



Program

From Hydrodynamics to Electrokinetics and in between ...

A Colloquium Honoring the 80th Birthday of Prof. Emeritus Touvia Miloh24/10/2023

Gathering + Coffee	9:00	9:30	Sp eaker	Affiliation	Title
Welcom e	9:30	9:40	Noam Eliaz - Dean	TAU	Welcoming words
Session 1	9:40	10:00	Orlin Velev	NCSU	Electrohydrodynamic propulsion of active particles: principles and engineering aspects
Electrokinetics & Nanotechnology	10:00	10:20	Antonio Ramos	Univ. Seville	Insulating traveling electrophoresis
Chair: Gilad Yossifon	10:20	10:40	Alicia Boymelgreen	FIU	A generalized approach to solving the mixed boundary value problem governing self-diffusiophoresis
	10:40	11:00	Gregory Slepyan	TAU	Electronic, optical and mechanical properties of carbon-based nanostructures: physics and applications
Coffee	11:00	11:20			
Session 2	11:20	11:40	Ioannis K. Chatjigeorgiou	NTUA	Touvia Miloh's contributions to spheroidal and ellipsoidal harmonics with applications to hydrodynamics
Free-Surface Hydrodynamics	11:40	12:00	Jean-Marc Vanden- Broeck	UCL	Computations of strongly nonlinear water waves and related problems
Chair: Eliezer Kit	12:00	12:20	Lev Shemer	TAU	On resonant standing surface and water waves in two and three dimensions
	12:20	12:40	Hezi Gildor	HUJI	Odyssey of satellite-tracked drifters in the Levantine basin
Lunch	12:40	13:40			
Session 3	13:40	14:00	Eldad Avital	QMUL	Acoustics and heat transfer of Janus particles, intelligent Math and useful numerics
Micro Fluid Mechanics	14:00	14:20	Oded Gottlieb	Technion	Fluid-structure interaction and the bifurcation structure of rigid bodies subject to electro/magneto-hydrodynamic excitation
Chair: Yoav Green	14:20	14:40	Avshalom Manela	Technion	Kinetic description of flow detachment at a micro-step
	14:40	15:00	Shachar Richter	TAU	Unidirectional motion of microswimmers powered by chemical chirality
Coffee	15:00	15:20			
Session 4	15:20	15:40	Gideon Dagan & Avinoam Rabinovich	TAU	Dynamic effective properties of heterogeneous media with spherical inclusions under periodic time variations
Environmental Science	15:40	16:00	Dani Weihs	Technion	Damage patterns from collisions of bodies moving at hypervelocities
Chair: Itzchak Frankel	16:00	16:20	Joseph Loya	TAU	Past present and future of the coral reefs of Eilat
Greetings	16:20	16:40			