



UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING

Memorial Tribute to

SERGEI DMITREVSKY

Professor Emeritus

The Edward S. Rogers Sr. Department of Electrical & Computer Engineering

October 13, 2022

Be it resolved –

THAT the Council of the Faculty of Applied Science & Engineering record with deep regret the death on July 31, 2022 of Professor Sergei Dmitrevsky.

Professor Dmitrevsky arrived in Canada from Czechoslovakia in the early 1950s after two years at Prague Technical University. He completed his undergraduate education at the Faculty of Applied Science & Engineering at the University of Toronto in 1955 and spent two years working at Philips Electronics Industries Ltd. as a microwave engineer. After returning to receive his Masters at U of T Engineering, he obtained his PhD in quantum physics at Harvard University under the supervision of Professor Nicolaas Bloembergen, who later received the Nobel Prize for Physics in 1981.

Professor Dmitrevsky returned to U of T and joined the Edward S. Rogers Sr. Department of Electrical & Computer Engineering (then known as the Electrical Engineering Department) where he taught courses in electronics, electricity and magnetism, and quantum physics and helped to build the reputation of the electromagnetics and photonics groups here as world-class. He had an unbelievable depth of understanding of electromagnetics and quantum mechanics. He rarely taught from notes; rather he derived everything from first principles.

His approach to teaching was unique and memorable, and often won him departmental teaching awards. When interviewed for an alumni magazine, Dmitrevsky described his teaching style: “My first principle: I teach the particular scientific discipline. I do not [just] prepare students for examinations.” While he may not have intended to prepare students for examinations, he certainly provided his students with clearly explained complex concepts and theories with an unforgettable delivery.

His former student, TA and later colleague, Professor Micah Stickel remembers his impact on students: “Sergei was beloved by his students. He expected students to be on time (often late students would find a locked door), and if you fell asleep or stopped paying attention you might find yourself on the end of a well thrown piece of chalk. Yet, students admired and loved him as a person and a professor. He was always on the dance floor with students at the ECE Dinner Dances,

and this deeply endeared him to generations of our students. I don't know how many teaching awards he won, but it seemed like it happened every term!"

According to former student and current professor at the University of Alberta, Professor Ashwin Iyer: "Students were treated to a surreal, inspiring journey through electromagnetic theory, frequently annotated by witty, sometimes anachronistic, often wildly funny, and always enthralling anecdotes that served as mental anchor points for the challenging lecture material."

Professor Dmitrevsky had very high expectations for his students. He wanted them to truly understand the concepts and was always available to help; for example, he ran all of his own tutorials. As a student in his fields and waves course in the late 90s Professor Iyer recalls "Professor Dmitrevsky established a review session the day before the final exam, during which any question could be asked, and all problems would be methodically re-explained and fully solved. The full-day session proceeded well into the evening, until there were no further questions, culminating in an ovation of applause like I'd never before, and never since, seen."

Beyond academia, Professor Dmitrevsky was an accomplished pilot, and well into his later years he would still fly up north in the summer to camp and fish and as someone else recently shared he said: "My camp site was whatever lake I was able to land on."

His passion for teaching kept him at the front of a classroom — with his bag of chalk in hand — until his nineties, teaching quantum mechanics to students born well after he had retired. Professor Dmitrevsky would have turned 100 at the end of the year.

Be it further resolved –

THAT this tribute to Sergei Dmitrevsky be inscribed in the minutes of this Council meeting, and that copies be sent to his family as an expression of the respect and gratitude of the members of this Council.

Prepared by Professors George Eleftheriades, Khoman Phang, Sean Hum and Micah Stickel