

Here is combined information about the extraordinary circumstances which led The University of Chicago to award a PhD in Chemistry in 2018 for research, which was completed 48yrs before. Included here are the major news links, quotes from news articles, information on Dr. Dembe's book, as well as some of her chemistry music videos (launched during sheltering in place).

### **Professor Emeritus Cheryl Sundari Dembe**

**Background:** Cheryl Sundari Dembe (BS, University of Michigan; University of Chicago MS '70, PhD 2018) taught at Diablo Valley College for 37 years, serving three times as Department Chair, as interim Division Chair of Physical Science and Engineering, and headed architect selection and faculty design input for a new Physical Science facility.

She was the first woman chemist, chemistry department chair, and physical science division chair at the 27,000 student campus, at the time, as well as one of the first women to have children while teaching. She was the first member on the faculty union board to request that maternity leave be a part of the contract.

She created ancillary materials to accompany The World of Chemistry, a 26-episode television series hosted by Nobel laureate Roald Hoffmann and funded by the Annenberg Foundation. She taught at UC Berkeley on one sabbatical, and on another engaged 10 great minds in hour conversations on the scientific-metaphysical interface, including Linus Pauling.

Barred from normal research pathways without the doctorate, she developed 25 original chemical theories applied to life, society and the individual, interwoven at a lay level in her book

**The Choice of Happiness, Glimpses from an Extraordinary Ordinary Scientific Mystical Life**  
(<https://www.amazon.com/dp/0998299197>) by Sundari Dembe,

**Speech Title: A 48-year PhD Pathway: Secrets to Success in Attaining One's Goals**

Dr. Cheryl Sundari Dembe



**Speech Abstract:** Dr. Dembe describes being drawn to chemistry at an early age, as a practical application of her passion for mathematics. Historical influences on science, education and women are included. In 1971, after a normal degree progression, her advisor, Lothar Meyer, told her that her work in superfluidity, quantized vortices, and thermometry development near Absolute zero was complete, and to start writing. Ten days later he unexpectedly died. The department quickly informed her that the faculty member closest to her research had refused having a woman in his group.

After three months without assistance in how to proceed, she left Chicago. In 2000, she discovered that a few years after she would have published, similar parallel research had been published, eventually winning the Nobel Prize. Dembe called the Nobel laureate, who then encouraged her to ask Chicago for the doctorate and offered his support. No one answered that request letter. In 2018, after a #MeToo group, she was inspired to try again, this time with a successful PhD outcome.

### **Here is her account:**

At the University of Chicago in the graduate Department of Chemistry, my research involved a study of quantized vortices in superfluid liquid helium at 20mK. The vortices formed around alpha particles, projected through a cell in a  $^3\text{He}/^4\text{He}$  **dilution refrigerator**. Helium becomes a liquid at 4K. At 2.17K, a superfluid forms which has less friction (near zero viscosity) and appears to defy gravity by crawling up the walls of its containers.

I had the coldest stable system in the world at the time and also developed techniques to measure temperatures close to Absolute zero, of about 20 mK or 0.020 Kelvin. The current induced in a secondary wire around a magnetic salt, Cerium Magnesium Nitrate, ended up proportional to the temperature of the system and became my thermometer in that very low temperature region. Magnetic properties of the energetically quantized vortices were then investigated. Eventually this work became relevant in terms of using the superfluid behavior as a model for the projected plasmatic nature of the universe that existed moments after the Big Bang.

My research advisor, Lothar Meyer, died suddenly, just after he told me I would be done with my doctorate in 4-6 months and to start writing it up.

The Chemistry Department at that time informed me that the person who could most easily take over my research would not accept a woman in his research group, and that it would be necessary for me to start my degree 'from scratch', with a new project and a new advisor. A week to the day after my advisor died, someone broke into my locked apartment during the night and sexually assaulted me.

The department sent me flowers after the attack, but didn't offer the support and counseling as to how to progress toward my degree. I sat in shock for the next three months. Finally, I left and found a teaching position in the California Community Colleges.

