

# DETAILED PROGRAM

Tuesday, October 1, 2013

20:30-22:00

*Social Event: Kartoshkes Ensemble*

Wednesday, October 2, 2013

07:00-09:30

*Breakfast*

09:30-09:40

**OPENING** (*Oren 2*)

**Prof. Arie Maharshak**, President, ORT Braude College

**Prof. David Shoikhet**, Vice President for Academic Affairs, ORT Braude College

09:40-10:30

**PLENARY I** (*Oren 2*)

**Dr. Omri Bonne**, *KKL-JNF Chief Scientist*

Forestry Research and Development

10:30-10:50

*Coffee Break*

10:50-11:40

**PLENARY II** (*Oren 2*)

**Dr. Roey Tzezana**, *Interdisciplinary Center for Technology Analysis and Forecasting*

Human Enhancement: Trends and Prospects

11:50-13:10

**SESSION A1: Biotechnology Engineering I** (*Jasmine*)

*Chair: Amal Rouhana Toubi*

11:50-12:10

GPI-anchored CD24: Placental expression in normal and pathological human pregnancies

*Marei Sammar, Berthold Huppertz, Monika Siwetz, Niko P. Bretz, Peter Altevogt*

12:10-12:30

Small molecule inhibitors of protein interaction with glycosaminoglycans (SMIGs) – A novel class of bioactive agents with anti-inflammatory properties

*Nicholas Harris, Chen Kaplan, Paul Gregor*

12:30-12:50

Targeting atypical neuroleptics to the CNS for BBB permeability improvement and peripheral side effects reduction

*Idit Golani, Rosa Azhari, Alon Shamir*

12:50-13:10

The antifungal efficacy of formulated copper oxide nanoparticles

*Michal Maoz, Daniel Panitz, Sigal Eichler, Ester Segal, Iris S. Weitz*

11:50-13:10

**SESSION A2: Mechanical Engineering I** (*Oren 1*)

*Chair: Samy Abu-Salih*

11:50-12:10

Plastic deformation mechanisms operating during creep in parent metal and friction stir welded AZ31B magnesium alloy

*Michael Regev, Stefano Spigarelli*

12:10-12:30

A turned trochoidal disturbance on a liquid jet surface

*Shalom Sadik, Felix Kirzhner, Denis Kramarenko*

12:30-12:50

Performance simulation of a heat pump water heater

*Michael Koenig, Khen Mizrakhi*

12:50-13:10

Rehabilitation knowledge center at ORT Braude College

*Orit Braun-Benyamin*

11:50-13:10

**SESSION A3: Industrial Engineering and Management I** (*Oren 2*)

*Chair: Natalia Zaitsev*

11:50-12:10

Further results for the longest queue (LQ) system with exchangeable items

*Rachel Ravid, David Perry, Onno Boxma*

12:10-12:30

Controlling FMS based on dynamically creating local optimal schedules for dynamically selected appropriate operational criteria

*Boris Shnits*

12:30-12:50

Impacts of practicing lateral transshipments on designing and operating a supply chain

