



William Calvin Stwalley

October 7, 1942 - October 7, 2025

William Calvin Stwalley, better known as Bill, has left the planet.

Bill was born in Glendale, California on October 7th, 1942 to Clarice Diette Stwalley and Calvin Murdock Stwalley. It was truly a different world. Bill recalled often riding the bus to the beach by himself to swim in the ocean and then going to hit a used bookstore on the way home to grab some second-hand Donald Duck comics for a nickel each. Bill had many early interests... comic books, stamps, basketball, geography... but what really ended up catching his attention was science.

After graduating valedictorian from Fullerton High School, Bill learned his trade at Caltech, where he got his BS in Chemistry (1964), and then Harvard, where he got his PHD in Physical Chemistry (1969). There are not a lot of research physicists in the world. There are not a lot of research chemists, either. He was both a world-class research physicist and chemist, and the legacy of his scientific work and discoveries will be felt far into the future.

Bill served in a wide variety of roles over the years; he was a professor, a researcher, a mentor, a leader, an organizer, an author, and, as his many friends, colleagues and students will attest to, an all-around incredible mensch. In his career he was the head of the Laser Facility at the University of Iowa, and later was the head of the Physics Department at the University of

Connecticut.

Bill's major research interests in his career were studies of ultracold atoms and molecules, especially photoassociation and formation and trapping of alkali dimer molecules; laser spectroscopy, photophysics and photochemistry; laser ionization; long range molecules and potential curves; radiative transition probabilities; and quantum degenerate gases.

Bill was an old-school scientist in that he believed open, collaborative, peer-reviewed research was key to moving the sciences forward. So, he always chose to work with public institutions that would keep his research public rather than corporations and other modern institutions that hide research for short-term profit at the expense of science.

While he was old-school that way, Bill was always at the cutting edge of his fields... both in the research itself and the choices of collaborators who he chose to work with. Bill was incredibly inclusive long before it was "woke." He made a point of collaborating with people of other races and genders throughout his career, and knew that collaborators having diverse viewpoints and backgrounds could only improve the work. To that end, from all the way back to the beginning of his career he made a point of working to bring in brilliant international students from a host of countries.

It is a challenge to summarize such a spectacularly successful career.

- Bill authored over 338 scientific papers and edited 8 books spanning atomic collisions, molecular spectroscopy, laser-induced chemistry, and ultracold physics. None of them were best-sellers, but they were all well-reviewed!
- Bill co-developed six patents. He pioneered techniques in optical-optical double resonance spectroscopy and photodissociation dynamics. Just try saying that three times fast!

- Bill held numerous leadership roles in a murderer's row of prestigious national and international scientific organizations.
- Bill served on numerous editorial boards for peer-reviewed scientific journals with strange names like The Journal of Molecular Spectroscopy.
- Bill led and organized over 30 national and international conferences on laser science, spectroscopy and quantum chemistry. Just think of all those coffee urns!
- Bill won more awards and honors than you could shake an entire redwood at.

Obviously, Bill's many professional and life accomplishments are quite literally much too long to list in an obituary, so we've attempted to summarize. We need to leave some room for the other dead folks here. If you want to read a much more thorough list of Bill's many professional accomplishments, you can find 33 pages of them at: https://www.stwalley.com/bill/William_Stwalley_CV.pdf

All of this is very impressive. What is more impressive, though, is that being a physicist and chemist was not even Bill's greatest endeavor. That would be his family. Bill loved his job, but he always, always, always put his family first before his work.

Bill was fortunate enough to find his perfect partner, soul mate and best friend at a very early age. Bill was only 20 when he married Mauricette, then 18. His beloved Mauricette remained the center of his world for the rest of his life. They were a wonderful team, showing deep love, affection and respect to each other every day in endless ways.

Mauricette was always his anchor, looking after all of the details of their life, allowing him the confidence and comfort of knowing that he and his family

were well taken care of all of the time. This enabled him to accomplish the remarkable scientific work that was his second passion.

Bill was an incredibly busy guy, often working late into the night in addition to his regular office hours. However, he prioritized travelling back and forth from work to have lunch with his beloved for an hour almost every afternoon. That is just one example of how he always made sure to have time for his family.

His sons were lucky enough to have a Dad who was always available to do math homework, and who could have done trigonometry standing on his head. He was also available to help them out with all their interests and pursuits... assistant coaching, attending events, chauffeuring, pursuing and sincerely sharing their interests. Bill was the spark that led both of his sons to the interests that would eventually become their livelihoods. I assure you this is not intended as a slight to your father, but I'm sorry to have to inform you that Bill was actually the best dad in the world. Maybe yours came in second?

Bill rarely travelled without Mauricette... and boy did they travel! Bill's career took them all over the world, with invitations to lecture and collaborate on research in over 50 countries. Bill's boyhood interest in geography came in handy as Bill and Mauricette visited every continent other than Antarctica (which he came in spitting distance of).

Obviously, Bill was an incredibly impressive gentleman. And by gentleman, let's be clear; he was respectful and polite at all times... but he was also incredibly gentle, thoughtful and kind. This gentle nature served him well in his unfortunate decline into the indignity of Alzheimer's dementia in recent years. This absolutely horrific disease was made considerably less horrible than it is for so many people, as Bill's core of gentle kindness always remained with him even as the disease consumed the rest of his incredible intellect. This was a great mercy to all those who cared for him in his final years.