During a Sabbatical Leave in 2000, I discovered that someone at Cornell, now at Stanford, Douglas Osheroff, doing parallel research, published what seemed to me nearly the same research, two years after I would have, and won the Nobel Prize for it in 1996. I called him up, and he said that he had heard of our group and my research. He said that I should have received my degree, and that he would support me in my request for it to be awarded. With his inspiration, I wrote the Chemistry Department Chairperson at that time, without response.

In February 2018, a #MeToo group led me to resend the letter, this time to the President of The University of Chicago. Within days the Vice Provost for Academic Affairs contacted me, and then the Assistant Provost for Gender Equity and Title Nine arranged two interviews with me. Soon a professor with a joint appointment in physics and chemistry was assigned to receive my research, that no one, including me, had looked at since my advisor's death, but which I still possessed.

A committee was organized to decide on the merit of my research, and I was notified on July 18, 2018, that the university had awarded me a PhD in Chemistry after all this time.

The Chemistry Department Chair wrote this.

**Dear Ms. Dembe,**

**Thank you for your letter of April 7, 2018, following your correspondence with the Department of Chemistry at the University of Chicago in 2000. We regret that the University did not respond to your request 18 years ago and regret still more that your difficulties while you were a student in our department were handled with such negligence. We thank you for your persistence in writing again and, especially, for presenting us with an opportunity to partially rectify these mistakes of the past.**

**As you know, after receiving your letter, a committee of Chemistry faculty were convened to evaluate your case. Following examination of your laboratory notebooks and in consideration of the unique events and circumstances that led to the unfortunate termination of your graduate studies, the Department of Chemistry is pleased to report that the University has agreed that the degree of PhD should be awarded to you at the end of this summer quarter.**

**I would like to congratulate you, and invite you to participate in the next Convocation on June 15, 2019. We would be honored if you would allow the Department to cover your travel expenses to Chicago for the event.**

**Yours sincerely,**

**Chair, Department of Chemistry**

**The University of Chicago**

I found this letter profoundly moving. One sometimes feels injustice in one's life, but truly, it is nearly impossible in such circumstances to assume the position of a neutral bystander, to know if one's feelings are justified.

Their words of regret for the negligent manner in which my difficulties were handled and regret for the not answered communication in 2000, I found amazing. How very rare it is to hear anyone take responsibility for how anything has been handled, especially with no attached words spreading blame. My accolades, and gratitude, to this department and this university at this time for daring to do so.

Their decision has empowered me.

**I feel that this story needs to be told, not for me, but for the template for societal healing it might provide for those feeling unjustly treated by an institution or individual. Here are a few aspects of this process that opened the door to resolution:**

**A. I did not approach the University in anger, but rather as an institution with the integrity needed to want to correct an error. I made them my solution, not my problem. In thinking the best of them, their best was called forth, and also my best.**

**B. I presented them with three possibilities of resolution, which would have been acceptable to me. I believe the doctoral committee realized that a gap of many decades left me unable to write the thesis now, and they had not allowed me to do so then, when it would have been possible. Amazingly they stepped into the sphere of inspired creativity in allowing us all to reach integrity together by granting the degree for my work completed then.**

**C. Throughout this process all three of us, myself, the institution, and the three member committee deciding whether to award the degree, all ended up feeling that what has just transpired now is just, and in integrity. We all felt happiness in the end!**

**D. I gave up a specific outcome. Not that I didn't want or hold a specific outcome, but rather I saw myself living a good life with or without this outcome manifesting. This gave Chicago the power to step up and solve the problem for me, by my not limiting Chicago to a particular solution and outcome. This let them feel good about holding the power to be able to fix the problem, which let us all join together to feel good about each other, ourselves, and the process.**

**I propose this as a possible template for entering into communication, and for the resolution of numerous societal ills, such as African American communities and police departments, #MeToo issues, affirmative action, our political discourse, and other thorny issues of our times.**

## Some published quotes from the University of Chicago are:

A year after Dembe dropped out of UChicago, a Cornell team working on the same problem got what Guyot-Sionnest described as an “exciting result,” for which they later received the Nobel. Dembe wasn’t far off from the same result when she stopped her research.

