



L@b Brief | November 2023

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Hello again,



Last month's meeting of the International Standards Organisation's (ISO) committee on laboratory equipment, TC48, highlighted what has become a trend in all international standards committees, a concerted effort by China to gain the leadership of standards committees.

The business being done by TC48 included a re-structure of the committee's working groups in three areas:

- Non-measuring equipment made of glass, plastic and ceramics,
- Volume measuring instruments, and
- Laboratory furniture.

In every case the Chinese sought to provide the secretariat for the committee, and in each case, another country with more experience of running standards committees and formulating standards, was recommended to take on the role instead.

The meeting had the advantage of being chaired by Charles Pascall, a very experienced committee chair from the UK (and an ex-employee of GAMBICA member, AlphaLabs), but other areas of standards have not benefitted from a co-ordinated approach. For example, in June a proposal was made by the Chinese National Committee for a new Project Committee (PC) on Performance of cold storage equipment for medical use. All national bodies were invited to vote on the proposal and further inquiries are underway as to overlaps with existing committees.

GAMBICA is able to nominate members to participate on British Standards Committees with a view to being nominated to sit on International Standards Committees. If your business is affected by or uses international standards and you would like to ensure that your interests are adequately addressed, please put your name forward by emailing me at jacqueline.balian@gambica.org.uk.

Toodle pip!

Jacqueline

UK News

Made Smarter to be extended nationwide

THE GOVERNMENT'S recent autumn financial statement announced that Made Smarter Adoption is to become an England-wide scheme from 2025 for firms across the manufacturing sector. Made Smarter which was set up by the government to help manufacturing companies prosper through digital tools and innovation, has had some significant successes with one factory owner hailing its 'phenomenal' impact after he was able to improve productivity by 20% with the help of the scheme.

Beverston Engineering, based in Knowsley, invested £173,000 in sensor technology and software to connect all 20 machines across its factory to provide real-time visibility of its manufacturing. MD Rod Wah, said:

“Made Smarter has had such a phenomenal impact on the business, I’m recruiting [have] plans for £2m investment, and a healthy order book.”



Beverston began working with

Made Smarter in 2019 by developing a digital adoption roadmap. A first project in 2020 laid the foundations for the smart factory by enabling connectivity and upgrading IT infrastructure with a dedicated machine data server. The firm also installed sensors to monitor its machines and factory assets.

The company then created a ‘productivity control room’ - a bank of 18 big screens in the centre of the factory displaying real-time factory analytics, such as machine downtime events, availability, and performance metrics to the workforce.

A second project in 2022 created a platform which integrated all 20 machines and operators with its Enterprise Resource Planning and third-party systems, giving further real-time insight and analytics, enabling the business to react quickly to challenges and opportunities.

Commenting on the impact of Made Smarter, Donna Edwards, Director of Made Smarter’s North West Adoption programme, said: “Rod and the team have been enthusiastic programme participants from the beginning. We have backed them to invest in the right technologies at the right time.”

Donna will be one of the speakers at the upcoming GAMBICA Lab Industry Conference in March, speaking in a session on how your company can grow in a world full of AI. She will be explaining how to take advantage of what Made Smarter can offer to your business.

The conference will be dedicated to helping GAMBICA members capitalise on the opportunities of a digital transition enabling you to inspire and engage your teams with this major task, so all those attending the conference can bring additional members of staff for less than £100.

See overleaf for the full conference programme...

GAMBICA'S UK LABORATORY INDUSTRY CONFERENCE

12th March 2024

Venue: Stapleford Park, Melton Mowbray

| Strategic success in a future full of AI | |
|---|--|
| 08.30 / 09.00 | Conference registration and refreshments |
| SESSION ONE: FORECASTS FOR THE COMING YEAR | |
| 09.00 | Welcome: Paul Wheeler, Chair, GAMBICA Lab Tech Board |
| 09.05 | Special guest: Jonathan Reynolds, Shadow Secretary of State for Business (invited) |
| 09.45 | Economic forecast: Lee Hopley, Director, Economic insight and research, UK Finance |
| 10.10 | Forecast for the lab industry: Instrument Business Outlook; Mike Tice |
| 10.35 | Political forecast: John Arnold, Northern Universal |
| 11.00 | Refreshments |
| SESSION TWO: WHAT DOES AI AND MACHINE LEARNING MEAN FOR THE LAB INDUSTRY? | |
| 11.30 | The impact of the AI revolution on UK businesses over the next 5 years Ved Sen: Head of Innovation at Tata Consultancy Services and author of <i>Doing Digital: The guide to digital for non-technical leaders</i> |
| 11.55 | How AI is currently being used in the medical and lab industries Tim Hargreaves, Partner, Marks and Clerk, International Intellectual Property Experts |
| 12.20 | How to develop and fund your digital transformation strategy Donna Edwards, MD Business Support and Finance, The Growth Company |
| 12.45 | Lunch |
| SESSION THREE: WHAT DO WE WANT FROM THE FUTURE? | |
| 14.15 | If sustainability is important – how can AI help? Martin Bach, Alt-Bearings |
| 14.30 | Sustainability update Ben Sunderland, CAMLAB |
| 14.45 | Selling to universities – the upcoming framework and sustainability scoring Jiteen Ahmed, Chair SUPC |
| 15.00-15.30 | Refreshments |
| SESSION FOUR: OUR MAIN ASKS FROM THE INCOMING GOVERNMENT | |
| 15.30 – 16.25 | Influencing future government policy – your priorities Led by Steve Brambley, chief executive, GAMBICA Panel discussion on the current proposals and priorities |
| 16.25 - 16.30 | Results of business sentiment survey and close |

Lab space critical to be science superpower, ministers told

TWO PROMINENT property firms are urging the UK to prioritise building more laboratory space to fulfil Rishi Sunak’s vision of becoming a science superpower. A report by British Land and Savills reveals a growing demand for labs, with low vacancy rates in key areas like Cambridge and London.

