

# Science Minister at the Foundation for Science and Technology

Thank you.

It's wonderful, genuinely, to be here today to talk about one of our greatest and most significant challenges, which is the levelling up agenda.

As you can tell from my accent, I'm not from down South. And as you probably also know from my bio, I don't have a degree, in fact, I very sadly left school after my A-levels without really having any major success in them.

Subsequently, I've spent my whole career in a variety of businesses and latterly, politics.

And therefore, that means I'm somewhat unique, as far as science ministers go.

However, science and research have always been important to me. I've had a life-long fascination with engineering – inspired by the wonders of the Industrial Revolution – which I've bored my children with for many years – and they study the landscape of the Midlands, from the Grand Central Railway to Ironbridge and indeed the amazing Silk Mill in Derby, which I'm reliably informed is the first ever factory in the UK.

And, had I been more focused at school, I may well have ended up in a career in engineering – continuing that great Midlands tradition.

So, science and innovation have always been something that matters a great deal to me, it's an agenda which is genuinely close to my heart. One which shapes and defines me as a person, and also as your minister for science, research and innovation.

Anybody who knows me will know that I've never shied away from innovating throughout my career – and I've tried to foster creativity and innovation in all of the places that I've worked.

And throughout my life, I have had a deep appreciation of just how crucial science and innovation are to our future as a country.

And it's been confirmed by what we've all seen in the last 6 months or so.

From the amazing partnership between the University of Liverpool and Unilever on new materials for industrial processes, to the climate research being done by the British Antarctic Survey, who I visited recently and they talked about their studies of 50,000 year old polar ice, and I actually got to hold some in my hand. And as it melted, I listened to air from 50,000 years ago. That is just so incredibly exciting.

These are vital programmes, not just for the economic benefits that they

bring, but also for tackling the major challenges, such as climate change, that face the world.

Science, research and innovation will help us build a better world for the future – and I truly believe that.

And, of course, this does have an impact on everybody, in ways that we already take for granted.

I can remember my first ever calculator – a big advance from the slide rule that I used for my O Levels! But my granddaughter will grow up surrounded by technology and these technological wonders – which, when I was a child, could only be found in science fiction in the pages of Isaac Asimov.

So science and innovation will, I honestly believe, allow us to build a more sustainable world. It will give us a safer world.

And it will give us a fairer world.

Underpinned by new knowledge, and its amazing value and impact on the world.

But, while we are all surrounded by the wonders of technology, we must not forget that for many people, our research and development sector is an unfamiliar place.

It's a totally different walk of life.

It is seen as a sector that enriches the major cities in London and the South East, but leaves little for the rest of the country.

I want every person in my constituency, and throughout the country, to be touched by the advances in science and technology.

But the challenges and opportunities in Derby are very different to those in Oxford, Cambridge, or London.

So, I'm calling on you, as scientists, to better understand the range of challenges and opportunities across the entire country.

This includes having a better understanding of the lives led by people from more diverse backgrounds than are represented in your profession.

And I want you to put your minds to research projects which directly address different people's needs.

Put simply, we need to renew the social contract for research.

This means doing 2 things.

First, we need to make it as easy as possible – as attractive as possible – for the results of our scientific and research system to be translated into better jobs,

better products,

better services,

and a better quality of life for more people, all over the UK.

For this, we'll need to work together to foster a rich and vibrant ecosystem of innovation, to connect research and industry, academics and policymakers, and institutions and civil society.

We'll need to use our immense capacity for creating new knowledge as the fuel for our recovery, building our understanding of places into our decision-making at all levels, and attracting the private investment to deliver growth.

And we'll also need to develop the models of training and skills that allow more, and more, people to benefit from a more vibrant knowledge economy, and to participate in it.

Second, we need to deepen the interaction between science and society.

This means, for me, seizing every available opportunity to inspire even more people about the incredible work we are doing in the UK. Building excitement about the amazing things that we are doing.

And engaging people in the work – whether that's the families and communities who are affected by science, or the people who can enrich our understanding of issues, or those who stand to benefit most from more inclusive engagement.

And I believe we need to build trust in what we are doing. Because in this age of flat-earthers and anti-vaxxers, it's ever more important that we build trust in the knowledge that comes from science and research. And build mutual trust between those doing research and those affected by it.

The critical success factor is your vision,

your enthusiasm

and your application.

Now let me turn to an important point. It seems to me there are some people involved in science who remain deeply bought into notions of exclusivity.

Now, don't get me wrong. There is a real value in wanting to be the best – and in taking bold action to ensure that we can be the best and can succeed in the UK.

And we mustn't ever undermine that.

Indeed, in my view, we must strengthen it.

But by obsessing over narrow indicators of success, we run the risk that our funding and assessment systems become disconnected from the diverse needs of our nation.

And we risk neglecting the contributions that so many people already make to

our R&D sector all around this country.

From lab technicians to administrators. From industry staff scientists and technologists, to innovators in all walks of life.

To those adopting and using technologies, as well as those inventing them.

And the local leaders and institutions around the UK who have the networks and insights that bring our R&D system to life.

It is absolutely vital that we now start to harness the potential of more people across our R&D system.

To do this, we need to include different sorts of people from all sorts of places in our discussions.

We'll need to collaborate across boundaries and borders to find the best solutions.

That means building better interfaces between government, funders, institutions and local leaders.

Put simply, we need to be more willing to listen, and more willing to work together.

We all need a change in mindset.

Now, I know there is more to be done to the levelling up debate than the things I've just talked about.

We of course need to have proper, informed debates about the best ways to achieve our aims and the right role for R&D investment.

That is exactly why I established a [Place Advisory Group](#) to help develop our Place Strategy for R&D.

But we mustn't forget that 'levelling up' is about much more than straight economics, or funding models, or winners and losers.

It's about how science, research and innovation can help us to become a more inclusive economy, and a less divided country.

It's about how we can secure equality of opportunity and embrace diversity and difference.

It's about how we can strengthen connections across our country so that more people and places can benefit from the UK's status as a science superpower.

And it's about building trust and respect.

In short, it's about building the kind of country we all want to be and can be part of.

I'm excited by this opportunity, and believe that together we can do this.

The only way is up, for us all.

Thank you.