

*Laureation given by Prof. Eleanor Campbell, Chair of Chemistry, at the Graduation Ceremony on 28<sup>th</sup> June 2016*

Mr. Vice Chancellor. In the name and by the authority of the Senatus Academicus I have the honour to present for the Degree of Doctor of Science

**Professor DUDLEY ROBERT HERSCHBACH**

Dudley Herschbach is a giant in the field of chemical physics and it is a particular pleasure to celebrate his achievements today in the year that marks the 50<sup>th</sup> Anniversary of the first chemical physics graduates from the University of Edinburgh. Dudley is renowned for his pioneering work on the development of molecular beam techniques for which he shared the 1986 Nobel Prize in Chemistry, 30 years ago. This work opened up a new field of research in chemistry and laid the foundation for the development of a deep fundamental understanding of the mechanisms of elementary chemical reactions. It was the inspiration for the early chemical physics research at Edinburgh. Malcolm Fluendy was a researcher in the Herschbach lab in the early 1960s and brought the experimental techniques to Edinburgh when he was appointed to one of the first lectureships in chemical physics. As one of Malcolm's former molecular beam students myself I like to think of Dudley as my scientific grandfather.

Dudley is an exceptionally inspirational figure who has made seminal contributions to many areas of chemical physics such as stereodynamics and a theoretical dimensional scaling approach to electronic structure calculations. His infectious enthusiasm, broad scientific interests and playful sense of humour are all regularly put to very good use in his lectures to students of all ages and the general public. He is a very strong proponent of science education and for many years has also been an outspoken advocate of women in science.

Dudley has also been a mainstay of the delightful ig-Nobel award ceremony for many years. This is an event held annually at Harvard to honour achievements that make people laugh, and then think, such as last year's chemistry award for inventing a chemical recipe to partially un-boil an egg. He has even appeared on the Simpsons cartoon series in 2003, providing the voice over for his character who is seen presenting the Nobel Prize to Professor Fink. It was reported that Herschbach considered his animated, yellowed-self to be "a great improvement".

It is a great pleasure for me to present this hugely inspirational figure, great scientist, humanist, distinguished Eagle Scout and fun-loving person for our highest honour, the doctorate of the University. I have sincere pleasure, Mr Vice Chancellor, in inviting you now to confer on

Professor Dudley Robert Herschbach  
the degree of Doctor of Science.