Currently, the UK significantly lags behind the US in laboratory space. Demand for laboratories in the UK is growing fast, with lab vacancy rates of just 1% in Cambridge and London, and 7% in Oxford. Across these areas, projects to construct 11.6m sq feet of labs are waiting for a planning decision or are in the pipeline and need to be speeded up. Accelerating projects awaiting approval holds the potential for 67,000 new high-skilled jobs, £4bn more economic output, and £1.1bn additional tax revenue annually by 2035 say the firms, which are calling for clear economic expansion targets, doubling overseas investment, committing to the East-West rail line and expanding R&D tax credits.

Tom Mellows, head of Savills Science, commented: “We are continuing to see positive levels of demand across the golden triangle, particularly in Oxford and Cambridge where take-up remains at record highs. However, the UK will not be able to sustain this level of growth if we don’t provide the right real estate.

“London is a great example of where the lack of purpose-built lab space has impacted on occupiers’ ability to expand. However, 2023/24 will see the first delivery of a significant quantum of this type of space in the capital, which will no doubt lead to an uptick in activity moving forward. We have already seen demand for science-related real estate increase considerably over the past five years and the potential to deliver growth quickly will accelerate this further still.”

The full report is available [here](#).

Test and trace lab sell off

Meanwhile, the lab at the centre of the UK’s test and trace debacle has been quietly put up for sale, according to the BBC.

The Rosalind Franklin Laboratory in Leamington Spa opened in June 2021 but stopped processing tests in January. It is understood the NHS Test and trace facility has so far cost £455m.

An online estate agent brochure explains to prospective buyers the site provides state-of-the-art lab lines with facilities capable of containing high levels of virus or pathogens.

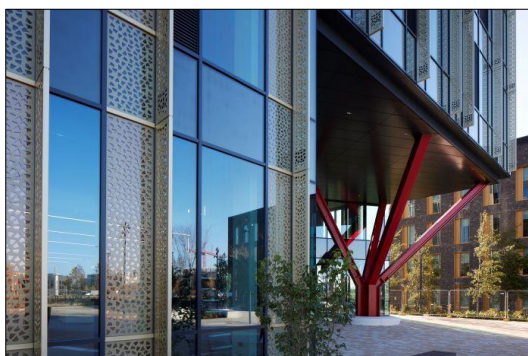


Up to 236,200 sq ft (21,950 sq m) of space is available, including a canteen, locker rooms and warehouse loading docks.

Commercial real estate firm Avison Young said the leasehold facility provided an opportunity for businesses to 'fill supply gaps' in the life sciences sector, in areas such as precision medicine, diagnostic testing or genomic sequencing.

Lab space to let at UK leading life sciences hub

Property developer, Prologis UK, has sold Cambridge University Hospitals NHS Foundation Trust (CUHT) a 15-year lease on the top floor of its newly developed, state-of-the-art life sciences facility at Cambridge Biomedical Campus (CBC).



CUHT will be using 23,000 sq. ft. of the recently completed laboratory and office space to house an ultra-modern histopathology unit which will provide diagnostic pathology services, supporting clinical trials.

This is the first lease agreement to be signed at 1000 Discovery Drive, a five-storey speculatively developed building which has a total of 103,000 sq. ft. of laboratory and office space.

Proof of identity required to buy and sell chemicals

AFTER A short, and poorly publicised consultation last year, the Government has tightened controls on poisons and chemicals which can be used to make explosives.

New measures which came into force on 1 October 2023 following the Manchester Arena attack in 2017, include additional requirements for reporting of suspicious activity, adding new substances to the controlled list, providing additional obligations on online marketplaces, and requiring that certain information is recorded when selling regulated explosives precursors to business users.

The new requirements will affect GAMBICA members which supply, and therefore have to buy, chemicals. The Poisons Act 1972 already sets out controls of chemicals which can be used to make explosives and poisons, restricting the general public's access to the most dangerous materials. It permits a licensing regime for the purchase and use of regulated substances where there is a legitimate need and no safer alternative.

If a member of the general public requests to purchase a regulated substance above the concentration threshold, suppliers should:

1. Ask to see their Explosives Precursors and Poisons (EPP) licence and associated photographic ID.
2. Compare the photograph to the customer.
3. Verify the photographic ID reference against the ID reference on the front page of the licence.

4. Check the product being purchased is allowed as part of the licence conditions: substance, concentration, volume.
5. Record the transaction details in the table on the back of the licence.
6. If it is a regulated poison and the supplier is not a registered pharmacist or operating under the supervision of a registered pharmacist, they must refuse the sale. If it is a regulated poison and the supplier is a registered pharmacist, or operating under the supervision of a registered pharmacist, they must enter the transaction details into their poisons register.

If the transaction is suspicious or unusual in any way suppliers must:

- refuse the sale
- report using the [Report suspicious chemical activity service](#)
- phone the police on 0800 789321

The Control of Poisons and Explosives Precursors Regulations 2023 introduced new substances to the lists of regulated explosives precursors and poisons.