Bill passed away peacefully among loved ones on his 83rd birthday, October 7th, 2025. Bill was agnostic. Science is not about proving things to be true; it is about trying to find things that can't be disproven. Bill perhaps took some comfort in the Law of Conservation of Energy. "Energy can neither be created nor destroyed; rather, it can only be transformed or transferred from one form to another." Wherever Bill is now, his family is so grateful for the time and love they had with him in our space-time continuum, and is thankful that he is no longer suffering.

Bill is survived by the light of his life, Mauricette; his sons Ken and Steven; his grand-kids August, Cassidy, Esther and Mitzi; his siblings Bob, Ramona, Ned and Brent; his nephew Jonathan and his wife Ana and daughter Thalia; his niece Alexandra and her husband Brian and daughters Skylar and Emmi; his niece Madeline and her husband Kendrick and daughters Kendall and Autumn; his niece Meredith and her husband Matt; his cousin Marilyn; his son Ken's life-partner Kristen... as well as other beloved family, friends and admirers.

Bill will have a small, private family burial on Friday, October 10th. Information about a celebration of Bill's life will be forthcoming. In lieu of flowers, please consider a contribution in Bill's memory to: The University of Connecticut Foundation, Edward N. Frisius Memorial Fellowship, 2390 Alumni Dr., Storrs, CT 06269-3206; North Memorial Health Hospice, North Memorial Health Foundation 3300 Oakdale Ave, Suite 425 Robbinsdale, MN 55422; Alzheimer's Association; or the ACLU.

Tribute Wall

PC

“ Bill was a valued and respected colleague during my days as a scientist with the US Air Force. I remember many interesting and stimulating conversations with him about our work in high energy density materials. He was an integral part of that extensive HEDM program. My condolence to his family and colleagues.

Patrick Carrick - January 18 at 04:51 PM

MB

“ Bill was such a gentleman and a scholar. He was so cheerful, patient and professional. He was so smart that he was able to be a chemist and physicist at the same time. No one understood diatomic molecules more than Bill did. He had such a spark in his eyes. I was lucky enough to be one of his students (UConn 2012). My condolence to his family.

Michael Bellos - January 09 at 08:59 PM

LT

“ I was Bill's roommate, as freshmen at CALTECH, in 1960. I would have preferred to continue that arrangement as sophomores, but Bill found a better roommate: Mauricette. So I had to continue our friendship at a greater distance...
It was just as well; Bill was smarter than most at Caltech (check out his subsequent accomplishments); I was not. But I still treasure our time together, all those years ago.

Leon Thomsen - October 17, 2025 at 03:10 PM



“ A sympathy card was purchased for the family of William Calvin Stwalley.



October 17, 2025 at 03:32 AM



“ Bing Ji lit a candle in memory of William Calvin Stwalley



Bing Ji - October 17, 2025 at 03:11 AM



“ I am deeply saddened by Dr. Stwalley's passing. I had been fortunate to be one of his many students. Dr. Stwalley had the unique combination of a world-renowned scientist, an academic leader, an inspiring teacher and mentor, and above all, a kind gentleman! I remember he had a coffee mug with a quote "That man is a success because he brings out the best in the people who work for him." Indeed, his life had been a huge success in this regard. As his former student, I am forever grateful to Dr. Stwalley. I really miss him, his smile, his calm voice and encouraging words.

R. I. P. Dr. Stwalley. My sincere condolences to Mrs. Stwalley and his family at this sad time.

Bing Ji

Bing Ji - October 17, 2025 at 03:10 AM

WH

“ I am so sorry to learn of Bill's passing. It was a privilege to know Bill and Mauricette during their time at UConn. Bill served our department with integrity, dignity, and class. During his tenure as head, our department grew in both size and prestige. His scientific accolades speak for themselves. However, as outstanding a scientist as he was, he was even a better person. Kind and generous are the words that come to mind when I think of Bill and Mauricette Stwalley. My sincere condolences to Mauricette and family at this sad time.

--Bill Hines

William Hines - October 16, 2025 at 04:52 PM

MJ

“ I was deeply saddened to hear of Dr. Stwalley's passing. He was the one who hired me in 2008, and I will always be grateful for his support. He and his wife were both wonderfully generous people, welcoming all faculty of Physics department into their home around Christmas—a tradition that created a real sense of community to new hires. After his retirement, I was fortunate to have many pleasant conversations with him and his wife as our offices were on the same floor. My sincere condolences to his family and loved ones.

-Menka Jain

Menka Jain - October 15, 2025 at 10:46 AM

NM

“ I'm deeply saddened to hear this. I had the pleasure of meeting him several times when I visited UConn. He came to the department well after I left

-- Mohan

Nagavarapu Mohan - October 15, 2025 at 10:33 AM

DW

“ *I am deeply saddened. Bill was an incredible mentor, a brilliant scientist, and a kind soul who profoundly shaped my life. I will always be grateful for his guidance and support.*

R.I.P., Bill. Thank you for everything.

Dajun

Dajun Wang - October 15, 2025 at 12:57 AM