

Dr. William Begell has had a long and distinguished career as a chemical-nuclear engineer, researcher and publisher. Dr. Begell taught at Columbia University and was the Engineering Director of its Heat Transfer Research Facility. There, he managed the large-scale seminal work on two-phase flows, burnout studies and cooling procedures for nuclear reactors, some of which were conducted directly under the founder of the US Nuclear Navy, Admiral Hyman Rickover. He later became involved in a US Air Force intelligence project that culminated in the cofounding of Scripta Technica (1962), a publishing company specializing in the presentation of important scientific and engineering materials translated from foreign languages into English. Building upon his experience and reputation in the field, Dr. Begell founded Hemisphere Publishing Corporation (1966) where he continued to pursue his personal research and publishing activities. It was here that he developed an impressive list of 86 high-impact engineering and biomedical journals as well as hundreds of basic texts. research books and reference tools.

Dr. Begell's visionary sense of future trends in engineering and biomedicine led to the creation of interdisciplinary and cross-disciplinary publications. Throughout the years, Dr. Begell's contributions and support of scholarly societies were a factor in the development of new branches of knowledge. In some cases, these innovative titles led to the establishment of new fields of endeavor and study. Dr. Begell was one of the founding members of the Society of Scholarly Publishing and has been nominated for and granted many awards for his achievements in science, engineering and publishing and the ASME Heat Transfer Division Distinguished Service Award (2005).

The William Begell Medal, For Excellence in Thermal Science and Engineering is being established in 2010 and is made possible by the support and generosity of William Begell's friends, colleagues, and Begell House Inc. sponsorship.



for Excellence

in Thermal Science and Engineering

# Presented to Nobuhide Kasagi

International Heat Transfer Conference 14

August 11, 2010 Omni Shoreham Hotel, Washington D.C., USA





## 2010 Recipient of the William Begell Medal **Nobuhide Kasagi**

Nobuhide Kasagi received BS (1971), MS (1973) and Ph.D. (1976) degrees in mechanical engineering from the University of Tokyo. Since 1976, he has been a faculty member in the Department of Mechanical Engineering at the University of Tokyo with a sabbatical leave at Stanford University (1980-81), and now serves as Professor of Thermal and Fluids Engineering. He is also working for the science and technology policy of Japan as Executive Member of the Science Council of Japan, and Principal Fellow in the Center for Research and Development Strategy of the Japan Science and Technology Agency.

He has been involved in fundamental and applied research on fluid mechanics and heat transfer. He started his research work with investigation of wall turbulence structure, and then extended it to modeling and large-scale numerical simulation of turbulent transport phenomena, control of turbulent transport, two-phase flows with particles/cells/bubbles, micro-scale thermal and fluid systems, micro cell processing, and computer-aided visualization and image processing. He has also led applied research projects, which are related to high-temperature gas turbines, solid oxide fuel cells, micro heat exchangers, and small-scale distributed energy systems. He is currently working for developing advanced turbulence control schemes, GT-SOFC hybrid energy systems, micro energy conversion, and computational fluid mechanics and heat transfer. He is the author of more than 700 articles and 30 books, and the curator of scientific databases, "DNS Database of Turbulence and Heat Transfer" and "3-D PTV Database of Turbulent Flows," which have been available on the web since 1995.

Kasagi served as President of the Japan Society of Mechanical Engineers, the Japan Society of Fluid Mechanics and the Japan Society of Computational Fluid Dynamics. He is and has been actively participating in various international activities as, e.g., Executive Member of the International Centre of Heat and Mass Transfer, President of the World Assembly of Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, and organizer of various conferences such as the International Symposium on Turbulence and Shear Flow Phenomena. He has committed himself to Editor of JSME International Journal, Editorial Board Member for Experimental Heat Transfer, Associate Editor of Fluid Dynamics Research, and Managing Editor of Journal of Flow Visualization. He is now Editor-in-Chief of International Journal of Heat and Fluid Flow, Advisory Editor of Journal of Flow Turbulence and Combustion and Advisory Board Member of e-Fluids.

He is a recipient of JSME Medal for the Best Papers (1987, 1990, 2008, and 2010), GTSJ Best Paper Award (1988), JSME Thermal Engineering Achievement Award (1993), Heat Transfer Society of Japan Award (2002), JSME Fluids Engineering Award (2004), Fluid Science Award (2004), JSME Thermal Engineering Award for International Activity (2008) and so forth. He is Fellow of Royal Swedish Academy of Sciences (2003), Royal Academy of Engineering (2007), Engineering Academy of Japan (2002), ASME (1994), JSME (2001) and JSFM (2005).



#### Nobuhide Kasagi

The William Begell Medal for Excellence in Thermal Science and Engineering is being awarded to an individual, from among those selected to deliver Keynote Lectures at the International Heat Transfer Conference. In 2010 The Medal bestowed to Nobuhide Kasagi who is held in high regard by the heat transfer community for his contributions and excellence in thermal science and technology.

### The Key-Note Lecture: CONTROL OF TURBULENT TRANSPORT: LESS FRICTION AND MORE HEAT TRANSFER

Nobuhide Kasagi The University of Tokyo Tokyo, Japan Yosuke Hasegawa The University of Tokyo Tokyo, Japan

Koji Fukagata Keio University Yokohama, Japan Kaoru Iwamoto Tokyo University of Agriculture and Technology, Tokyo, Japan

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