Regulated substances and concentration thresholds set out in the amended Regulations are:

- ammonium nitrate: 16% N
- hexamine
- hydrochloric acid: 10% w/w
- hydrogen peroxide: 12% w/w
- nitromethane: 30% w/w
- nitric acid: 3% w/w
- phosphoric acid: 30% w/w
- potassium chlorate: 40% w/w
- potassium perchlorate: 40% w/w
- sodium chlorate: 40% w/w
- sodium perchlorate: 40% w/w
- sulfuric acid: 15% w/w
- acetone
- aluminium powders
- calcium nitrate
- calcium ammonium nitrate
- magnesium nitrate hexahydrate
- magnesium powders
- potassium nitrate
- sodium nitrate
- sulfur

For more information click [here](#).

Further acknowledgement of delays at ECJU

THE EXPORT Control Joint Unit (ECJU) has published further guidance aimed at encouraging applicants to reduce the Unit's workload. The guidance reminds licence applicants about the 'End User Advisory Service' which enables exporters to seek advice on whether exports will

require licences because of Weapons of Mass Destruction (WMD) or military end use concerns.

The unit is currently processing around 14,500 enquiries per year, which has increased substantially because of Russian sanctions, as well as the enhancement of the Government's Military End Use Controls and their inclusion of China. Enquiries about Chinese end users alone have increased by 14.5% from May 2022, when the Military End Use Control changes took effect, to April 2023.

Acknowledging the delays, particularly for Russia and China the guidance asks applicants to avoid submitting unnecessary queries.

The End User Advice Service should only be used by exporters who have already established that their goods do not feature on any control lists and will therefore not normally require export licences. Those who have applied to the EUAS before, and been told that there are no concerns, need not seek further advice for the same equipment going to the same end user for six months. If however, you have received the response that there are concerns, that will apply for a year.

Those exporting exclusively to the following countries, do not need to apply to the End User Advice Service: Australia, Austria, Belgium, Bulgaria, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Lithuania, Luxembourg, Malta, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom, United States.

Further information is available here.

[Consolidated list of strategic military and dual-use items that require export authorisation](#)

[End-use controls applying to WMD-related items, including technical help](#)

[End-use controls applying to military related items](#)

The ECJU has also updated the forms to be completed by overseas undertakings when an export licence is required. The overseas end-user or consignee receiving the items must complete the form and supply a covering letter on the original official headed paper of the overseas company.

The UK exporter is responsible for putting the completed documentation for the SIEL or SITCL in [SPIRE, the online export licensing system](#) as part of the licence application process. The new form can be found [here](#).

Lab Innovations hits the spot

LAB INNOVATIONS 2023, the main UK show for the lab industry seems to have been considered a success by those participating. There was some feeling that the number of visitors was somewhat lower than in previous years, although the organisers claim higher-than-ever attendance with over 4000 visitors attending over the two days and over 200 exhibitors. Both mornings of the exhibition were busy, although numbers did drop off in the afternoons.

Happily, Lab Innovations seems to have bucked the trend of the partial or full withdrawal of the biggest companies which has been obvious in overseas shows.



Rising Star award winner, Emma Sanderson, of SLS with fellow GAMBICA young council member, Josh Walker of Priorclave.

Perkin Elmer, which has re-asserted its focus on the lab industry by spinning off its life sciences activities was present and took a prominent place near the entrance to the show. VWR was also there along with many other GAMBICA members. Thermo fisher was notable for its absence after what appears to have been a very difficult year, which

allowed SLS to take on the mantle of highest profile lab distributor not only by taking one of the very largest stands but also by sponsoring the awards. Calibre scientific which is notable for its very rapid growth was also there in force.

Kevin Mann, UK sales director at IKA, commented during the show, “Lab Innovations has gone really well this year. We have been coming to the show since 2017 and every year it has gotten bigger and better. We have had lots of good conversations and shown off some really cool pieces of lab equipment, which would normally be difficult to take into labs to show in person. Being able to demonstrate our kit is a big reason why this show is so important. We have already signed up again for next year.”

Paul Vanden Branden, director and product manager at SciMed, remarked, “Lab Innovations is a really important show for SciMed as it’s the only place where we can meet all our customers in one place. It is a great opportunity to hear from new and existing customers in person, so we can fully understand their requirements and operational situations and work with them to deliver solutions that meet their needs.”



This year, GAMBICA ran one of the event’s seminar sessions with members and other invited speakers offering insights on how to achieve effective lab automation. Binary Vision, and SMC UK were both able to promote their offerings, alongside a spokesperson for lab language SILA and Innovate UK which provides funding for automation projects.

This year, for the first time, the Lab Innovations Awards were held separately away from the floor of the exhibition. Congratulations go to all the GAMBICA members among the winners who included Emma Sanderson from SLS who won the ‘Rising Star’ award, and to VWR who won the award for

most sustainable product. The awards dinner at the Vox conference centre in the nearby Resorts World was well attended although it was felt that post event publicity could have been more prominent. GAMBICA member Element won the award for commitment to training which was picked up by their Business Development Manager, Amrit Bhogal (above).

Research round-up

Bleach does not tackle fatal hospital superbug

LIQUID BLEACH does not kill off a hospital superbug that can cause fatal infections, researchers have found, commenting that new approaches are needed towards disinfection in care settings.

Clostridium difficile, also known as C diff, found in the human gut and severe infections can kill, with 1,910 people known to have died within 30 days of an infection in England during financial year 2021-2022. Those at greater risk of C diff infections include people aged over 65, those who are in hospital, people with a weakened immune system and people taking antibiotics, with some individuals experiencing repeated infections.

