



15<sup>th</sup> ISRAELI SYMPOSIUM ON JET ENGINES & GAS TURBINES,  
Faculty of Aerospace Engineering, Technion, Haifa, Israel  
November 17 2016,



## TECHNICAL PROGRAM

	15th ISRAELI SYMPOSIUM ON JET ENGINES & GAS TURBINES, NOVEMBER 17 2016
07:45 - 09:00	(Registration) הרשמה
09:00	Opening: <b>Professor Yeshayahou Levy</b> , Chairman, Head, Turbo and Jet Engine Laboratory, Faculty of Aerospace Engineering, Technion.
	<b>Professor Yaakov Cohen</b> , Dean, Faculty of Aerospace Engineering, Technion.
	<b>Major Uri Zvikel</b> , Head, Propulsion Systems Branch, Aeronautical Division, MOD/MFAT
	<b>Major Avi Yosfan</b> , Head of Engineering, Propulsion Branch, IAF
09:20 - 13:10	מושב ראשון (First Session, In English)
	<b>RECENT ADVANCEMENTS IN ENGINE DESIGN</b>
35 min. lectures	<b>Session Chairman: Beni Cukurel</b> , <b>Technion</b>
A1	<b>Alan Epstein</b> , Pratt & Whitney, <i>"Is the Future Electric: Hope, Hype, or Reality?"</i>
A2	<b>Bruno Aguilar</b> , Honeywell, <i>"Conjugate Heat Transfer Analysis for Gas Turbine Film-Cooled Blade"</i>
A3	<b>Ryan M. Chapin</b> , GE Aviation, <i>"Digital Solutions for the 21st Century"</i>
11:05 - 11:25	(and refreshments Break) הפסקה וכיבוד קל
A4	<b>Joachim Kurzke</b> , GasTurb, <i>"Engine Families"</i>
A5	<b>Boris Glezer</b> , Optimized Turbine Solutions, <i>"Getting The Outmost Benefits From Turbine Cooling"</i>
A6	<b>Bayindir Saracoglu</b> , VKI, <i>"Challenges of Detonation Engines for Future Jet Propulsion"</i>
13:10 - 14:30	ארוחת צהריים וסיור במעבדה למנועי סילון (Lunch and laboratory visit)



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## TECHNICAL PROGRAM (Cont.)

Lectures in Hebrew, 20 min. lectures.  
 14:30 - 17:00 כל ההרצאות 20 ד' ובעברית.

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Second Session מושב שני 14:30 -15:30		Third Session מושב שלישי 14:30 -15:30		Forth Session מושב רביעי 14:30 -15:30	
Material & Stress		Turbomachinery		Simulations & Modelling	
Session Chairman: Alex Roizman, Technion		Session Chairman: Eli Yakirevich, Bet Shemesh Engines		Session Chairman: Dan Fishman, Rafael	
B1	Alex Katz, Technion, <i>"Turbine Blades made of Ceramic Matrix Composites CMC , SiC/SiC"</i>	C1	Ella Berlowitz Paska, Rafael <i>"Compressor Test Bench Development Process"</i>	D1	David Lior, R-Jet <i>"Closed Cycle Micro turbines for CHP market"</i>
B2	Inna Kprovsky, IAF, <i>"Thermomechanical Fatigue, Sulfidation &amp; H.C.F. of P&amp;W JT3D Turbine Blades"</i>	C2	Eli Yakirevich, BSE, Technion, <i>"Transonic Linear Turbine Cascade Development in Technion"</i>	D2	Alon Grinberg , IAI, <i>"Turbo shaft Aero Engine Modeling Using NPSS Software"</i>
B3	Koresh Ido, Rafael, <i>"Ceramic matrix composites as a structural material for high temperature applications"</i>	C3	Konstantin Rosenberg, Rafael, <i>"Compressor Development Process – Verification of Simulations"</i>	D3	Michael Lichtsinder, Bet Shemesh Engines, <i>"Influence of Turbine Outlet Flow Swirl Angle and Reynolds Number on Small Jet Engine Performance"</i>
15:50-15:30 הפסקה וכיבוד קל Break and refreshments					
Fifth Session מושב המישי 15:50 -16:50		Six Session מושב שישי 15:50 -16:50		Seventh Session מושב שביעי 15:50 -16:50	
Fuel & Combustion		Dynamics & Vibration		Noise & Instrumentation	
E1	Alex Roizman, Technion, <i>"Suppression of Combustion Instability"</i>	F1	Alex Ferdinskoif, Technion, <i>"Comparing experimental and simulated dynamics of a tunable micro turbo-jet engine laboratory simulator"</i>	G1	Oksana Stalnov, Technion, <i>"Fan Noise"</i>
E2	Moshe Rabaev, IAF, <i>"Jet Fuels, Characteristics and Properties"</i>	F2	Eyal Setter, Rafael, <i>"Analysis and Experimental Study of Jet Engine Rotor Dynamics"</i>	G2	Shalev Aizik, IAI, <i>"Commercial High Bypass Engine Instrumentation"</i>
E3	Yuval Dagan, Rafael, <i>"A Preliminary Computational Study of a Micro Jet Engine Combustion Chamber Using Compressible Large Eddy Simulations"</i>	F3	Ronen Payevsky, Bet Shemesh Engine, <i>"Modeling of Rotating Assembly Dynamics for small jet engine"</i>	G3	Mordechai Peled, <i>"Utilization of Turbo-Fan Engine's Residual Energy as a Source of Electricity for Consumers in a Plane Using Thermo-Electric Cell"</i>