



November 11, 2018

Dear ICS members,

It is with deep sadness that we announce the passing of Prof. Harold Basch on November 8, 2018. Harold was a Professor of Chemistry who specialized in Computational Chemistry. He was born on November 29, 1940 in the Bronx in New York. He obtained his B.A. from Yeshiva University (1962) and M.A. and Ph.D. from Columbia University (1966) under the supervision of Harry B. Gray. He did a Post-doctoral research at Bell Telephone Laboratories (1966-1968) and was a Principal Research Scientist at Ford Motor Company in Dearborn, Michigan (1968-1971). In 1970 he joined the Chemistry Department at Bar-Ilan University and became a full Professor in 1977. He served as Chairman of the Department of Chemistry at Bar-Ilan University (1973-1976), Dean of the Faculty of Sciences and Mathematics (1988-1990), member of the Executive Board of the Senate for several terms, Academic Head of the Holon Institute of Technology (1978-1981), member of the Council for Higher Education in Israel (1985-1991), served on scientific grants committees of the Israel Science Foundation, was a member of the scientific board of the Israel Inter-University Computation Center, was appointed to the National Council for Research and Development (Prime Minister's Office) and a member of the computer grants committee of the Planning and Budgeting Committee. In 2005-2011 he served as the Vice President for Research at Bar-Ilan University.



**Prof. Harold Basch**  
**1940 - 2018**

The main research interest of Prof. Harold Basch was in the field of Computational Chemistry. He was a pioneer in computational quantum chemistry, developing methods and innovative applications of theoretical concepts and equations to solving problems in Chemistry. Already in 1962, as a beginning graduate student at Columbia University, he recognized the potential use of the computer in chemical research. The methods and paradigms he developed are used today in modern software packages for the calculation of molecular properties. He was involved in numerous applications, including electron, electronic and photoelectronic spectroscopies, energetics, geometric and electronic structures, chemical reaction paths, intermediates, and transition states, metal-ligand, metal-metal, metal cluster bonding, and active site reactions in metalloenzymes. The theoretical methods include single and multi-configuration molecular orbital theory, valence bond theory, and effective core and effective fragment potentials. His latest research efforts were directed towards finding appropriate molecular bridges that can serve as nano-conducting and switching elements in molecular electronics. Prof. Basch published more than 180 papers and book chapters. He lived in Rehovot was married to Julia and had 5 children.

The Israel Chemical Society and the entire community of Israeli scientists mourn the loss of a great scientist.

*Ehud Keinan*

**הוועד המנהל**  
**Executive Board**

- ישראל בן-מורדכי  
Yashar Ben-Mordechai
- פרופ' גיל גובס  
Prof. Gil Goobes
- ד"ר דורית טייטלבוים  
Dr. Dorit Taitelbaum
- פרופ' חיים כהן  
Prof. Haim Cohen
- פרופ' מיכאל מייילר  
Prof. Michael Meijler
- פרופ' דוד (דידי) מרגוליס  
Prof. David (Didi) Margulies
- ד"ר מיכל סורני-הררי  
Dr. Michal Soreni-Harari
- פרופ' תמר רז-נחום  
Prof. Tamar Raz-Nahum
- פרופ' מיטל רכס  
Prof. Meital Reches
- פרופ' דורון שבת  
Prof. Doron Shabat
- ד"ר אלעד שבתאי  
Dr. Elad Shabtai

**גזבר**  
**Treasurer**

- פרופ' צ'רלס דינדרוק  
Prof. Charles Diesendruck

**ועדת ביקורת**  
**Inspection Committee**

- פרופ' אמנון אלבק  
Prof. Amnon Albeck
- פרופ' מיכה פרידמן  
Prof. Micha Fridman