*Hussein Naseraldin, Yale T. Herer*

12:50-13:10

Project management, systems engineering and what's in between

*Meir Tahan*

<b>11:50-13:10</b>	<b>SESSION A4: Mathematics I</b> ( <i>Tamar</i> ) <i>Chair: Fiana Jacobzon</i>
<b>11:50-12:10</b>	Some inequalities for the horosphere function on the Hilbert ball <i>Mark Elin, Marina Levenshtein, David Shoikhet</i>
<b>12:10-12:30</b>	Exponential estimates of solutions of parabolic pseudodifferential equations <i>Yakov Lutsky</i>
<b>12:30-12:50</b>	Field $D^*$ pathfinding on weighted triangulated and tetrahedral meshes <i>Mark N. Berman</i>
<b>12:50-13:10</b>	Inequalities for angular derivatives and boundary interpolation <i>Vladimir Bolotnikov, Mark Elin, David Shoikhet</i>
<b>13:10-14:20</b>	<b>Lunch</b>
<b>14:20-15:40</b>	<b>SESSION A5: Biotechnology Engineering II</b> ( <i>Jasmine</i> ) <i>Chair: Nicolas Harris</i>
<b>14:20-14:40</b>	The effect of NaCl concentration in soft cheese on whey composition and on molecular weight profile of whey proteins <i>Amal Rouhana Toubi, Maor Dahan</i>
<b>14:40-15:00</b>	Combined adsorption and biological degradation processes for the removal of pharmaceutical compounds from effluents by nitrifying bacteria <i>Anwar Dawas, Carlos Dosoretz, Isam Sabbah</i>
<b>15:00-15:20</b>	Mechanisms of skeletal muscle cell mechanotransduction <i>Rosa Azhari, Iris Bonshtein, Ehud Kroll</i>
<b>15:20-15:40</b>	Biomed business model design case study: Bone Cure AMCA ammonio methacrylate copolymer type A membrane for treatment of severe bone defects in pets <i>Harry Langbeheim</i>
<b>14:20-15:40</b>	<b>SESSION A6: Software Engineering I</b> ( <i>Oren 1</i> ) <i>Chair: Orly Yahalom</i>
<b>14:20-14:40</b>	On the location of roots of graph polynomials <i>Johann A. Makowsky, Elena V. Ravve</i>
<b>14:40-15:00</b>	Comparable randomness of textual sources <i>Renata Avros, Zeev Barzily, Zeev Volkovich</i>
<b>15:00-15:20</b>	Cluster model selection using minimum cost spanning trees <i>Renata Avros, Dvora Toledano-Kitai, Avi Soffer, Zeev Volkovich</i>
<b>15:20-15:40</b>	Graph partition approaches based on ladder connected components <i>Zakharia Frenkel, Ahuva Mu'alem, Avi Soffer, Zeev Volkovich</i>
<b>14:20-15:40</b>	<b>SESSION A7: Teaching and Learning I</b> ( <i>Oren 2</i> ) <i>Chair: David Pundak</i>
<b>14:20-14:40</b>	Students' misunderstandings in project design activities <i>Elena Trotskovsky, Nissim Sabag</i>
<b>14:40-15:00</b>	Financial planning for the engineering student <i>David Pundak, Arie Maharshak</i>
<b>15:00-15:20</b>	Using lab experiments in electric circuits to promote achievements in mathematics <i>Nissim Sabag, Elena Trotskovsky</i>
<b>15:20-15:40</b>	Teachers' work context: Components that support or inhibit the implementation of innovations <i>Yael Furman Shaharabani</i>
<b>14:20-15:40</b>	<b>SESSION A8: Physics and Optical Engineering I</b> ( <i>Tamar</i> ) <i>Chair: Eli Raz</i>
<b>14:20-14:40</b>	Quantum gravity phenomenology with neutrinos and high energy photons <i>Dafne Guetta</i>
<b>14:40-15:00</b>	Interferometric control over the photoelectric effect: What is the relative birth place of the electron in the continuum? <i>Avner Fleischer</i>
<b>15:00-15:20</b>	Reinterpretation of the basic axioms founding the principles of electrodynamics <i>Ofer Eyal</i>
<b>15:20-15:40</b>	Noise and controllability: Suppression of controllability in large quantum systems <i>Shimshon Kallush</i>

**16:00-17:20** **INTERDISCIPLINARY SESSION I** (*Oren 2*)

*Chair: Marei Sammar*

**16:00-16:20** Assessment of the mobility and fate of natural and naturally modified engineered nano-particles related to in-situ remediation of soil and groundwater contamination

*Isam Sabbah, Yuri Haimov*

**16:20-16:40** Toward computational design of efficient plasticizers for nylon

*David Alperstein, Dafna Knani*

**16:40-17:00** Biomimetic locust-like jumping robot

*Valentin Zaytsev, Uri Ben-Hanan, Avi Weiss, Gabor Kosa, Amir Ayali*

**17:00-17:20** Analysis of thermo-electromechanical buckling of micro annular plate

*Samy Abu-Salih*

**17:20-20:00**

*Leisure Time*

**20:00-21:00**

*Dinner*



*Social Evening*

## Thursday, October 3, 2013

07:00-09:00	<i>Breakfast</i>
09:00-10:20	<b>SESSION B1: Electrical and Electronic Engineering I</b> ( <i>Jasmine</i> ) <i>Chair: Samuel Miller</i>
09:00-09:20	Use of heavily masked normalized correlation for 2D label detection <i>Samuel Kosolapov</i>
09:20-09:40	Quantum-dot cellular automata serial decimal subtractors <i>Michael Gladshstein</i>
09:40-10:00	A small signal characterization of MOS transistor current for CMOS submicron technology <i>Radu Florescu , Guy Gontmacher</i>
10:00-10:20	Efficiency of LED panel implementation for office or factory lighting <i>Radu Florescu , Raya Shechtman</i>
09:00-10:20	<b>SESSION B2: Industrial Engineering and Management II</b> ( <i>Oren 1</i> ) <i>Chair: Boris Shnits</i>
09:00-09:20	HR outsourcing and absenteeism: A cross countries study <i>Hilla Peretz, Yitzhak Fried</i>
09:20-09:40	Theories and theorizing in organizations <i>Doron Faran</i>
09:40-10:00	The value and timing of introducing knowledge in decision support systems <i>Nirit Gavish, Hussein Naseraldin</i>
10:00-10:20	Contribution of industrial engineering to the management of medical systems <i>Yariv N. Marmor</i>
09:00-10:40	<b>SESSION B3: Teaching and Learning II</b> ( <i>Oren 2</i> ) <i>Chair: Miri Shacham</i>
09:00-09:20	"From good to excellent"- Coaching for success <i>Miri Shacham, Rivka Weizer-Biton</i>
09:20-09:40	Engineers as second-career teachers: The perceived contribution of engineering education and career to teaching <i>Yael Furman Shaharabani, Miri Shacham, Orna Muller</i>
09:40-10:00	Misconceptions in electronics design using simulation <i>Nissim Sabag, Elena Trotskovsky</i>
10:00-10:20	Mathematical knowledge for effective teaching and learning: The case of four algorithms <i>Ira Raveh</i>
10:20-10:40	Attitudes of engineering instructors toward "active learning" <i>David Pundak, Miri Shacham, Orit Herscovitz</i>
09:00-10:40	<b>SESSION B4: Mathematics II</b> ( <i>Tamar</i> ) <i>Chair: Mark Elin</i>
09:00-09:20	Indefinite metric spaces and operator linear fractional relations <i>Victor Khatskevich</i>
09:20-09:40	Well-posedness of coupled first and second order hyperbolic systems <i>Lavi Karp</i>
09:40-10:00	Gambler's ruin probability – a general formula <i>Haggai Katriel</i>
10:00-10:20	Asymptotic behavior of parabolic type semigroups <i>Mark Elin, Fiana Jacobzon</i>
10:20-10:40	New cases of increasing pursuer capturability by using hybrid dynamics <i>Valery Y. Glizer, Vladimir Turetsky</i>
10:40-11:10	<i>Coffee Break and Hotel Check-out</i>
11:10-12:00	<b>PLENARY III</b> ( <i>Oren 2</i> )

