## **Oration for Professor Paul Hardaker**

Considering Professor Paul Hardaker has been widely acknowledged as one of the country's leading commentators on climate change, it is surprising to know that this was not his original choice of career.

A mathematician by background, when he joined the University of Essex's Propagation and Remote Sensing Research Group he worked with BT's research labs, the Rutherford Appleton labs and the European Space Agency looking at how to remove the effects of weather from ground-based and satellite radio signals. This research was essential for the designs of the very first mobile phone networks.

However, during the research he became a lot more interested in how to use satellites and radar systems to observe the weather and to help improve forecasts.

He became particularly interested in short-term forecasts to protect people from flooding. With the UK's ever-changing weather system - the period between 2011-2020 was nine per cent wetter than 1961-1990 - this area of science has become more important than ever.

Professor Hardaker's new-found interest in forecasting led him to the Met Office where he worked for 15 years in a variety of interesting roles across weather and climate research including the Met Office's Director of Development Programmes and latterly the Met Office's Chief Advisor to Government, supporting the Government in areas such as climate change policy and the national civil contingencies.

Before detailing the rest of Professor Hardaker's illustrious career to date we thought you might like to know why he chose to study at Essex.

He remembers his first visit to Colchester Campus fondly – where he found everyone was so warm and welcoming, and he loved the surroundings. The Maths department had put together a really interesting visitor programme with, in his words, "some fascinating and engaging talks". He knew that day that Essex was the university he wanted to go to. He studied for his BSc in Mathematics and Computing, and his PhD in Mathematics at Essex, completing in 1988 and 1993 respectively.

During his time at Essex, he had a reputation of being very personable - good with people as well as science! He had a knack of explaining complex science in a way which people outside academia could understand. This skill explains why his career highlights include so many key roles over the years.

He recently retired from his role as Chief Executive of the Institute of Physics, which he held for ten years.

He is also a board member (and past-chair) of Sense about Science and of Engineering UK.

Prior to that Professor Hardaker was the Chief Executive of the Royal Meteorological Society, a Board member of the Society for the Environment, and a member of the Science Steering Group for the UK's Joint Weather and Climate Research Programme, and the Advisory Board for e-Research South.

He was also a member of the Standards Quality Council, and has been for many years a reviewer for the Queen's Anniversary Prizes for Further and Higher Education.

Professor Hardaker has headed up the UK delegation to several UN and EU technical committees on physics and meteorology and has been a member of the Physics Advisor Panel at the University of Wales, one of the Government's Science and Society Champions, Chairman of one of the UK's national e-Science projects, and the founding editor of the international journal Atmospheric Science Letters.

He was the Chairman of the UK Research Council's programme on the Flood Risk from Extreme Events. He is a past board member of the Science Council and for five years was also a Non-Executive Director and latterly Deputy Chairman of the Board of NHS Berkshire West.

Professor Hardaker is a Visiting Professor at the University of Reading in the School of Mathematical and Physical Sciences and Fellow of the Institute of Physics and the Royal Meteorological Society

He has kept his links with Essex and in 2019 generously offered the Institute of Physics as a venue for the 'Essex in London' alumni event series. The event proved to be one of our most successful Essex alumni events of that year.

Pro-Chancellor, I present to you Professor Paul Hardaker.