They're burning the labs…

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While Donald Trump thinks that foreigners are eating American dogs and cats and that the US economy is in free fall - other voices in the US are pretty chipper.

The US life sciences industry is stabilising and returning to steady growth after recent fluctuations says Nick Cassaro, VP of life science development at New York investment firm BGO. There has been a return to venture capital interest in companies with strong scientific foundations. Large pharmaceutical firms are also acquiring smaller companies to secure prime locations with an emphasis on sustainable sites says Salil Payappilly of BioMed Realty. The overall feeling seems to be that with a return of biotech investors looking for premium sites, the glut of unoccupied labs can be a thing of the past.

One example they give is the Gateway of Pacific in South San Francisco, home to over 200 life science companies which benefits from a robust venture capital network making it a key hub for growth and one where sustainable buildings align with environmental goals.

Ken Richter of Project Management Advisors Inc agrees that while interest levels are below the peaks of 2020-2021, increasing venture funding provides tenants opportunities to secure high-quality properties at competitive rates.

Over here worries have become focussed on shortages rather than over-supply of lab space with the Royal Society of Chemistry (RSC) calling on government to address what it describes as an 'ongoing lack of access to suitable lab facilities' in the UK.

According to the RSC, demand for UK lab space still massively outstrips supply, with developers reluctant to commit to the extra investment and infrastructure that chemistry facilities in particular require. The RSC's 'Unlocking Innovation report' suggests the lack of investment is linked to a lack of value case for deep tech lab developments. The lack of such a case is attributed to the specific lab facilities required differing widely between research areas and little having been done to assess the needs of the sector as a whole. This, says the RSC, is compounded by a complex planning environment; chemistry specific requirements that aren't taken into account during property development; strategic narratives that overlook deep tech chemistry technologies; and a postcode lottery that disadvantages locations outside Oxford, Cambridge and London.

Aurora Antemir, Senior Manager, Enterprise Impact Programmes at the Royal Society of Chemistry, said: "Deep tech chemistry ventures are at the cutting edge of research and innovation. From reducing food waste to improving medical technologies, these ventures have the potential to solve many of the world's most pressing problems. We want to help take these technologies to the next level, by ensuring that suitable lab space is available to all. With no labs, there's no technology research, and no impact."

The Society is launching a new initiative –'More ChemLabs'– to catalyse change in the system affecting access to chemistry labs. This will entail bringing together passionate, connected people from across sectors, including the chemical sciences, property development, investment, government, and advocacy, to build a supportive landscape, make the case for more chemistry labs, and unlock investment into spaces that work.

To view the full report or offer support, Visit https://changemakers.rsc.org/rsc-site/content/Deep-Tech-Chemistry/Lab-access.aspx.

The UK may need more labs - but not like this…

The shortage of UK lab space was made worse recently when one was blasted out of existence by a huge fireball. Rathburn Chemicals (Manufacturing), was fined £40,000 in September for the blast which destroyed its laboratory and caused considerable damage to nearby structures.

The explosion was probably triggered by pentane vapor generated during a distillation process which overheated and ignited due to a malfunction in the extraction system. Witnesses reported a massive fireball engulfing the laboratory.

An investigation found that Rathburn Chemicals had insufficient systems in place to manage steam and heat during distillation. HSE inspector Isabelle Martin commented: "This was a serious incident, and it is fortunate that no one was injured."

India also looking to grow lab portfolio

Like the US and UK, the Indian lab industry is also looking to grow significantly. New laws which require forensic examinations in all serious cases have prompted the Indian government to commit the equivalent of more than £225 million to upgrading its forensic laboratories.

But more labs may not mean more waste…

Biotech Company, Amgen, winner of the 'Top Organisation' award in this year's Freezer Challenge, has managed to save 7,671 kWh/day, by optimising the operation of its chiller plant. The Freezer Challenge, which promotes best practice in cold storage management saw a surge in participation in 2024, with over 3,100 labs from 239 organisations across 35 countries committing to reducing their cold storage energy consumption.

Hosted by the International Institute for Sustainable Laboratories (IISL) and My Green Lab, this year's event saw participants achieving a total of 31.8 million kilowatt hours (kWh) in energy savings, leading to a substantial reduction in greenhouse gas emissions - equivalent to 22,000 metric tons of carbon dioxide. This marks an impressive 50% increase compared to last year's results. Since its inception in 2017, the Freezer Challenge has collectively saved 76.5 million kWh of electricity, illustrating the ongoing commitment to energy efficiency in the laboratory sector.

So, the future's looking rosy for those employed in and serving the lab industry!

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