

TECHNION-KAIST SYMPOSIUM on ICT & Nanotechnology

October 13-14, 2015

Room 2201 (Wooribyul Seminar Room), Dept. Electrical Engineering (E3-2), KAIST

October 13th, 2015 (Day 1)

Opening		
09:30~10:00	KAIST	Opening and Welcome
	Technion	Welcome
	Chang-Hee Lee	Introduction to School of Electrical Engineering, KAIST
Session I – Photonics (Chairs: Meir Orenstein, Seunghyup Yoo)		
10:00~10:25	Meir Orenstein	Nano photonics, polarization control and angular momentum of localized light
10:25~10:50	Seunghyup Yoo	Towards affordable flexible OLEDs with high efficiency: a systematic approach based on trans-scale optical simulation
10:50~11:20	Coffee Break	
11:20~11:45	Gadi Eisenstein	Time scale dependent dynamics in quantum dot lasers
11:45~12:10	Kyoungsik Yu	Localized photothermal processes and their optoelectronic applications
12:10~13:30	Lunch	
Session II – Nano Technologies & Their Applications (Chairs: Dan Mordehai, Seunghwa Ryu)		
13:30~13:55	Dan Mordehai	Mechanical Properties at the nano scale
13:55~14:20	Seunghwa Ryu	Mechanics of nanostructures and nanocomposites
14:20~14:45	Tal Carmon	Liquid-walls microfluidics
14:45~15:10	Avner Rotchild	Reflections on rust: Iron oxide photoelectrodes for solar energy conversion and storage
15:10~15:35	Jang Wook Choi	Wearable rechargeable batteries
15:35~16:00	Coffee Break	
Session III – BioElectronics (Chairs: Hoi-Jun Yoo, Kahn Itamar)		
16:00~16:25	Hoi-Jun Yoo	Wearable Healthcare: The Past and Future
16:25~16:50	Kahn Itamar	Novel imaging tools to study the brain in health and disease
16:50~17:15	Ki-Hun Jeong	Optical MEMS endoscopes
17:15~17:40	Hyunjoo Lee	Microsystems for disease-oriented bio/medical applications
18:00	Dinner	

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October 14th, 2015 (Day 2)

Session IV – Signal Processing & RF Electronics (Chairs: Cohen Israel, Hoi-Rin Kim)		
09:30~09:55	Cohen Israel	GARCH models and their applications to speech enhancement and sea-mine detection in sonar images
09:55~10:20	Hoi-Rin Kim	Histogram equalization based feature compensation approaches for robust speech recognition
10:20~10:45	Yael Yaniv	The internal clock-like mechanisms that determine our heart rate and rhythm
10:45~11:05	Coffee Break	
11:05~11:30	Sang-Gug Lee	Development of 2.4 GHz ULP receivers for IoT applications
11:30~11:55	Cohen Emanuel	mm-Wave and digital RF transceivers integration in CMOS
11:55~13:30	Lunch	
Session V – Big Data & Machine Learning (Chairs: Jaehyuk Huh, Assaf Shuster)		
13:30~13:55	Jaehyuk Huh	Performance prediction and interference management for distributed applications on clouds
13:55~14:20	Assaf Shuster	Monitoring big, streaming data
14:20~14:45	Alice Oh	Developing and applying machine learning models for computational social science
14:45~15:10	Jinwoo Shin	Belief propagation for large-scale combinatorial optimization
15:10~15:30	KAIST	Closing remark
15:30~18:00	Lab tours and personal meetings	
18:00	Dinner	