

# Position statement

## Coronavirus and SMEs in the chemical sciences

April 2020



### Introduction

With around 50,000 members in over 120 countries, the Royal Society of Chemistry (RSC) is the UK's professional body for chemical scientists from all over the world. As part of our offer to chemical science companies in Industry, [EnterprisePlus \(EP\) is a dedicated scheme](#) specifically for UK micro, small and medium sized enterprises (SME) that are the base for many other UK industries. It provides opportunities to help promote your business, recruit the right people and find the connections and information you need to grow.

The Coronavirus pandemic and the measures put in place to fight its spread are significantly affecting every aspect of daily life for employees, employers, the business landscape and the economy. EP SMEs are highly specialised, innovative and productive. They are well placed to help combat the pandemic, but also stand to be greatly affected by it.

This document is a collation of conversations the RSC has had with numerous EP members on the coronavirus pandemic and its effect on their business, outlining key issues and actions Government can take to safeguard the success of EP SMEs.

### What Government can do to help

This is an unprecedented situation and the RSC acknowledges the Government steps taken so far to safeguard the economy. Gaps remain, however, and steps must be taken to minimise further disruption:

- 1. Labs must remain open to ensure vital R&D is continued and SMEs can continue to operate.**
- 2. The Government should promote continued support and encourage private investment, both during the crisis and after.** The RSC is also a signatory of the [Save our Startups campaign](#):
  - The Government needs to provide an equity based liquidity package suitable to save startups at risk.
  - The Government must fast track payments to startups from public funding schemes - in particular R&D tax credits and Innovate UK funding grants.
  - The Government must change EIS, SEIS and VCTs to stimulate private equity investment into startup and high growth businesses.
- 3. The EP community are well placed and willing to help with the fight against coronavirus but not being utilised. As a matter of urgency, the Government must find more efficient and timely ways to communicate with those who have answered its call to help.**

### Key issues for EP SMEs

#### 1. Continued access to Labs is vital for R&D

**Lab work is crucial to many EP SMEs to continue research and development (R&D).** One EP SME said they have been able to keep their lab open by introducing shift working to reduce numbers in the labs at

any one time, helping staff to adhere to social distancing guidelines. Another said they are limiting numbers in the lab to two at once.

As of w/e 30 April, five EP SMEs have report to the RSC that their labs have closed as part of wider closures in universities and insitutions. One EP SME said they are looking into new premises but have very specific requirements, and must assess the time and expense it would take to relocate for only a short period compared to the loss of R&D whilst waiting for their current lab to reopen.

However, by introducing such measures, some EP SMEs expect to or already have experienced a drop in producing results. **Further damage to productivity would be done by any further restrictions on lab workers being able to go to their place of work.**

## **2. Continued investment flows are vital for survival**

Many EP SMEs are pre-revenue, meaning they are ineligible for many measures put in place. For such companies, the Bounce back Loan scheme announced on 27 April is welcome and timely, and should provide much needed relief. Government have clearly listened to the concerns of the EP SME community on issues relating to micro and small businesses.

Medium and longer term issues remain, however. **It is vital that investors have the confidence to continue to invest in new and existing ventures immediately after the pandemic has abated.** One EP SME also suggested that investors are already becoming more cautious, whilst another suggested that investors have pulled interest in any new ventures to focus instead on existing ones.

**Lower productivity or delayed results will also affect investment.** One SME noted that the longer labs remain closed the greater the impact on its R&D and accompanying results. This increases the likelihood of investors pulling out or companies being unable to raise further investment, meaning they will eventually run out of money, jobs will be lost and the companies fold.

## **3. Business and operational disruptions**

**Many EP SMEs reported issues with partnerships and collaborations, which is affecting operations.** One SME said they were reviewing budgets because of uncertainty around a collaboration with an organisation in Belgium. Another said a project has been delayed due to their Italian collaborators being unable to work.

There are similar issues with supply chains for EP SMEs. **Such disruptions are causing issues with cash flow, which could have short and long-term implications.** One EP SME said they have daily conversations with suppliers asking for due dates to be delayed. Another said that shipments were being delayed, having a similar effect on their product development.

## **4. SMEs stand ready and able to help**

Many EP SMEs are well placed, ready and willing to divert business activity to help in the fight against coronavirus (please see the appendix below for a list of companies already diverting operations). Many are established enough to help as an integral part of a supply chain, i.e. have a proven technology or stable R&D capacity (infrastructure and workforce)but also their size means that they are agile enough for rapid business change.

Despite this readiness, we are receiving reports of no or confused communication from Government. Two companies have offered help in producing PPE and ventilator valves. One reported that three weeks after making initial contact with the Government to offer help, they have received no response at all. Another

said, after an initially positive response, they have received contact from several different Government Departments with conflicting and vague requests that were never resolved.

They were also directly contacted by a local hospital trying to source their own PPE but had no knowledge or experience of the necessary regulation or certification, presenting a potential safety issue. **There must be better communication between Government and SMEs who have offered services. Furthermore, to avoid safety issues, Government needs to clearly communicate with individual NHS trusts on the correct procedures for sourcing approved PPE and ensure they followed.**

#### **5. People are key assets for SMEs but recruitment decisions are being delayed or postponed**

The pandemic is also affecting recruitment decisions. One EP SME said they had selected a candidate to hire but decided not to because of sudden uncertainties. Another said they are freezing all recruitment. Another said they have agreed with a recruit to delay their start date until July, with the view that they will be able to access their premises by then.