Philippe Guyot-Sionnest, chair of Dembe’s doctoral committee

“Cheryl’s scientific research was of a very high caliber, and I am deeply grateful that we can recognize her achievements. I want to thank Cheryl for her determination in the face of deeply unfair and unfortunate obstacles. Her degree should be an inspiration to students and scientists alike.”

Angela Olinto, Dean of UChicago’s Division of Physical Sciences

“We offer our heartfelt congratulations to Cheryl Dembe on her academic work, as well as her inspiring persistence in pursuing the degree that her scholarly work has earned,” Merchant said. “It’s clear that she did not receive the support that all students should expect when she was here, and the University sincerely regrets the treatment she received and the decades it has taken to rectify the effects of that mistreatment. We are very pleased to be able to recognize, albeit belatedly, her academic accomplishments now.”

Jason Merchant, Vice Provost, Univ of Chicago

## Links to various news articles, TV and radio interviews are as follows:

TV web interview (Jan 2020 -scroll down it’s on the left): [https://kryon.com/2020/k\\_24\(N\).html](https://kryon.com/2020/k_24(N).html)

<https://news.uchicago.edu/story/university-grants-long-delayed-doctoral-degree-cheryl-sundari-dembe>

<https://www.mercurynews.com/2019/05/12/after-48-years-female-chemist-gets-the-doctorate-she-always-deserved/>

<https://www.chicagomaroon.com/article/2019/6/6/seven-times-life-along-way-ph/>

<https://sanfrancisco.cbslocal.com/video/4086737-bay-area-woman-receives-long-delayed-doctorate/>

<https://www.chemistryworld.com/news/50-years-after-sexism-forced-her-out-of-chemistry-cheryl-dembe-is-graduating/3010565.article>

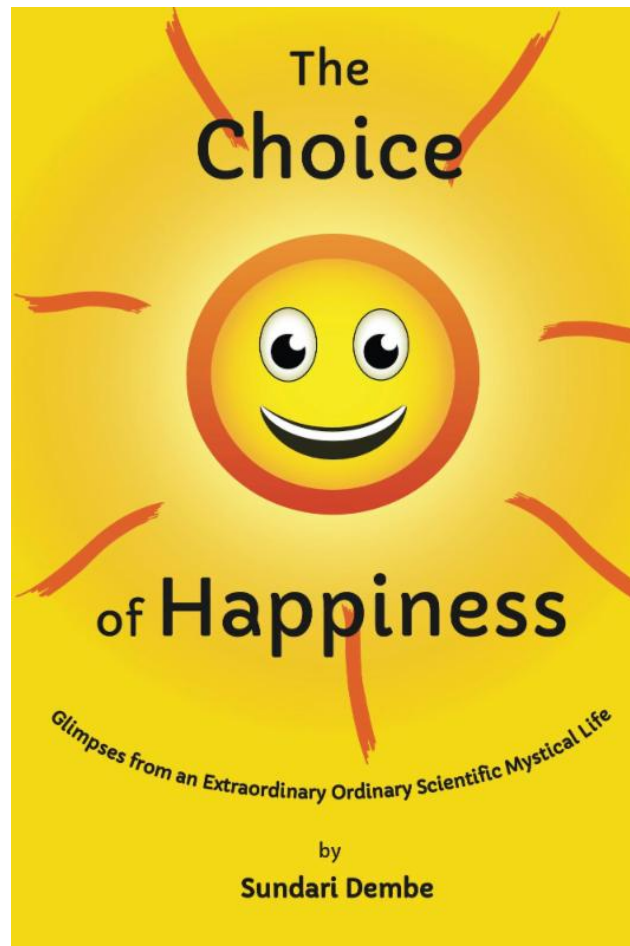
**NPR Chicago:** <https://www.wbez.org/shows/wbez-news/50-years-after-sex-discrimination-at-uchicago-two-female-students-receive-phds/d452cd05-29b3-4f9e-8545-78f06dfee21b>