According to government guidance, updated in 2019, chlorine-containing cleaning agents with at least 1,000 ppm available chlorine should be used as a disinfectant to tackle C diff.

But researchers say it is unlikely to be sufficient, with their experiments suggesting that even at high concentrations, sodium hypochlorite – a common type of bleach – is no better than water at doing the job.

“With antimicrobial resistance increasing, people need to recognise that overuse of biocides can cause tolerance in certain microbes, and we’re seeing that definitely with chlorine and C diff,” said Dr Tina Joshi, co-author of the research from the University of Plymouth.

“While chlorine-based chemicals used to be effective at killing such bacteria, that no longer appears to be the case,” she said.

“The UK doesn’t seem to have any written new gold standard for C diff disinfection. And I think that needs to change immediately,” she said.

Joshi and colleagues reported in *Microbiology* how they exposed spores from three different strains of *Clostridium difficile* to three different concentrations of sodium hypochlorite bleach – ranging from 1,000 ppm to 10,000 ppm. The spores were left for 10 minutes before the bleach was neutralised.

The researchers then attempted to culture the spores on agar plates, and compared the results with the controls of spores exposed only to water or the neutralising substance.

The results reveal spores from all three strains of C diff survived all three concentrations of bleach, with no significant reduction in their ability to germinate compared with the controls. Indeed, scrutiny of the spores with scanning electron microscopy showed that they underwent no visible damage when exposed to the cleaning agent.

The researchers also applied spores of C diff to squares of fabric cut from new multiuse surgical scrubs and patient gowns and tested whether they would transfer when an agar plate was touched by the fabric.

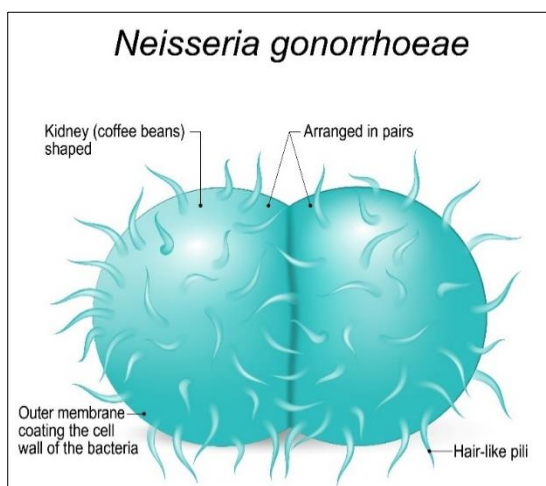
The team found the spores largely remained on the gowns and scrubs, with exposure of the spores to different concentrations of bleach making no tangible difference.

“It’s very clear that the spores are sticking to the fibres,” said Joshi, noting that that finding suggests such items are reservoirs of transmission.

Joshi said the new work has important implications. “Even if we’re trying to disinfect across different surfaces, the chlorine is not doing its job,” she said. “It’s not the right biocide.” More information in the journal *Microbiology* [here](#).

AI identifies potential gonorrhea vaccine targets

RESEARCHERS WORKING with AI immunology startup Evaxion, have pinpointed potential vaccine targets for combating gonorrhea. Gonorrhea, caused by *Neisseria gonorrhoeae*, affects over 80 million people annually, with increasing antibiotic resistance.



According to a study published in *mBio*, after studying ten clinically relevant *N. gonorrhoeae* strains, two novel antigens involved in cell division were identified.

Immunised mice displayed blood samples capable of killing bacteria from multiple strains, reducing the bacterial burden upon subsequent infection. The success prompted the creation of a chimeric protein, combining the two antigens, which demonstrated similar efficacy in inducing immune responses in both laboratory and animal models.

While uncovering the vaccine candidate's mechanism for clearing bacterial infections, further studies are needed to verify its presence in humans.

For further information see the original article in *mBio* [here](#).

Humans make better cancer treatment decisions than AI

TO BE able to offer patients personalised cancer therapies requires laborious and time-consuming analysis and interpretation of data. Researchers at Charité – Universitätsmedizin Berlin and Humboldt-Universität zu Berlin studied whether generative artificial intelligence (AI) tools such as ChatGPT could help with this step.

Researchers prompted large language models such as ChatGPT to identify personalised treatment options for fictitious cancer patients and then compared the results with the recommendations made by experts. They found that while AI models were able to identify personalised treatment options in principle – they weren't even close to the abilities of human experts.

Ten molecular tumour profiles of fictitious patients were created. A human physician specialist and four large language models were then tasked with identifying a personalised treatment option. One researcher commented: “There were some surprisingly good treatment options identified by AI in isolated cases, but large language models perform much worse than human experts and beyond that, data protection, privacy, and

reproducibility pose particular challenges in relation to the use of artificial intelligence with real-world patients.

However, the performance of AI models is continuing to improve as the models advance. This could mean that AI can provide more support for even complex diagnostic and treatment processes in the future – as long as humans are the ones to check the results generated by AI and have the final say about treatment.

More information on from the Charite – Berlin University Medicine [here](#).

Breakthrough on Lyme Disease

IN A breakthrough study, a Duke University team has developed a technique, inspired by cancer-targeting methods, to effectively combat the bacterium causing Lyme disease. The approach, tested on *Borrelia burgdorferi* bacterium in cell cultures, involves utilising a molecular facilitator named high-temperature protein G (HtpG). This protein, previously explored for cancer therapies, was tethered to a drug that enhances sensitivity to light. When exposed to light, the HtpG inhibitor rapidly entered the cells of the Lyme bacteria, triggering a programmed death response and causing the collapse of the chromosome, effectively annihilating the bacteria.

