

# The 12<sup>th</sup> George E. Davis Lecture

**Professor Roland Cliff CBE FEng FIChemE**

Seeing the whole picture: chemical  
engineering and the science of  
sustainability

Thursday 6 July 2017

Royal Academy of Engineering  
London, SW1

Registration from 18:00



# The George E. Davis Lecture

The Institution of Chemical Engineers is pleased to announce that the leading thinker on sustainability and industrial ecology issues, Professor Roland Clift CBE, has been confirmed as the recipient of the 12th George E. Davis Medal. Named in honour of the founding father of the chemical engineering profession, the medal is the highest award conferred by the Institution.

The medal presentation will take place on Thursday 6 July 2017 following the 12th George E. Davis Lecture titled *Seeing the Whole Picture: chemical engineering and the science of sustainability*.

Clift will assert that chemical engineering is more than just the branch of engineering that supports the process industries. Rather, it is a systematic way of approaching problems

based on integrating fundamental scientific principles, quantitatively, and considering complete systems. Chemical engineering thinking is particularly powerful when applied at the macroscopic scale, to problems with economic, environmental and social dimensions, notably to the sustainability agenda and to the approach known as industrial ecology.

Drawing on personal experience amassed over a professional career spanning nearly 50 years, the lecture will examine some less familiar applications of chemical engineering thinking. Clift will explore the idea that chemical engineers can offer a rational approach to the crucial question:

How can we find ways to live within the constraints of our finite planet?

## Previous Medallists

1965 - A.J.V Underwood

1969 - F.E. Ireland

1973 - John Coulson

1977 - Sir Denis Rooke

1982 - Sir Maurice Hodgson

1988 - Sir Geoffrey Allen

1991 - Jacques Villermaux

1998 - Sir Ian Robinson

2001 - Sir David Harrison

2004 - Sir David King

2011 - Andrew Liveris

The George E. Davis medal is awarded to an eminent individual who has rendered service to chemical engineering. It is given not more frequently than every three years. Nominations are considered by IChemE's Medals and Prizes Committee.

For more information email [medals@icheme.org](mailto:medals@icheme.org)



## George E. Davis (1850–1906)

Davis gave a series of 12 lectures at the Manchester School of Technology (now the University of Manchester), which formed the basis of a two-volume Handbook of Chemical Engineering, first published in 1901. Davis' ideas about engineering promoted a new field; one that encompassed both chemical processes and mechanical equipment. The discipline that we now recognise as chemical engineering was born and a new field of study emerged, resulting in an astounding array of innovations that would transform society in the 20th Century and beyond. Antibiotics, plastics and petrol are just three examples of everyday items that are widely available today as a direct result of Davis' far sighted approach.

IChemE's headquarters in Rugby are named in his honour.

# Programme

The lecture will take place in the Al Qasimi Lecture Theatre in Prince Philip House at 3 Carlton House Terrace, London, SW1. Registration opens at 18:00 and the lecture and medal presentation will be followed by a drinks reception concluding at 21:00.

The presentation will be followed by a performance of 'Adagio in G minor for string quartet', a piece composed by the ever-versatile Clift himself in 1967.

## How to register

Given his relocation to Canada, this event may represent the final opportunity to hear the redoubtable Professor Roland Clift share his thoughts from an IChemE platform on a topic area in which he remains a leading international authority.

A full house is anticipated and early booking is recommended by all those with an interest in sustainable development, industrial ecology or the application of chemical engineering solutions to environmental challenges.

Register online now via [www.icheme.org/davis12](http://www.icheme.org/davis12)

For more information contact Rachael Fraser at [communications@icheme.org](mailto:communications@icheme.org) or call **01788 534435**





## Roland Clift CBE

Born in 1942, Clift studied Chemical Engineering at Cambridge before going on to obtain his PhD from McGill University in Canada. His research continued at Cambridge, then the University of Surrey where he became Head of the Department of Chemical Engineering in 1981.

His growing interest in the application of chemical engineering principles to environmental issues led him to establish Surrey's multidisciplinary Centre for Environmental Strategy in 1992.

Clift was a member of the Royal Commission on Environmental Pollution, an expert adviser to the House of Lords Science and Technology Committee inquiry into energy efficiency, a member of the Science Advisory Council of the UK Department for Environment, Food and Rural Affairs and a contributing author and review editor for the Intergovernmental Panel on Climate Change (IPCC). He is a Past President of the International Society for Industrial Ecology. He was awarded an OBE for his work on clean technology in 1994 and a CBE for services to the environment in 2006.

He is Professor Emeritus at the University of Surrey and a notable critic of government energy and environment policy. Clift will retire to Canada later in 2017.

## For more IChemE events contact:

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