**Dr. Daphne Raban**, *Head of the Department of Information and Knowledge Management, University of Haifa*  
The Value of Information

<b>12:10-13:30</b>	<b>SESSION B5: Mechanical Engineering II</b> ( <i>Jasmine</i> ) <i>Chair: Michael Koenig</i>
<b>12:10-12:30</b>	Dynamic mimicking <i>Avi Weiss, Gideon Avigad, Yuri Surkov, Barak Samina</i>
<b>12:30-12:50</b>	Generation of controlled rolling motion of a cylinder using magnetic fields <i>Avi Weiss, Gideon Avigad, Maor Peretz</i>
<b>12:50-13:10</b>	Drilling of composite and metal stack materials with the assistance of low frequency vibration <i>Uri Ben-Hanan, Andrea Stoll, Steffen Ihlenfeldt, Klaus Wolf</i>
<b>13:10-13:30</b>	Advances in cognitive neuroscience and optimization theory can inform the rehabilitation process in developmental disorders: Production management in the classroom? <i>Gerry Leisman</i>
<b>12:10-12:50</b>	<b>SESSION B6: Electrical and Electronic Engineering II</b> ( <i>Oren 1</i> ) <i>Chair: Radu Florescu</i>
<b>12:10-12:30</b>	Approximated methods of analysis guided modes in large 2D photonic arrays of identical waveguides <i>Elena Smith, Vladislav Shteeman, Elyahu Kapon, Amos A. Hardy</i>
<b>12:30-12:50</b>	New printed meta-material antennas <i>Albert Sabban</i>
<b>12:10-13:10</b>	<b>SESSION B7: Software Engineering II</b> ( <i>Oren 2</i> ) <i>Chair: Benjamin Mounitz</i>
<b>12:10-12:30</b>	Adaptive language modeling for word prediction <i>Orly Yahalom</i>
<b>12:30-12:50</b>	Molecular dynamics study of double-stranded DNA molecule folding <i>Zakharia Frenkel, Avi Soffer</i>
<b>12:50-13:10</b>	Simple repeat fossils in protein coding sequences <i>Zakharia Frenkel, Zeev Barzily, Zeev Volkovich, Edward Trifonov</i>
<b>12:10-13:10</b>	<b>SESSION B8: Physics and Optical Engineering II</b> ( <i>Tamar</i> ) <i>Chair: Mani Shay</i>
<b>12:10-12:30</b>	Parametric excitation of silicon-on-insulator microcantilever beams by fringing fields probed with laser Doppler vibrometry <i>Yoav Linzon, Said Mahajna, Bojan Ilic, Stella Lulinsky, Slava Krylo</i>
<b>12:30-12:50</b>	Radiative transfer in stellar atmospheres <i>Nathan Netzer</i>
<b>12:50-13:10</b>	Flux-induced thermoelectric effect <i>Jorge Berger</i>
<b>12:10-13:30</b>	<b>SESSION B9: Industrial Engineering and Management III</b> ( <i>Dekkel 2</i> ) <b>Round table discussion</b> <i>Chair: Emil Bashkansky</i>
<b>13:30-14:40</b>	<b>Lunch</b>
<b>14:40-15:40</b>	<b>INTERDISCIPLINARY SESSION II</b> ( <i>Oren 2</i> ) <i>Chair: Dafna Knani</i>
<b>14:40-15:00</b>	Analysis of huge volume Orange cellular data <i>Thomas Couronné, Valery Kirzner, Katerina Korenblat, Zeev Volkovich</i>
<b>15:00-15:20</b>	Engineering education: Present and future <i>Alec Groysman</i>
<b>15:20-15:40</b>	From "TEMPUS - English for All" to "ERASMUS for All" <i>Linda Weinberg</i>
<b>15:40-16:00</b>	<b>CONCLUDING REMARKS</b> ( <i>Oren 2</i> )

**Prof. Arie Maharshak and Prof. David Shoikhet**  
Advancing Research in ORT Braude College