In Memory of Professor Jan Sundell

ISIAQ deeply regrets to hear about the loss of Professor Jan Sundell, who peacefully passed away last month at his home in Stockholm, Sweden.

Swedish by birth, Professor Sundell was an international researcher with a background in both engineering and medicine. He was one of ISIAQ's founding members and served on the Board of Directors of ISIAQ, as Editor-in-Chief of Indoor Air Journal and was a Vice President of the International Academy of Indoor Air Sciences (now Academy of ISIAQ Fellows).

His death is a great loss to our society, for which he provided major input into its development and helped us to be where we are today.

Marzenna Dudzinska
President, ISIAQ

A Tribute to Professor Jan Sundell
Homage from Professor Carl-Gustaf Bornehag, Karlstad University and Icahn School of Medicine at Mount Sinai, New York, USA

It is with sorrow in my heart that I have realized that my mentor and very good friend of more than 30 years has passed away. I got to know Jan in the mid-80's in an Accident Commission that investigated a building scandal in Stockholm. As a young PhD-student I was impressed by him; his argument that we needed to base our opinions on scientific evidence, and his view that understanding how the indoor environment affects man must be based on collaboration across scientific boundaries. Jan advocated real interdisciplinarity that includes a deep knowledge of engineering, chemistry, epidemiology, statistics, and of course in medicine and psychology. Everyone agreed upon this, but in reality, this type of collaboration has slowed dramatically in recent years, and today it is mainly engineers involved, which Jan considered as a major mistake.

Jan has done a tremendous amount for how indoor environmental factors are related to human health and development, both nationally and internationally. And he was not afraid to express his views! First in his role as an authority person, during which he wrote important documents for ventilation of buildings in Sweden. But most for his scientific role where he defended his doctorate at Karolinska institutet in Stockholm 1994 and during his career published more than 200 scientific articles. He co-founded the main scientific international conferences in the field; Indoor Climate in Copenhagen 1978, Indoor Air in Stockholm 1984 and Healthy Buildings in Stockholm in 1988. Jan joined and formed ISIAQ and its scientific academy, sat in the board of directors and he was a chief editor of Indoor Air. He then worked as a professor at DTU in Copenhagen, University of Texas at Tyler, USA, and in recent years at Tsinghua University in China.

With regard to science, I had the opportunity to initiate and operate with Jan in the NORD-works, where we went through global scientific literature and examined thousands of articles from a multidisciplinary perspective. These works - which included volatile organic compounds (VOCs), moisture in buildings, pets, ventilation, particles - are among the historically most cited scientific articles in the indoor environment area. I also had the opportunity to perform research with Jan for many years. We started the Swedish DBH study in 2000, where the "children" now are 20-25 years old and still being followed. The concept of DBH has been copied in Bulgaria, Singapore, Denmark, the USA, Taiwan and China under the leadership of Jan. These studies have involved over 100,000 children and their families with the aim of understanding what the indoor environment means for children's health and the studies have given rise to a large number of articles and doctoral theses. Jan also participated in our Swedish SELMA study which focused on the prenatal environment and how this impacts children’s health and development. We both shared the idea that chemical exposure during sensitive periods of development plays a crucial role in health and development throughout the life cycle.

It is sad that Jan is gone. At the same time, there’s a feeling of grace and joy, thinking of all the good times we shared together through the years. Our travels, the years in Copenhagen, the occasional beers, the endless scientific and political discussions (we mostly agreed), our common music interest (even if some of his Jazz records were beyond my preferences), all the applications, that were not always granted, and the book that we planned to write, but which unfortunately never did. Thank you for all, Jan.

Homage from the School of Architecture, Tsinghua University, China

Professor Jan Sundell, a renowned international expert on indoor air quality, one of the founders of the International Society of Indoor Air Quality and Climate (ISIAQ) and International Academy of Indoor Air Sciences (IAIAS), a promoter of indoor environment and human health research in China, a full Professor at Tsinghua University (2009-2017), passed away peacefully at home in Stockholm, Sweden, on May 27, 2019, at the age of 76.

Professor Sundell was born in Sweden on July 10, 1943. He graduated from Stockholm University
in Sweden in 1968 with a bachelor degree in business economics. In 1969, he obtained his master degree in heating, ventilation and air-conditioning of mechanical engineering from KTH Royal Institute of Technology in Sweden. He obtained his Doctor of Medicine (M.D.) from Karolinska Institute, Stockholm in 1994. Professor Sundell served on the National Board of Urban Planning and Building, Sweden, responsible for building codes regarding ventilation and indoor climate. He was the head of the section for Ventilation and Thermal Climate in the National Board of Occupational Safety and Health, Sweden. He served as a full-time or visiting professor at eight famous universities in the world. He was the president of IAIAS, vice-president of ISIAQ, and the editor-in-chief of Indoor Air, the leading international journal in the field of indoor environment. He got the Nordic Indoor Climate Award in 1994, Rockwool Prize in 2004 and Max von Pettenkofer Award, the international highest academic achievement award in the field of indoor air environment in 2011 (he was the 5th winner in the 33 years since this award was established).

Professor Sundell devoted himself to the study of indoor environment and human health. He was a pioneer in the field. He found the impact of air change rate in buildings on human health. In recent years, he wrote many articles advocating research on the correlation between “modern exposure” and “modern diseases.” He initiated and organized the research on the relationship between building environmental factors and childhood asthma/allergies in many countries/regions around the world, including Sweden, Bulgaria, Singapore, the United States, China and Mexico. He promoted the multidisciplinary development of indoor environment and health science, and published more than 300 papers in international academic journals. His foresight, enthusiasm, persistence and rigor in indoor air quality research has exerted a profound influence on the research and development of this field worldwide.

Professor Sundell loved China so much that he took his Chinese name as 宋德扬. From 2009 to 2011, he was invited to be a visiting professor at the Institute of Built Environment and Equipment, School of Architecture, Tsinghua University. He was a full-time professor at Tsinghua University from 2012 to 2017. He was concerned about the lack of ventilation in Chinese buildings and called for action and promoting the research on the relationship between indoor environment and human health in China. He conducted an epidemiological survey named as “China Children Home Health” (CCHH) for 48,000 children in 10 cities, cooperating with researchers from more than 10 universities in China. He was warm and generous to others.

He was devoted to education and helped young scholars actively and selflessly. During his eight years at Tsinghua University, he had deep discussions with Tsinghua teachers and students. He introduced advanced research ideas and presented forward-thinking suggestions for the development of indoor environment research and student training in Tsinghua and in China. He promoted international cooperation and communication in this field in Tsinghua University. He also enhanced China's international influence in this field. He offered the English course “Indoor Environment and Health” for undergraduates and graduates of Tsinghua University, which was well received by students. In addition, he cooperated with the Public Health Research Center, School of Public Health at Tsinghua University to set up the course "Environmental Health," which promoted the interdisciplinary cooperation of indoor environment and medicine.

More than one decade ago, Professor Sundell predicted that China will be the global research center in the field of indoor environment. His words have always encouraged and spurred the Tsinghua team to work hard and move fast in this field. He has left us, however his contribution to the development of indoor air quality in Tsinghua, China and the world, and his vision, enthusiasm, perseverance and love will all remain in our hearts forever.