

## Tribute to Dr. J.M.H. “Anneke” Levelt Sengers (1929-2024)



Anneke Levelt was born in Amsterdam on March 4, 1929 and passed away at Asbury Methodist Village in Gaithersburg, MD on February 28, 2024. She was the eldest child of Willem Levelt, who had a Ph.D. in chemistry, and Josephine Berger, who had a masters in physics. Having grown up in a large family with a strong scientific interest, she received her Ph.D. in Physics from the University of Amsterdam in 1958.

After a year as a postdoc at the University of Wisconsin, she went back to The Netherlands. In 1963 she immigrated to the US to take a position as a physicist at the National Bureau of Standards (NBS), together with her husband Jan. At NBS, which later became the National Institute of Standards and Technology (NIST), she became an internationally recognized scientist in the area of thermodynamics of the critical behavior of fluids and fluid mixtures. She was also active in the thermodynamic properties of water and steam for the power-generating industry. A Russian scientist called her the most thermodynamic woman of the world.

Anneke Levelt Sengers received numerous awards and recognitions. She was a member of both the US National Academy of Engineering and the US National Academy of Sciences. She was a correspondent of the Royal Netherlands Academy of Sciences and of the Royal Holland Society for Sciences. In 1992 she received an honorary doctorate from the Technical University Delft as the first female honorary doctor in the 150-year history of this university. In 2003 Anneke received the L'Oréal-UNESCO Prize for women in science in North America. Among her other honors are NIST and U.S. Department of Commerce Awards, the US Interagency Committee for Women in Science (WISE), and the Yeram Touloukian Award of the American Society of Mechanical Engineers (ASME).

Anneke has also been a role model for many women scientists. As Co-Chair of a panel of the Inter-Academy Council she coauthored a report “Women for Science” for the science and engineering academies of the world. In the final phase of her career, she played a leading role in the activities of the Working Group of the Inter-American Network of Academies of Sciences (IANAS) on Women for Science.

Anneke was active in IAPWS and its predecessor organizations for several decades, beginning with her participation in the 7th International Conference on the Properties of Steam in Tokyo in 1968. In the 1980s, she served as Chair of IAPS Working Group A, which was responsible for studying thermophysical properties of ordinary water, heavy water, and aqueous mixtures. She served as President of IAPWS in 1991-1992, and was the US delegate to the IAPWS Executive Committee for many years before retiring from that position in 2004. She was named an IAPWS Honorary Fellow in 1994.

Anneke’s contributions to IAPWS, to the scientific world, and to all those who knew her, cannot be captured by a simple list of accomplishments. Her energy, enthusiasm, and drive for excellence brought out the best in those around her, and she was always eager to encourage and assist those at earlier stages in their careers. All of this was done with extraordinary kindness and grace. She will be missed but not forgotten.