Labour has always been the party of science. From Clement Attlee through Harold Wilson's 'white heat' of technology to the unprecedented levels of funding received by universities under the last Labour government, our party has always championed science as an engine of social and economic progress.

Under the Conservatives, low investment across the public and private sectors has led to the deterioration of our science base. Capital funding for science has been slashed, and core spending has fallen in real terms, despite government promises of a 'ringfence'. Now Theresa May's reckless plans for a hard Brexit mean that the institutional infrastructure that underpins our scientific success is under threat.

Labour understands that investing in science pays dividends – both by producing new knowledge, but also improving our economic productivity in the long-run. That's why science is at the heart of our 2017 manifesto and our industrial strategy, with our pledge to build an 'innovation nation' and achieve a target of 3% GDP spent on research and development by 2030.

Pathways into science

We want to ensure that affordable, high-quality pathways into STEM careers exist and are fully funded. We've pledged to introduce a National Education Service, including free provision of adult education and life-long learning, so that working people are able to reskill thorough out their life-times. We will abolish tuition fees for anyone studying their first undergraduate degree, and double the number of completed apprenticeships at level 3 from 94,000 in 2015-16 to 200,000 by the end of the Parliament. These reforms will help to create a diverse range of routes into science, ensuring the sector is accessible to the many, and not just a privileged few.

Migration and international relationships

Alongside our internal skill needs, businesses and research organisations need to be able to attract the best scientists from across the world. A Labour government would grant EU citizens in Britain the indefinite right to remain from day one, helping to stem the brain drain we're already seeing post-Brexit.

Our manifesto is clear that while freedom of movement will end when we leave the European Union, and Britain's immigration system will change, Labour will not scapegoat migrants nor blame them for economic failures.

Unlike the Tories who have set artificial migration targets, we will develop and implement fair immigration rules that reflect the needs of businesses and key UK sectors – including science and research.

Our commitment to Britain's world-leading science and research sectors extends to our plans for Brexit negotiations. We have promised to underwrite Horizon 2020 projects approved before we leave the EU, and ensure that the UK remains a part of Horizon 2020 after our exit from the EU. We would also retain membership of European organisations which offer research benefits to the UK such as Euratom and the European Medicines Agency.

Investment in science and research

As stated, we've pledged a total spend of 3 per cent of GDP on research and development by 2030. This will include committing an additional £1.3 billion of public investment in our first two years in office, to raise the total to 1.85% of GDP.

We will also encourage the private sector to invest more in R&D too – through public sector investment in R&D, which has a well-established link with levels of private sector investment. The long-term, patient finance provided by our National Investment Bank will help to 'crowd in' funding for R&D, providing a more secure and stable environment for investors. And we will review Government channels for dispersing public R&D funding with a view to encouraging greater regional equality so that the economic benefits can be felt across the country.

More broadly, we have pledged to transform our economy with £250bn of investment over ten years, and a large chunk of this will go towards helping businesses to harness the economic potential of new technologies and science. For instance, we will complete the Science Vale transport arc, from Oxford to Cambridge through Milton Keynes. This will join up some of the UK's most scientifically active regions and ensure the benefits of research can be reaped by businesses and organisations across the region.

Broadening the definition of innovation

A Labour government would also seek to broaden the definition of innovation away from the commercialisation of elite science to encompass innovation in the service sector. British science is at its best when its benefits are reaped by us all, through the dissemination of innovation across all sectors of the economy. To achieve this aim, Labour will establish two new Catapult centres: for retail, and for Materials and Metals.

Jeremy Corbyn, Leader of the Labour Party

Chi Onwurah, Shadow Minister for Industrial Strategy, Science & Innovation