



**UK Midlands**  
Chapter

## Presidential Lecture

Date: Tuesday, 10 Oct 2017  
 Time: 18:00 - 20:00  
 Location: RT0.25, School of Architecture,  
 Building and Civil Engineering  
 Loughborough University  
 Loughborough  
 LE11 3TU  
 Booking: <https://goo.gl/fLsn73> (free)  
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### ASHRAE Presidential Lecture

## The influence of occupant behaviour on indoor environment and energy use in buildings

Professor Bjarne W. Olesen Ph.D.

ASHRAE President 2017-2018

Intl. Centre for Indoor Environment and Energy  
 Technical University of Denmark, Lyngby, Denmark

*"Technologies alone do not necessarily guarantee low energy buildings. Occupant behavior plays an essential role in the design and operation of buildings, but it is quite often oversimplified. Occupant behavior refers to an occupant's movement and responses to discomfort, when his/her comfort needs are not met. Occupant behavior varies with time, space, individual, and is influenced by social context. It is stochastic, complex, and multidisciplinary. Having a better understanding and modeling of occupant behavior in buildings can improve the accuracy of building simulations and guide the design and operation of buildings. This talk highlights related behavior research at various institutes."*



#### Biography

Professor Olesen received his Master's degree in civil engineering, 1972, and Ph.D., from the Laboratory of heating and Air Conditioning, Technical University of Denmark, in 1975. His remarkable experience within the industry and the academia include: In the period 1972-1990 Research scientist at the Laboratory of Heating and Air Conditioning. Part time affiliated as product manager at Brüel & Kjaer 1978-1992. Senior Research Scientist, College of Architecture, Virginia Tech. in the period 1992-1993. Since 1993 until January 2004 Head of Research & Development at UPONOR-VELTA GmbH KG & Co., Norderstedt, Germany. Since January 2004 full professor in Indoor Environment & Energy at the Technical University of Denmark and director of the International Centre for Indoor Environment and Energy, Technical University of Denmark. He has received the Ralph Nevins Award (1982), Distinguish Service Award (1997), Fellow Award (2001) and Exceptional Service Award (2006) from ASHRAE. Awarded the Medal of Honour from the German Engineering Society (VDI-TGA, 2005) and International Honorary Member of SHASE. The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan. President Elect of ASHRAE and Honorary member of AICARR (Italian Society for HVAC)

Professor Olesen is active in several ASHRAE-CEN-ISO-DIN standard committees regarding indoor environment and energy performance of buildings and HVAC systems. To date, he has published more than 350 papers including more than 60 in peer reviewed journals.