**Particularly for early stage companies, staff will often have specific, specialist knowledge, making them a company's key asset.** As of w/e 30 April, five EP SMEs have notified the RSC they have placed some or all staff on Furlough, but another said that this would not be an option for them as doing so would be to stop using their only asset. In small or micro companies, workers with specialist knowledge may also be performing vital business functions. So far, no company has notified us of any redundancies.

#### **Conclusion: common losses**

SMEs make up 96% of all companies in the chemical sciences. They are key drivers of innovation and help to generate knowledge and solve key societal issues. EP SMEs have the specialist knowledge, workforce and established technology to respond rapidly to the pandemic.

However, the current situation comes at significant cost to them. The slowdown in supply chains, loss of collaborations, access to labs and the decline in productivity all lead to a loss of time and knowledge, which will affect their investment opportunities, and a longer-term loss to UK PLC. **Government must ensure labs are kept open, keep investment flowing so R&D can continue and communicate swiftly and effectively with EP SMEs who have offered help.**

## **What the RSC is doing to help the chemical sciences community**

The RSC has been in regular contact with both their own staff and the wider chemical sciences community, regularly circulating Government information through its member networks, EP newsletter and the Chemistry Community fund.

The RSC Industry Engagement team is facilitating networking and knowledge sharing amongst EP SMEs. In part, this is to help companies maintain operations and productivity, such as finding labs to continue R&D. It also intends to facilitate collaboration so SMEs can contribute to helping fight the pandemic. The team are also helping EP SMEs connect with suitable investors.

The RSC is also aware it is well placed to relay information to Government from our community, such as this document. It will continue to do so as long as the threat exists.

## Appendix (last updated 30 April 2020)

EP company	Activity during COVID-19 outbreak	Normal Business activity	Region	Press release/Social media posts
Attomarker	Rapid antibody technology	Blood-testing device	South West	<a href="https://www.attomarker.com/covid-19-attomarker-technology-trials-start-monday-23rd-march">https://www.attomarker.com/covid-19-attomarker-technology-trials-start-monday-23rd-march</a>
Medisieve	Sepsis identification in COVID-19 patients	Filter for magnetic blood filtration	London	<a href="https://twitter.com/MediSieve/status/1242050902967619586">https://twitter.com/MediSieve/status/1242050902967619586</a>
Photocentric	3D printing face shields and ventilator valves	Photopolymers/visible light curing technologies. 3D printing	Peterborough	<a href="https://photocentricgroup.com/printing-parts-for-covid-19/">https://photocentricgroup.com/printing-parts-for-covid-19/</a>
Scotmas	Disinfectant for front line services	Chlorine Dioxide products for water treatment	Scotland	
Hexigone Inhibitors	Hand sanitiser to WHO formulation	Corrosion inhibitors/smart coatings	Wales	
Sphere Fluidics	COVID-19 Vaccine development	Microfluidic technology/ultra-high throughput analysis of cells in picodroplets	Cambridge	<a href="http://spherefluidics-2496087.hs-sites.com/blog/vaccine-development-for-covid-19">http://spherefluidics-2496087.hs-sites.com/blog/vaccine-development-for-covid-19</a>
Iceni Diagnostics	COVID-19 detection in under 20 mins	Focused on the development of carbohydrate-based therapeutics and point-of-care diagnostics for infectious diseases	Norwich	<a href="https://d37q3n3sbrpg4t.cloudfront.net/assets/files/1072/icd08_cov-2_new_approach.pdf">https://d37q3n3sbrpg4t.cloudfront.net/assets/files/1072/icd08_cov-2_new_approach.pdf</a>
Exscientia	Collaboration with Diamond Light Source to find a cure against COVID-19	AI drug discovery	Oxford	<a href="https://www.linkedin.com/posts/exscientia_exscientia-announces-joint-initiative-to-activity-6650789225249808384--R6Z">https://www.linkedin.com/posts/exscientia_exscientia-announces-joint-initiative-to-activity-6650789225249808384--R6Z</a>
Smart Separations	Working on an anti-viral air filtration unit	Patented innovative microfiltration (MF) technology to produce ceramic filters with self-assembled controllable pores	London	<a href="https://www.linkedin.com/pulse/air-filtration-make-covid-19-never-event-hugo-macedo/">https://www.linkedin.com/pulse/air-filtration-make-covid-19-never-event-hugo-macedo/</a>

Imophoron (Not EP company yet)		Highly adaptable, easy-to-manufacture, rapid-response platform for vaccines to combat present and future infectious diseases.	Bristol	<a href="https://www.thepharmaletter.com/article/imophoron-to-begin-preclinical-tests-on-covid-19-vaccines">https://www.thepharmaletter.com/article/imophoron-to-begin-preclinical-tests-on-covid-19-vaccines</a>
--------------------------------------	--	---	---------	---