**The University of Michigan:** <http://alumnus.alumni.umich.edu/persevering-finding-redemption/>

**NYTimes:** <https://www.nytimes.com/2019/05/25/opinion/sunday/gender-discrimination-abuse.html?action=click&module=Opinion&pgtype=Homepage>

# The Choice of Happiness

Glimpses From An Extraordinary Ordinary Scientific Mystical Life



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**The Choice of Happiness** interlaces spirituality with science, while the story line reveals ever-unfolding surprises and delights. It provides tools for dealing with some of life's greatest quandaries, including how to bring a marriage back from the brink, how to integrate the death of a loved one, how to manifest abundance, how to reach forgiveness, and how to profoundly connect to the Self within.

It follows a nine-year life journey, of transitioning from an Indian spiritual path through three mentors, to arrive in the intimacy of direct guidance, the evolution from being a Seeker to the self-empowerment of becoming a Finder.

It explores sacred global locations, esoteric interactions with six religions, and offers original innovative applications of chemical principles to spirituality and to understanding your own life. This is an insightful journey to one's own Self.

It can be ordered on Amazon at the following link:

<https://www.amazon.com/dp/0998299197>

## About The Author

**Cheryl Sundari Dembe** 's life has been an intimate mixing of metaphysics, science and music into a seamless solution of Self. She has had a lifetime career as a Chemistry Professor in the California Community Colleges holding degrees in Chemistry and Chemical Physics from the University of Michigan and the University of Chicago. She taught enneagram, meditation and esoteric practices in varied local and international settings, including Claudio Naranjo's SAT Sufi mystery school groups. She has practiced Taoism, Vipassana, Nyingma, and Zen Buddhism, Sufism, decades in Hindu practices, Judaism, was ordained as a Priestess, has deep ties with mystical Christianity, and is strongly aligned with A Course in Miracles (ACIM). She has been a psychic and healer.

She has spent a lifetime singing in choirs, Gilbert and Sullivan productions, madrigal groups, lead chanting and being a conductor in an Indian ashram, performing with SF Opera, Oakland Symphony, Oakland Ballet and at an Oakland A's game. She has written spiritual music, given solo a capela concert performances, leads Vibratory Sound/Light Sessions and sings globally with a 1000 person Lemurian Toning DNA Activation Choir.

She was widowed after a nearly 25 yr marriage and has two children. She runs working ranches, functions as a Planetary Caretaker, and has been to 45 countries, often with groups of Lightworkers.

Since receiving my PhD, I've become a speaker/presenter for many organizations, among them an IISc (Indian Institute of Science) group of 500 scientists near Stanford with Nobel laureate, Brian Kobilka, keynote Saturday and me on Sunday, two AAUW groups (American Association of University Women), one on zoom, Kiwanis, and the PEO (Philanthropic Educational Institution). I was scheduled to present at alumni week at The University of Chicago's Center on Gender and Equity, now postponed due to coronavirus, and the WCC of The American Chemical Society on zoom in September. I am open to further speaking invitations as the times allow.

### From Sundari Cheryl Dembe's YouTube channel

#### Chemistry Music Videos:

Solubility Song (with lyrics): <https://youtu.be/Kfb5K3l8YvA>

Grignard Reaction Song: <https://youtu.be/9VDSH4KphKc>

#### Music Videos:

Toning Video: <https://www.youtube.com/watch?v=qqgkJN4UvU0>

Lord's Prayer (Aramaic): [https://youtu.be/SHtPWn\\_NWoc](https://youtu.be/SHtPWn_NWoc)

23rd Psalm: <https://youtu.be/SFfntNSUNLE>

Peace Invocation (Sanskrit) from the Isa Upanishad:

<https://www.youtube.com/watch?v=RrjDxslGiXI>

<https://www.youtube.com/watch?v=rQyDiaQhXsc>

[Visit website](#)