Dear ICS members,

It is my great pleasure announcing that the 2018 ICS Excellent Young Scientist Prize will be awarded to Prof. Roey J. Amir of the School of Chemistry, Tel-Aviv University for the design and synthesis of enzymatically degradable polymeric amphiphiles for biomedical applications.

Roey J. Amir was born in Israel in 1973, received his B.Sc. with excellence from Tel-Aviv University in 2000 and then completed his M.Sc. and Ph.D. with Prof. Doron Shabat (2000–2007), introducing the concept of Self-Immolative Dendrimers. During his postdoc research at The Materials Research Laboratory in UC Santa Barbara with Prof. Craig J. Hawker (2008–2012), Roey shifted to polymer chemistry and focused on enzymatically induced self-assembly of polymers. In 2012, he accepted an academic position at Tel-Aviv University and started his own research group, focusing on hybridizing dendrimers with linear polymers to design stimuli-responsive polymers with high molecular precision.

Utilizing enzymatically degradable dendrons as the hydrophobic blocks allowed Roey and his group to study the molecular parameters that govern self-assembly and enzymatically induced disassembly of polymeric micelles. They have also designed polymeric amphiphiles that can self-report their self-assembly and disassembly by changing their fluorescent properties or magnetic resonance signal. Such polymeric assemblies have high potential to serve as drug delivery systems that can report their degree and location of activation and drug release. These self-reporting systems have emerged also as an important tool to study the stability of micellar assemblies in complex biological media, allowing Roey and collaborators to study the cellular uptake of polymeric micelles and distinguish between different cell internalization mechanisms as a result of minor structural changes. Overall, the high level of molecular precision has allowed them to provide important mechanistic insights and understanding of the fine balance between the stability and activity of enzyme-responsive polymeric assemblies and provide solutions to overcome the often observed, limited and poor enzymatic degradation of many reported polymeric nanocarriers.

The award ceremony will take place in February 12, 2019 during the gala dinner of the 84th ICS Annual Meeting.

Congratulations to Roey for his achievements!