com](http://www.syft.com)

### Share Registry

Computershare  
Private Bag 92119  
Auckland Mail Centre  
+64 9 488 8777