

Professor Dudley Shallcross, Hon DSc, *Monday 17 July 2023*

Vice-Chancellor:

Our honorary graduand this afternoon is Professor of Atmospheric Chemistry at Bristol University and a pioneer in outreach work and science education. I am delighted to introduce PROFESSOR DUDLEY SHALLCROSS.

Dudley Shallcross joined The School of Chemistry at Bristol University as a lecturer in 1999, becoming Professor in 2007.

Dudley attended The University of Southampton as an undergraduate where he studied degrees in both Chemistry and Mathematics simultaneously. He turned to atmospheric chemistry for his doctorate at Oxford and spent time as a post-doctoral researcher at The Centre for Atmospheric Science at Cambridge.

He has published over 200 papers on atmospheric chemistry, is a Fellow of the Royal Meteorological Society, was Visiting Scientist at the UK Metereological Office's Hadley Centre for Climate Change in 2005, and in 2009 won the Michael Hadley Award of the Royal Meteorological Society.

Dudley's other areas of research are in science education and in public engagement in science; he works on enabling effective transition from primary to secondary to tertiary education in science, on teaching mathematics in context, and on effective outreach by universities to secondary and primary schools. He has made outstanding innovations in

chemistry education and in outreach work, supporting the national campaign to increase the uptake of STEM subjects and provide the skilled scientists our future needs.

From 2005-2010, Dudley was Director of Outreach in Bristol's Chemistry Department. Here he pioneered successful science education initiatives at higher, secondary and primary school level – encouraging school use of university laboratory space by school students, as well as engaging with the general public. He came up with the idea of the 'School Teacher Fellow' – putting an experienced chemistry teacher into a university chemistry department, bringing together expertise and resources to produce better focussed outreach activities. This so impressed the Royal Society of Chemistry that they obtained government funding to expand the scheme. School Teacher Fellows now work in universities across the UK, organising lectures, demonstrations, workshops in university chemistry departments and in primary and secondary schools, as well as training university students in science communication.

Dudley also focuses on science in primary schools. Between 2010 and 2022, Dudley was Director and then CEO of the Primary School Teaching Trust, a national charity working to promote excellence in primary school science education. He oversaw the development of a new strategy for the Trust, putting excellent teachers at the centre: he has established a College of Excellent Primary School Science Teachers, which makes funding available to its Fellows to improve primary science across the UK.

Dudley is himself a talented teacher: in 2004, he won a Higher Education Academy National Teaching Fellowship, the first ever to be awarded in Chemistry; the following year, he received Bristol's Faculty of Science Teaching Award and the Higher Education Teaching Award from the Royal Society of Chemistry. In 2017 Dudley won the Royal Society of

Chemistry's Nyholm Prize for Education and is he currently President of their Education Division. In 2021, the American Chemical Society gave Dudley the George C. Pimental Award for encouraging students from underrepresented and economically disadvantaged backgrounds into careers in the chemical sciences.

Professor Shallcross has provided outstanding, inspiring and impactful educational and outreach work on an unprecedented scale, for which he has won many prestigious awards. It is a great pleasure to add to these accolades today.

Vice-Chancellor: in the name of the Senate, I present to you for admission to the degree of Doctor of Science, *honoris causa*, PROFESSOR DUDLEY SHALLCROSS.