



## The Israel Society for Astrobiology and the Origin of Life (ILASOL)

**33rd annual meeting March 3rd, 2020**

**Porter Building 013B, Tel Aviv University**

ILASOL: <http://www.iyar.org.il/about-15.html>

SOC: A. Wandel (HUJ), D. Lancet (WIS) – LOC: S. Zucker (TAU)

**Session 1: Opening 9:00-10:30 chair Shay Zucker**

**Welcome address: S. Marco** (Head, Porter School of Environment and Earth Sciences)

**Keynote: Selective Incorporation of Proteinaceous over nonproteinaceous amino acids in model prebiotic oligomerization reactions** – Moran Frenkel-Pinter (NSF/NASA) (30)

**Review: How, where and when will we find the first footprints of extraterrestrial life?** – Amri Wandel (Chairman ILASOL, HUJ) (30)

**Chemistry's New Kinetic Dimension and the Origin of Life** – Addy Pross (BGU)

**Coffee break 10:30-11:00**

**Session 2: Astrobiology 11:00-13:00 chair Amri Wandel**

**Teegarden's Star b+c: two habitable Earth-mass planets** – Lev Tal-Or (Ariel U), Amri Wandel (HUJ)

**Oumoamo'a revisited** – Noah Brosch (TAU)

**Silicon in outer space and its extraterrestrial life perspective** – David Avnir (HUJ)

**Artificial intelligence and SETI: The Singularity is near!** – Joseph Gale, Amri Wandel (HUJ)

**How to present "The search for life in the Universe" to the public?** – Hagai Netzer (TAU)

**Lunch break 13:00-14:00** (light lunch will be provided)

**Session 3: Biochemistry and Life 14:00-16:50 chair Doron Lancet**

**Evolution-CSI: hunting for evidence in the protein universe** – Rachel Kolodny (Haifa U)

**Lamarckian Origin of Life** – Tzachi Pilpel (WIS)

**Catalytic Lipid micelles as early protocells: from laboratory evidence to Molecular Dynamics simulations** – Amit Kahana, D. Lancet (WIS)

**Nucleopeptides in prebiotic replication networks: A study demonstrating predominance in self-replicating nucleopeptides** – Anil Kumar Bandela and Gonen Ashkenazi (BGU)

**Coffee break 15:30-15:50**

**Catalytic buffering for optimal scheduling of self-replication** – Rami Pugatch (BGU)

**The identity crisis of the mitochondria – from a free-living bacterium to a fundamental Eukaryote organelle** – Dan Mishmar (BGU)

**Thermal Condensation of Glycine and Alanine on Metal Ferrite Surface: Primitive Peptide Bond Formation Scenario** – Sohan Jheeta (NoR HGT & LUCA)

**Closing remarks** – Sohan Jheeta (10)