Lead author Timothy Haystead, Ph.D., described the process as a ‘berserker reaction,’ sterilising the culture with a single dose of light. The study, documented in *Cell Chemical Biology*, suggests a novel antibiotic development strategy by exploiting previously unexplored drug target areas within bacteria. The approach holds promise not only for bacterial infections but also for targeting fungi and viruses, opening new avenues for antimicrobial research.

More information can be found [here](#).

Upcoming GAMBICA Events

Investing in productivity | 5 December | 10.30-12.00am | online

THIS WEBINAR for the GAMBICA Business Growth Community will offer insights on whether investment in productivity would be a good idea for your business. The government is encouraging more UK companies to invest in digital technologies and good data is now available on payback times, growth, and employment benefits which could help you make decisions about which, if any, technological innovations would be helpful for your company. Alain Dilworth of Made Smarter will provide information on support and funding available via Made Smarter and will also give pertinent case studies of what others have achieved. To reserve your place, click [here](#).

Export Group Christmas Meeting | 12 December | 14.00-16.30am | GAMBICA office

Our Christmas meeting of the export group will discuss which exhibitions want to participate in in 2024 and will also have speakers on different regions for exports. There will be Christmas drinks after the meeting so do join us. Click [here](#) to let us know you will be coming

Strategic growth in a future full of AI – GAMBICA lab industry conference | 12 March 2024 | Stapleford Park Country House Hotel, Leicestershire

HOW FAST and how far can your company grow? If you are making plans to take advantage of the growth in laboratory capacity, the 2024 GAMBICA Lab Industry Conference will provide you with essential information on the key issues including:

- How AI and digitalisation will affect the lab and the world, and how they can be harnessed to give you a competitive edge.
- The latest economic and political projections for the world you will be trading in.
- Updates on sustainability and how your peers are faring, together with insights on customer requirements.
- How to sell to universities as UK frameworks come up for revision.

The conference will also provide an opportunity to prepare industry demands for an incoming government on the support needed by business, removing roadblocks for exporters, addressing skills shortages and building the UK's standing in international research. Click [here](#) to book your place and meet with your peers in the UK industry and formulate plans for your company and the UK lab industry.

Industry Events

Lab of the Future | Boston | 11-12 March 2024

THE USA multi-track congress program for the bio-pharma industry includes case studies from start-up biotechs and sessions on collaborative research partnerships including sessions on:

- Digital transformation
- Change management
- Lab automation
- Cross-stakeholder collaboration
- Breakthroughs in scientific research

For more information [click here](#).

ELRIG Research and Innovation 2024 | Manchester | 20 March 2024

THIS CONFERENCE will feature scientific tracks covering: Oncology, Animal-free drug discovery, New horizons in anti-microbial resistance and Mass spectrometry and 'Omics'. ELRIG Conferences are free to attend. For more information click [here](#).

Future Labs Live | Basel | 26-29 June 2024

THIS EVENT brings together industry disruptors, start-ups, lab heads, and technicians alongside tech and practice innovators to showcase solutions and discuss the future of labs. For more information, click [here](#).

FEEDBACK FROM visitors to the last SinS conference in June 23 was positive and the next event has now been scheduled. The aim of SinS is to showcase complementary and diverse ranges of analytical instruments, technologies, applications and present solutions to scientists from a range of industries and academic disciplines.

To book your exhibition stand contact Chris Jarvis chris@labmate.com 01727 855574.

Export News

Looking ahead: Americans depressed and Germans fearful of Chinese dumping

THE LATEST meeting of the European, Japanese and US lab industry trade bodies was a highly gloomy affair. The US Analytical Life Science and Diagnostic Association (ALDA) spokesperson reported that sentiment in the US is 'very cloudy'. "There are many factors but China is a major issue. For years we've had good



double-digit growth in China and now it's really slow. Lots of US companies have a lot of exposure in China. The general macro economy is not good, we've got high interest rates and biotech funding has become very difficult with biopharma de-stocking and general tech stocks sliding."

ALDA continued: "The Chinese market for lab tools is experiencing a multifaceted downturn, reflective of broader shifts that parallel trends in the United States. Biotech firms, which once enjoyed a robust influx of funding, are now navigating a challenging landscape where capital is more scarce. This downturn is further accentuated by the decrease of foreign direct investment from Western biopharmaceutical companies."

The Germans have their own worries: "We have a divided market. Covid gave biotech an incredible boost, and now we have an incredible loss. We have overstocking of pipettes and other consumables so sales are down and China is also causing us big headaches.

"The Chinese have applied tax advantages for buying Chinese, so Chinese firms now enjoy an at least 15% tax advantage. It's no longer a level playing field. Chinese manufacturers have also improved the quality of their goods during and post Covid and have invested heavily in automation.

"The Chinese market development model is different to ours. They produce in huge quantities and if they can't sell at the price they intended, they just dump the goods on

overseas markets. Because of problems in their domestic economy, including the real-estate crisis and high youth unemployment, the Chinese are looking to boost exports.

“At Analytica in Munich in 2024 we have heard that the space taken up by Chinese companies has increased tenfold over previous years.

“Frost and Sullivan are researching prices being charged in Europe by Chinese firms and we should monitor this carefully. We also believe that Chinese companies are purporting to be US companies when in fact they have only a sales office in the US.”

