



Dear ICS members,

It is my great pleasure to announce that the **2014 ICS Medal** will be awarded to **Prof. Eliezer Gileadi** and **Prof. Abraham Nitzan** of the School of Chemistry, Tel Aviv University, for their exceptional contributions to science, education and society.

Prof. Gileadi was born in Budapest (1932) and immigrated to Israel in 1940. He received his B.Sc. from the Hebrew University of Jerusalem and Ph.D. (with B. E. Conway, 1963) from the University of Ottawa. Since joining Tel Aviv University in 1966 he became a recognized leader of the domestic and international electrochemistry communities, educating generations of world-renown electrochemists and influencing the community by his widely used books. Gileadi developed the combined electrosorption isotherm, which provided the first understanding of the effect of molecular size on electrode kinetics. Measuring Tafel slopes with unprecedented accuracy, Gileadi could establish the temperature dependence of the transfer coefficient, a central question in electrode kinetics. He has also demonstrated that Grothuss-type hopping conductivity, believed to apply solely to protons in protic solvents, can also occur with halide ions in liquid and solid bromine and iodine, showing for the first time that unusual conductivity mechanisms can involve ions other than protons. His long list of achievements includes also the theory of microelectrode assemblies, electro-deposition of active metals in non-aqueous solutions, corrosion in non-aqueous media, and the development of new methods for studying adsorption isotherms using electrochemical quartz crystal microbalance (EQCM) in both gas and liquid phases.

Prof. Gileadi's contribution to society is exceptional. In 1994 he established the *Gileadi Program*, which provided over 500 university research positions to first-class immigrant scientists who came from the former Soviet Union. That program was later extended to the *Kamea Program*. The highly successful *Gileadi* and *Kamea* Programs, which affected science in Israel, were highlighted in a study conducted by *Science* magazine.

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Prof. Nitzan was born in Tel Aviv (1944), received his B. Sc. and M. Sc. from the Hebrew University of Jerusalem with G. Czapski (Summa cum laude, 1965) and Ph. D. from Tel Aviv University with J. Jortner (Summa cum laude, 1972). In 1975 he joined Tel Aviv University and since 2003 he serves as Director of the Sackler Institute of Advanced Studies. Nitzan has made pioneering contributions to the theory of chemical reactions, of energy transfer and of charge transfer in condensed phases and at interfaces. He also contributed profoundly to the understanding of molecular interaction with light. Together with Jortner, he has developed a general theory of electronic radiationless transitions in large molecules, and an equivalent theory for molecular vibrational relaxation in condensed environments. Later, he has generalized the Kramers theory of activated rate process to the non-Markovian solvent regime and to the multidimensional case, making it valid for realistic chemical reactions.

Nitzan has introduced the electromagnetic theory of surface enhanced Raman scattering, then extended it to other processes involving light interacting with adsorbed molecule, including surface enhanced energy transfer and surface enhanced photochemistry. Together with Ratner and Druger he has introduced and developed the dynamic percolation theory for transport in systems characterized by time dependent disorder, with important applications to transport properties of polymeric ionic conductors. Together with Landman he has developed numerical and theoretical methods to describe electron solvation and transport in polar environment. Furthermore, he has used similar methodologies to study electron transmission through water layers. He has made pivotal contributions to the understanding of electronic and heat conduction, inelastic and dephasing processes and optical processes in molecular conduction junctions, and elucidated the connection between molecular conduction and molecular electron transfer.

The award ceremony will take place during the 80th ICS Annual Meeting in February 17, 2015.

Congratulations to Eliezer and Abraham for their achievements!

Ehud Keinan