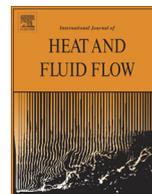




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Preface



This special issue of the IJHFF is dedicated to our colleagues and friends Brian Launder and Kemal (Kemo) Hanjalic, following their 75th birthdays in 2014, to celebrate their extensive contributions in the area of turbulent flow and heat transfer dynamics.



Kemo (left) and Brian on a summer visit to Siberia

Brian received his undergraduate training at Imperial College where he received a B. Sc (Eng) degree in Mechanical Engineering. He then pursued his graduate education while at the Gas Turbine Laboratory at MIT where he was awarded both his M.S. (1963) and D.Sc. (1965) degrees in Mechanical Engineering. Upon returning to the U.K., Brian began his academic career at Imperial College in 1964 as a Lecturer. This was followed in 1971 by promotion to Reader in Fluid Mechanics for his early research on turbulence modelling. In 1976 he accepted an invitation from the University of California, Davis to join the faculty as a full professor. After a stay of four years, he returned to the UK to head the Mechanical Engineering Department's Thermo-Fluids Division at UMIST in Manchester. He led the Division for more than fifteen years and served two terms as Head of Department. In 1998 he was appointed the inaugural chairman of UMIST's Environmental Strategy Group to promote the development of a coordinated programme of research and teaching on the environment while from 2000 he served six years as Regional Director of the Tyndall Centre for Climate-Change Research.

Brian has been a major contributor to the development of mathematical models of turbulence and their application to a wide range of complex industrially important flows, particularly hot-section components of gas turbines. Over his career he supervised more than 40 doctoral students and published more than 300 technical articles as well as (co)-authoring 4 books. He was elected a

Fellow of both the Royal Society and the Royal Academy of Engineering in 1994 for his contributions to the modelling, measurement and computation of turbulent flows. Other awards have included higher and honorary doctorates from seven international academic institutions and the quadrennial Nusselt-Reynolds Prize in Fluid Mechanics. He was appointed an Editor-in-Chief of the *International Journal of Heat and Fluid Flow* in 1987, a role he discharged for 25 years. Thereafter he continued as an Editor-at-Large handling special issues for two years.

Kemo received his Dipl. Ing. from the University of Sarajevo in Mechanical Engineering – Energy Engineering in 1964. His graduate education followed in the U.K. where, in 1966, he received his M.Sc. in Thermodynamics and Related Studies from the University of Birmingham, and in 1970 his Ph.D. from Imperial College in Fluid Mechanics. During this period in the U.K., Kemo held the position of Lecturer at the University of Sarajevo. After receiving his doctorate, he was promoted to Docent, Associate Professor in the Faculty of Mechanical Engineering and in 1979 to the position of Professor of Fluid Mechanics and Turbomachinery. During his tenure at the University, he also held various administrative positions including Head of Department of Mechanical Engineering and Dean of the Faculty of Mechanical Engineering as well as the Director of the Institute for Process-Power and Environmental Engineering. Noteworthy during this period were his service as mayor of Sarajevo and cabinet member in the government of Bosnia and Herzegovina. In 1991 he left Sarajevo and was Guest Professor of the German Research Association at the University of Erlangen until 1993. After having spent one year in the United States as Professor of Mechanical Engineering at Michigan Technological University, he joined TU Delft as the Professor and Head of the Thermofluids Section in 1994, a position he held until April, 2005. After retirement from Delft, his pace of activity and productivity continued, and throughout the last decade he has held positions at TU Darmstadt (2005–2007) and the University of Rome “Sapienza” (2007–2010) where he held a (EU) Marie Curie Chair in Computer Modelling and Simulation of Fluids and Thermal Processes. From 2011, he has been Lead Scientist at the Novosibirsk State University.

Kemo has also been a major contributor to the development of mathematical models of turbulence, and has published extensively on topics of heat transfer, combustion and MHD. In addition to supervising 30 doctoral students, he has (co)-authored 4 books, edited 12 volumes, and has received 2 patents (detonation wave technique for deposit removal). Kemo holds a D.Sc. from the University of London (UK) and a Dr.h.c. from the University of Reims (Fr). He is a Member of the Academy of Sciences and Arts of Bosnia and Herzegovina, and an International Fellow of the Royal Academy of Engineering (FREng) in the UK. He was

appointed in 2005, and continues to serve, as the Editor-in-Chief of the journal *Flow, Turbulence and Combustion*.

For almost two generations of professional activity that included educating and training students, collaborating with colleagues and extensively contributing to the advancement of knowledge in fluid flow dynamics and heat transfer, both Brian and Kemo have set a standard of excellence for the community. They have co-authored two of the most cited articles that have appeared in the area of turbulent flow modeling. The first was on high-Reynolds number Reynolds stress modeling (JFM, vol. 52, pp. 609–638, 1972) and the second on low-Reynolds number Reynolds stress modeling (JFM, vol. 74, pp. 593–610, 1976). More recently, they have jointly authored the textbook *Modelling Turbulence in Engineering and the Environment*, CUP 2011.

It has been our distinct honor and pleasure to have had the opportunity to edit this celebratory volume of *IJHFF*. We are grateful to the contributing authors for their contributions and want to thank them for their cooperation throughout the editorial process. This volume is but a small token of our appreciation to Brian and Kemo for their numerous contributions and we look forward to many more years of activity from them.

Editors-in-Chief, International Journal of Heat and Fluid Flow

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