The German comments come as the EU launches a probe into dumping complaints against such Chinese construction equipment manufacturers. The complaint alleges that imports of Chinese equipment into the EU have nearly tripled since 2020, and that ‘significant distortions in the form of a pervasive state presence’ in the Chinese manufacturing sector have undercut EU manufacturers, forcing them to sell at a loss. “At the same time, EU producers were caught in a scissor effect between costs increasing under the effect of inflationary pressures and market prices increasingly set by low-priced Chinese imports severely undercutting them,” states the executive summary of the complaint. Similar effects are being seen in the market for electric cars.

The Japanese situation seems to be somewhat less challenging but they too face the issues of high energy costs and some supply change problems.

SPECTARIS members have also seen Chinese sales slowing in 2023. German exports of analytical, biotechnology and laboratory technology to China increased by around 6% last year, they fell slightly in the first half of this year (-1.3%). Exports to the USA rose by 12% in the first half of 2023 and to India by more than 17%. Overall, exports increased by around 6%.

While we in the UK are complaining about the negative impacts of understaffing on the timeliness of granting of export licences, the Germans are complaining about new regulations in the shape of the European Supply Chain Act which will require EU companies to monitor the social and environmental impacts of their supply chains, “The call for less bureaucracy is getting louder and louder in this industry. In view of rising costs and a persistent shortage of skilled workers, the implementation of ever new regulations and reporting obligations has now become a major problem for many SMEs,” SPECTARIS asserted.

GAMBICA members satisfied with Medica

by Kirsty Roberts, GAMBICA

MEDICA, ARGUABLY the world’s leading life sciences B2B trade fair, closed it’s doors on Thursday 16 November having, together with sister show COMPAMED, brought together some 6,100 exhibiting companies and 83,000 visitors. It is a truly international event with participants from almost 70 nations, many of which represented in country pavilions, and approximately 75% of visitors from outside Germany. For the full final Press Release click [here](#). MEDICA 2024 will take place from 14/17 November 24.

GAMBICA co-ordinates the longest running UK pavilion (there are four others in Hall 16, one of the international pavilion halls) and the only one specifically for companies in the laboratory technology, diagnostic test & reagents sector halls.

In 2023 we were delighted to welcome 10 new pavilion members and 6 'returns' (most of which from pre-covid years). Those surveyed awarded the event an average of 7.71 out of 10 which, although lower than that of 2022 (the first 'full' MEDICA post-covid), was higher than that of 2019. Some felt visitor numbers were a little lower than those of 2022, nevertheless, an average of 104 visitors per stand was reported. Few participants expect to take orders at a B2B event yet one exhibitor advised of an order worth £100K.



As always, the GAMBICA hospitality area was very busy and space is at a premium. Nevertheless, we were delighted to welcome several visiting members to whom we were able offer some of the services we provide to group participants. We hope to be able to extend this facility for 2024 and details will be available later in the year.



In the meantime, we expect booking details for MEDICA 2024, ADLM 2024 (formerly AACC) and Analytica China 2024 to be available during December. To register interest please contact Kirsty Roberts on kirsty.roberts@gambica.org.uk.

Alternatively, if you wish to take part in the discussions & decision making towards the GAMBICA Overseas Event programme why not come along to our next Export Group meeting on 12 December 23?

Other events for 2024:

MEDLAB, DUBAI, 6/9 FEBRUARY 2024

WE ARE now closed for bookings for the UK Pavilion at Medlab Middle East although we currently have space for one 2m x 1m 'pod style' stand (available to GAMBICA members and/or first time GAMBICA pavilion participants ONLY). If interested please contact Kirsty asap.

ANALYTICA, MUNICH, 9/12 APRIL 2024 (www.analytica.de)

WE CURRENTLY have a small number of stands available (sizes 6sqm, 8sqm & 9sqm) however the deadline for submission of our total pavilion space requirement, to Messe Munich, is 11 December 2023. If you wish to participate with the GAMBICA UK Pavilion at Analytica Munich 2024, and have not yet applied, please complete and return a booking form **by not later than 8 December 2023** as it is unlikely we be able to accept bookings after this date.

ACHEMA, FRANKFURT, 10/14 JUNE 2024

WE HAVE one 'pod-style' stand space available within the GAMBICA pavilion area. This may be 2sqm, 4sqm or 6sqm. If interested, please contact Kirsty for a booking form asap.

Looking forward to the second half of 2024/early 2025, we intend co-ordinating UK pavilions at the following events. We hope to have booking details available by end December 2023 for the first 2 events, but if you would like to pre-register interest, and/or discuss participation options, please do get in touch.

- **ADLM** (formerly AACC) Clinical Expo, Chicago, 30 July / 1 August 2024. Joint UK Shared Stand. Details available December 2023
- **Medica, Dusseldorf**, 11/14 November 2024. Details available December 2023
- **Analytica China**, Shanghai, 18/20 November 2024. Details available January 2023
- **Medlab Middle East**, Dubai, 3/6 February 2025 (tbc)
- **Analytica Lab Africa**, Johannesburg, 8/10 July 2025

We will be discussing which events you want us to develop UK pavilions for in 2024 at the December Export Group meeting which will be held in the London offices on 12 December. The meeting starts at two and there will be drinks afterwards. To reserve your place please click [here](#).

