



November 17, 2021

Dear Colleagues,

With deep sorrow, we announce the passing of Professor Emeritus Prof. Shimon Vega of the Weizmann Institute of Science, who died yesterday in Rehovot. The funeral will take place today at 14:00, in the Rehovot Cemetery. The family will sit Shiva at Rehov Paldi 7/1, Rehovot, 09:00-13:00 and 14:00-22:00.

הוועד המנהל
Executive Board

ד"ר רבקה וייזר-ביטון
Dr. Rivka Weiser Biton

ד"ר דורית טייטלבוים
Dr. Dorit Taitelbaum

פרופי חיים כהן
Prof. Haim Cohen

פרופ' מיכאל מייזלר
Prof. Michael Meijler

פרופי דוד מרגוליס
Prof. David Margulies

מר גידעון סילברמן
Mr. Gideon Silberman

ד"ר סיגל ספיר
Dr. Sigal Saphier

פרופי שרון רוטשטיין
Prof. Sharon Ruthstein

פרופי מיטל רכס
Prof. Meital Reches

פרופי דורון שבת
Prof. Doron Shabat

ד"ר אלעד שבתאי
Dr. Elad Shabtai

ננובר
Treasurer

פרופי צ'רלס דייסנדרוק
Prof. Charles Diesendruck

ועדת ביקורת
Inspection Committee

פרופי מאיה בר-סדן
Prof. Maya Bar Sadan

פרופי מיכה פרידמן
Prof. Micha Fridman



Prof. Shimon Vega (1943 – 2021)

Shimon Vega was born in Amsterdam on November 14, 1943. At the age of 6 weeks, he was sent to a hideout with a Dutch family until the end of the war. He grew up in Ouderkerk aan de Amstel, a small village south of Amsterdam where they were the only Jewish family in the village. After the war, Shimon, his elder brother Lex (also a bright NMR scientist), and sister Bea returned from their hideout and reunited with their parents at Ouderkerk. Shimon obtained both his B.Sc. and M.Sc. in Physics in Holland. Following the Six-Day War, he made aliyah and completed his Ph.D. with Prof. Zeev Luz on Nuclear Quadrupole Resonance. As a Berkeley postdoc with Alex Pines, Shimon made pioneering discoveries in the new field of multiple-quantum NMR while developing the basis for the fictitious-spin- $\frac{1}{2}$ formalism that is now the primary tool for understanding NMR in solids and liquids. Upon returning to the Weizmann Institute as junior faculty, Shimon furthered these studies to half-integer quadrupolar nuclei. These species conform the majority of nuclei in the Periodic Table and made propositions that enabled a wide variety of materials-oriented NMR research. In the early 1980s, Shimon launched into magic angle spinning (MAS) investigations when MAS was largely viewed from a continuous-wave perspective. Shimon departed from this limited perspective, recognized the complex time-dependencies that underlie this coherent process, and analyzed it with Floquet theory tools to lay the foundations of many contemporary spin- $\frac{1}{2}$ experiments. This insight was extended to deal with multiple, non-commensurate time-dependent processes in efforts that lead to ^1H solids NMR experiments of everyday use worldwide. During the last decade, Shimon embarked on understanding the electron to nuclear magnetization transfer mechanism underlying dynamic nuclear polarization, delivering the insights that are again molding experiments in this area. He performed all these studies while taking leadership positions at the Weizmann and MIT, Washington University, and Leiden, mentoring coworkers who are nowadays leaders at the forefront of magnetic resonance.

Shimon had influenced professionally and personally many graduate students, postdoctoral fellows, colleagues, course students, and listeners to his great science talks. He represented a rare combination of openness to new ideas with deep-rooted understanding and contagious enthusiasm, always willing to pass on his knowledge with great openness and modesty. His achievements have been recognized by many prizes, including the Kolthoff, ISMAR, the 2003 ICS Prize for the Outstanding Scientist, and the 2018 ICS Gold Medal. On February 12, 2019, during the Medal award ceremony at the 84th ICS Meeting, Shimon responded in a way that reflected his warm and modest personality: "I wish to share with you, my love. Above all my love for my wife Margriet, who in addition to all the rest, made it possible for me to dedicate much of my time to science. And for our children who knew what it meant to have a dad in the lab or abroad or in miluim. Let me tell you about my other love... Magnetic Resonance... I wish to thank the ICS Prize Committee. I assume that if I had been a member of that committee, I would not have voted in favor of myself. Why? Because I know what I know and I also know what I don't know, but they don't realize how much I don't know. It is a great honor for me to join the incredible list of ICS Gold Medalists."

The ICS and the global chemistry community mourn the loss of a great scientist.

Ehud Keinan