



Dear ICS members,

It is my great pleasure to announce that the 2017 ICS Gold Medal will be awarded to **Prof. Yitzhak Apeloig** of the Technion for his pioneering contributions to silicon chemistry, both theoretical and experimental, for his leading role in establishing computational chemistry as a powerful research tool, and for his outstanding academic leadership; and **Prof. Sason Shaik** of the Hebrew University of Jerusalem for his revolutionary contributions to the Valence Bond theory, and for establishing new concepts in chemical bonding and chemical reactivity, ranging from small molecules to bioinorganic systems and metallo-enzymatic reaction mechanisms.

הועד המנהל
Executive Board

אינג' מלאכי אלפר
Eng. Malachi Alper

ד"ר גיל גובס
Dr. Gil Goobes

פרופ' אבי דומב
Prof. Avi Domb

אינג' דני חן
Eng. Dani Chen

ד"ר דורית טייטלבוים
Dr. Dorit Taitelbaum

ד"ר אורן טל
Dr. Oren Tal

פרופ' גבריאל למקוף
Prof. Gabriel Lemcoff

פרופ' חיים כהן
Prof. Haim Cohen

ד"ר מיכל סורני-הררי
Dr. Michal Soreni-Harari

פרופ' אסף פרידלר
Prof. Assaf Friedler

פרופ' דורון שבת
Prof. Doron Shabat

גבר
Treasurer

צ'רלס דייזנדרוק
Charles Diesendruck

ועדת ביקורת
Inspection Committee

פרופ' אמנון אלבק
Prof. Amnon Albeck

פרופ' טימור באזוב
Prof. Timor Baasov



Prof. Yitzhak Apeloig
apeloig@technion.ac.il



Prof. Sason Shaik
sason.shaik@gmail.com

Yitzhak Apeloig was born in Buchara, Uzbekistan (1944), obtained his BSc, MSc and PhD (1974, both with Zvi Rappoport) from the Hebrew University. Following a postdoc research with Paul von R. Schleyer at Princeton University and with John A. Pople (1974-1976) he joined the Technion. In 2001-2009, while serving as President of the Technion, he continued his research program and teaching activities. In 2011 he became a Distinguished University Professor. His research spans the fields of organosilicon chemistry, computational quantum chemistry and physical organic chemistry. He was one of the world's pioneers in using computational chemistry as a reliable research tool. His theoretical predictions inspired and guided numerous experimental groups. A unique characteristic of his research is the synergistic "in house" use of experimental and theoretical methods, leading to seminal contributions to the fundamental understanding of the properties and synthesis of multiple bonds to silicon and of silicon-centered reactive intermediates, compounds that only 35 years ago were widely believed to be non-existent and now are often used. His list of prizes include the ICS Prize for the Outstanding Scientist, Humboldt Senior Award, Japan Society for the Promotion of Science Award, Wacker Silicone Award, and ACS Frederic Stanley Kipping Award in Silicon Chemistry. He is a foreign honorary member of the American Academy of Arts and Sciences and a member of Academia Europaea. He received a Honorary Doctorate from Technische Universität Berlin, and Order of Merit of the President of Germany.

Sason Shaik was born in 1947 in Iraq, received his MSc in Chemistry in 1974 (with Michael Albeck), PhD in 1978 (with Nicholas D. Epitotis), and was a postdoc with Roald Hoffmann. In 1979 he joined Ben-Gurion University and in 1992 moved to the Hebrew University. He is well known for causing renaissance in the Valence Bond (VB) theory, re-charting the mental map of chemical bonding and shaking major paradigms in chemistry. His diagrammatic VB model provides an elegant model of chemical reactivity that applies from the simplest reaction of H-exchange all the way to reactivity of cytochrome P450. His research in oxidative chemistry has led to the development of the two-state reactivity (TSR) model, which defines a new mechanistic territory and a current frontier in bioinorganic and metallo-enzymatic chemical research. He has published over 530 papers with H index of 87. His list of awards includes the Humboldt Senior Award (1995-1999, 2014-15, 2018-2020), the E.D. Bergmann Prize (1995), ICS Prize for the Outstanding Scientist (2000), Kolthoff Prize (2001), Schrödinger Medal of WATOC (2007) and the August Wilhelm von Hofmann Dekmünze (German Chemical Society, 2012). He is Fellow of the AAAS (2003) and a member of the International Academy of Quantum Molecular Science (2015). Shaik delivers public lectures in Israel and abroad, in which he shows the beauty and importance of chemistry as a central pillar of human culture. His new book, *Chemistry as a Game of Molecular Construction – The Bond Click Way*, shows a new way of teaching chemistry and making it likable. Sason Shaik and Yitzhak Apeloig established together the Lise-Meitner Center for Computational Chemistry and ushered it from a small local center to a national center with a high international repute.

The award ceremony will take place during the gala dinner of the 83rd ICS Annual Meeting in February 13, 2018. Congratulations to Yitzhak and Sason for their achievements!

Ehud Keinan