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Foreword

Professor Geoffrey Frederick Hewitt on his 80th birthday



Professor Geoffrey Frederick Hewitt (Geoff, or GFH, as he is known to all) has been working in multiphase flow and heat transfer for nearly 60 years. From his enthusiasm and energy one would not believe that he is 80 years old. Yet his birth certificate states that he was born on the 3rd January, 1934. Such a date in the middle of the northern hemisphere winter is hardly the weather for a celebration. Not surprisingly, in the United Kingdom, the Queen has an official birthday in the summer. Following this precedent, Geoff's present and former PhD students and coworkers organized and participated in a celebratory conference in London 23–25th July 2014. This was an excellent event with an abundance of thought provoking presentations. However, such events are ephemeral. To provide a lasting record of the esteem in which Geoff is held, his colleagues, friends and students (past and present) have written a series of original papers which are being published in this Special issue of the International Journal of Multiphase Flow.

Professor Hewitt's speciality for several decades has been in gas-liquid and liquid-liquid systems, with particular reference to channel flow and heat transfer with applications ranging from nuclear reactors to process heat exchange, from hydrocarbon recovery to multiphase flow metering. He earned a BSc Tech in 1954 followed by a Ph.D. in 1957 both from the University of Manchester Institute of Science & Technology. In 1957, He joined the Harwell Laboratory of the UKAEA as a Scientist, and was appointed Division Head in 1976. GFH founded an early Joint Industry Project, the Heat Transfer and Fluid Flow Service in 1968 and remained at its helm until 1982. His academic career began in 1985, when joined the Department of Chemical Engineering at Imperial College on a part-time basis as a Professor; the appointment became full-time in 1990. He assumed the post of Courtaulds Professor of Chemical Engineering at Imperial College London between 1993 and 1999, before becoming an Emeritus Professor in 1999.

He has made significant contributions to the fields of multiphase flows and heat transfer and the wider field of engineering in his illustrious career. These have been recognised by the honours bestowed upon him:

- Fellow of the Royal Academy of Engineering in 1985.
- Fellow of the Royal Society in 1990.
- Foreign Associate of the U.S. National Academy of Engineering in 1998.

He has received all the principal international awards in multiphase flows and heat transfer: the Donald Q. Kern Award, AIChE, the Max Jakob Award, ASME, the Luikov Medal, ICHMT, the Nusselt-Reynolds Prize, ICEHT, and the 2007 ICMF Senior Multiphase Flow Award. In 2007, GFH received the Global Energy Prize at the World Economic Forum.

He was President of the U.K. Institution of Chemical Engineers in 1989–1990.

Professor Hewitt has published over 400 reports and papers and numerous books, on multiphase flow and heat and mass transfer, the most famous of which is *Annular Two-Phase Flow*. He has graduated over 50 Ph.D. students.

This special issue is dedicated to Geoff's distinguished career and outstanding contributions, which have been a source of inspiration to all of us. His papers and books have helped to form the minds of researchers in multiphase flow and heat transfer for the past fifty years. His ideas have contributed to the improvement of practices in the Power, Process and Oil and Gas industries.

GFH remains active in several areas of multiphase flows, and heat transfer to this day, running a large group of students and postdocs, and carrying out cutting-edge research with the same infectious enthusiasm and total dedication that characterised the young man that joined Harwell all those years ago.

Happy birthday, Geoff!

Guest Editors of the Special Issue
Jader Barbosa*

Federal University of Santa Catarina, Brazil

* Corresponding author.

E-mail address: jrb@polo.ufsc.br

Barry Azzopardi

University of Nottingham, United Kingdom

E-mail address: barry.azzopardi@nottingham.ac.uk

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