Western trade contracts

ACCORDING TO the Organisation for Economic Co-operation and Development, trade in goods contracted in the G20 in Q3 2023, compared to the previous quarter (Figures 1 and 2) and following a decrease recorded last quarter, exports and imports fell again by 1.2% and 2.1%, respectively, reflecting a continued slowdown most notably in East Asia and Europe. Goods exports declined by 1.5% in the European Union, and by more than 2.0% in Germany and France, largely due to lower sales of machinery and transport equipment. Merchandise trade also contracted in East Asia, with China experiencing a 6.1% drop in exports partly driven by machinery and steel products, and a 3.5% drop in imports. Exports were only slightly negative in Japan (down 0.7%) and increased in Korea (up 1.2%), driven by strong automobile sales. Imports declined in both Japan and Korea, following a reduction in imports of energy products. Lower sales of primary commodities impacted exports from Australia and Indonesia. North America defied the trend, recording a rebound in exports, especially in the United States, primarily due to robust trade in the automotive and energy sectors.

Preliminary estimates point to flat growth for G20 trade in services in Q3 2023, compared to the previous quarter and measured in current US dollars (Figures 1 and 2). Services exports and imports are estimated to have grown at just 0.1% and 0.2% in Q3 2023, respectively, following the 1.1% and 1.0% growth recorded in Q2 2023. In the United States, services exports rose by 1.8%, due to higher sales of travel and business services, while imports grew by only 0.2%. Services exports increased by 0.8% in Canada, while imports expanded markedly (up 3.3%), mostly driven by travel. In Germany, services exports grew slightly, while imports fell in line with lower travel expenditures. In France, a strong increase in travel expenditures drove up services imports (2.9%), while exports remained flat. The

United Kingdom recorded a marked increase in services exports and imports (2.9% and 3.7%), driven by dynamic trade in business services in both cases. Transport services, and freight in particular, weighed on services exports from East Asia, which contracted sharply in Japan, China and Korea. Conversely, an uptick in travel drove import growth in Korea and Japan. In Brazil, services exports expanded by 5.1%, driven by travel and telecommunication services, while imports grew by 2.0%.

Figure 1 – G20 international trade, quarterly growth rates
Quarter-on-quarter percentage changes, current US dollars, seasonally adjusted

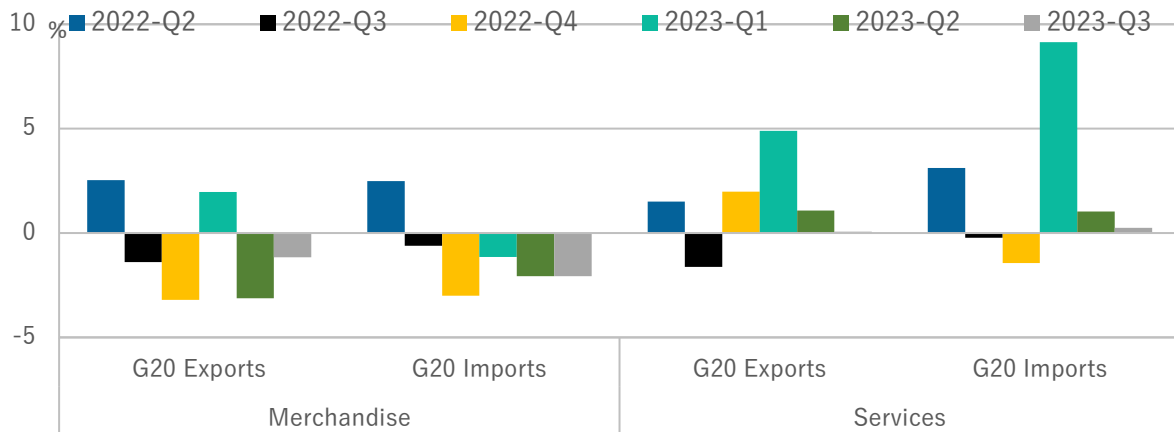
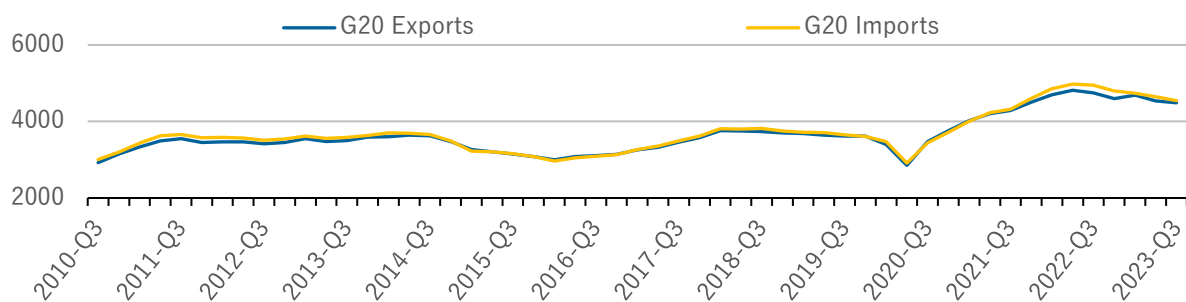
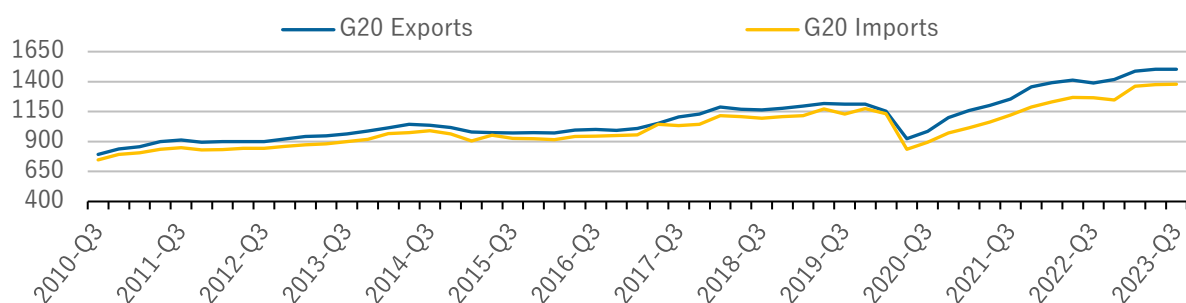


Figure 2 – G20 international trade, quarterly levels
Current prices in billion US dollars, seasonally adjusted

Merchandise



Services



Note: The Q3 2023 trade in services values are preliminary estimates based on available data, covering at least 60% of exports and imports for the G20 aggregate which does not include African Union countries, except for South Africa.

Company news

With some 70% of the UK ventilator flow measurement market, GAMBICA members MPB are worth getting to know

MPB INDUSTRIES (MPB) designs and manufactures flowmeters, flow alarms, flow indicators, flow switches, calibration cylinders and sight glasses for the measurement of liquids and gases by well-known industrial and scientific users. Based in East Peckham, UK, MPB operates across a broad range of applications including water treatment, oil and gas production, medical ventilators, medical anaesthesia, and scientific analysis. It has been a major contributor to the manufacture of ventilators for the UK at the outbreak of COVID-19. MPB supplies many companies in the lab, medical gases, petrochem and water treatment industries with tubes and flow meters, which they OEM for some of the best-known brands. MPB is a smallish company with just 21 people and is hugely adaptable. “Many bigger companies offer a much smaller range,” says MD Jason Bennion, “and are often quite restricted in what they will offer. But we have 4000 to 5000 different glass tubes for gases and liquids and if we don't have what you want - we'll adapt something for you. We can do small batches on a very quick turn-around. The company works in four different sectors; medical anaesthesia providing medical and veterinary anaesthetic gases, water treatment (often on chlorine dosing), 20% of its market is in the scientific and laboratory research areas and a further 20% is for the petrochem industry, including large calibration cylinders for pumps and lines for crude oil.

MPB became exceptionally well known during the COVID era as their flow tubes are for anaesthetic trolleys which go into medical theatres. With as many as six tubes on a trolley, demand was huge. MPB give their tubes a special conductive coating which allows any static charges to be earthed away and they flute the float, which has a silver dot on it, to make it spin and the anaesthetist has a visual check that gas is actually flowing and there can be no mis-readings due to debris, which will be comforting to all those who fear waking up on the operating table.



MPB tubes go into other people's equipment for human anaesthesiology, but for veterinary supplies, MPB also make the flow meters that house the tubes as the legislation covering veterinary medical equipment is somewhat lighter than that for human medical equipment.



The company's main client in the human medical gas area is Penlon of Abingdon, the company which was successful in the government's Covid ventilator challenge, but in fact many of the companies competing in the ventilator challenge came to MPB for their tubes. MPB were able to make 30,000 high quality tubes in just under four months well ahead of their nearest competitor. MPB has about 70% of the UK market for tubes for anaesthesia.

The company's strength, according to Jason Bennion, is to offer a very wide range of options for laboratory companies. Because they can produce items in very small numbers the scientists using the Large Hadron Collider specified them, but they do lots of work with Edwards Vacuum, one of the UK's largest suppliers of vacuum pump and exhaust gas product manufacturers.

Jason Bennion rose to his position as MD after starting as a tool-making apprentice with Pilkington Ophthalmics. He later went on to work for two specialist engineering companies before joining MPB in 1992 as its first employee in the role of engineering technician first. He worked his way up to engineering manager and after leaving for a short while he was asked to return to MPB industries by the former MD with a view of taking the helm. He formally became MD in 2019 when the business was sold to the SDI group. SDI group will be well known to many GAMBICA members as it has recently purchased LTE and Monmouth Scientific.

The company was an early target for SDI Group which has been acquiring successful science and technology companies since 2015 and which now has 15 companies in its digital imaging and sensors and control groups.

"They liked our healthy turnover and profit margins and they saw the future potential and we just fit," says Jason. "We weren't too big at the time, although SDI is now making larger acquisitions. We really enjoy being part of SDI because decisions are now made commercially without having to worry too much about the family purse strings. Being part of SDI means we can share information and knowledge with our sister companies."

"We are an ambitious company," says Jason. "We've got into the northern United States with our veterinary products via distributor and we're now supplying human anaesthesia flow tubes to Brazil, which is interesting given the level of tariffs. We are very much



hoping that the government will pursue a free trade agreement with Brazil and we want to grow our exports particularly to slightly underdeveloped countries, which are a good market for us they're not moving to digital metering yet and our range and prices make us ideal for those territories.”

Most people in the company have some engineering background, including the Sales team and this helps them understand the product and speak with credibility. “Lab buyers don't suffer fools gladly,” says Jason, “so we find that having engineers to talk to them as the best bet. We're very honest with people, especially when they want the impossible. But we make sure we can offer them the best viable alternative and we prove it by producing prototypes and getting them to the prospective purchaser usually within 48 hours. That has helped us win lots of sales because when you get a working prototype on your desk so quickly – that really does the talking.”

MPB wanted other Lab companies to know who they are and where to find them, “Because if we were starting out again we might choose a name which said what we do, we've given ourselves an uphill task with MPB. But we can genuinely help.” Marketing manager Zoe Green agrees: “We are known for our fast turnaround and bespoke work. We are so passionate about quality that we manufacture the machines that manufacture the tubes!” Jason will be joining the GAMBICA Business Growth Community, so do look out for him there.
