

**THE 12<sup>TH</sup> ISRAELI SYMPOSIUM ON JET ENGINES AND GAS TURBINES**  
**Thursday, November 7 2013 (9:00-17:00),**  
**Butler Auditorium, Forchheimer Building, Neaman Institute (Building #260),**  
**Technion, Haifa**

**PRELIMINARY PROGRAM**

**08:00 - 09:15 הרשמה**  
**(Registration)**

Opening: Professor Yeshayahou Levy,  
 Chairman, Head, Turbo and Jet Engine Laboratory, Faculty of Aerospace Engineering, Technion.

Major Uri Zvikel,  
 Head, Propulsion Systems Branch,  
 Aeronautical Division, MOD/MFAT

Lt.Col. Shlomi Konforty,  
 Head of Propulsion Branch, IAF

Professor Yaakov Oshman ,  
 Dean, Faculty of Aerospace  
 Engineering, Technion.

**9:15 - 13:15**  
**(First Session) מושב ראשון**  
**RECENT ADVANCEMENT IN**  
**ENGINE DESIGN**

**Session Chairman: Emanuel**  
**Liban, EDMATECH and Major**  
**Uri Zvikel, Head, Propulsion**  
**Systems Branch, Aeronautical**  
**Division, MOD/MFAT**

**A1**

Prof. Alan Epstein, VP  
 Technology and Environment,  
 Pratt & Whitney, USA, " Aero-  
 propulsion for Commercial  
 Aviation in the 21st Century  
 and Research Directions  
 Needed"

E

LANGUAGE:

**A2**

Mike Epstein, Military  
 Propulsion Engineering. GE  
 Aviation, USA "Aviation  
 Propulsion Technologies in the  
 21st Century"

E

E=English

**A3**

Prof. Srinath Ekkad, Mech. Eng.  
 Dep., Virginia Tech, USA,  
 "Advanced Film Cooling and  
 Combustor Cooling Concepts  
 for Gas Turbines"

E

H=Hebrew

**הפסקה וכיבוד קל**  
**(and refreshments Break)**

**A4**

Dr. Guillermo Paniagua, Von  
 Karman Institute, Belgium,  
 "Recent Development High  
 Pressure Unsteady  
 Aerodynamic Turbine Design"

E

**A5**

Prof. Arvind Rao, Technical  
 University - Delft, The  
 Netherlands, "AHEAD Advanced  
 Hybrid Engine Development"

E

**A6**

Andrzej Cwik, WSK "PZL-  
 Rzeszow" S.A., Poland,  
 "Turbojet engine compressor  
 surge margin estimation:  
 methods & comparison  
 to turbojet engine experimental  
 testing"

E

				<p>ארוחת צהריים וסיור במעבדה למנועי סילון (visit Lunch and laboratory) 14:30 – 13:15</p>				
	<p>16:50 - 14:30 מושב שני <b>D - SYSTEMS and COMPONENTS&amp;R</b></p>			<p>16:50 - 14:30 מושב שלישי <b>STRUCTURE and SYSTEMS</b></p>				
	<p>Session Chairman: AMIRAM LEITNER Rafael</p>			<p>Session Chairman: AVIAD BRANDSTEIN, Bedek Aviation Group, IAI</p>				
B1	<p>Dr. Beni Cukurel, Faculty Aerospace Eng., Technion, Israel, "Design of a Closed loop Continuous Turbine Test Rig"</p>	E	C1	<p>Albert Levy, Bet Shemesh Engine, Israel, "Damage at the Gas Turbine's First Compressor Stage due to Sand Ingestion"</p>	H			
B2	<p>Rami Shelef, Ettem Engineering, Israel "Dynamic Sealing in Gas Turbines"</p>	E	C2	<p>Shalev Aizik, Preliminary Engine Design, Engines Devision Engineering, IAI, Israel, "On the Effect of the By-Pass Ratio on the Dynamic Response of a Turbo Fan Engine"</p>	H		<p>16:50 - 15:50 מושב רביעי <b>MAINTANANCE</b></p>	
B3	<p>Prof. Levy Yeshayahou, Technion, Israel, "Using Chemical Kinetics as a Tool For Improved Efficiency and Low Emission Jet Engine Combustor's Design"</p>	E	C3	<p>Ohad Miler, Rafael, Israel, " Optimization of Aero- Mechanical Turbo Machinery Design"</p>	H		<p>Session Chairman: <b>MOSHE LEVY, IAF</b></p>	
	<p>הפסקה וכיבוד קל (and Break) (refreshments)</p>			<p>הפסקה וכיבוד קל (and Break) (refreshments)</p>			<p>הפסקה וכיבוד קל (and Break) (refreshments)</p>	
D1	<p>Dr. Alex Fleisher, Israel Institute of Metals, Foundry Laboratory, Technion R&amp;D Foundation, Israel, "High Entropy Alloys"</p>	H	E1	<p>Emanuel Liban, EDMATECH, Israel: "F-4 (Phantom) A/C modernization by engines' conversion"</p>	H	F1	<p>Dave Ogden, Southwest Research Institute (SRI), USA, "Condition Based Maintenance work"</p>	E
D2	<p>Eli Yakirevich, Bet Shemesh Engine, Israel, "Graphic - Analytical Solution for Contradicting Engine Specification Requirement"</p>	H	E2	<p>Cpt. Ivgeni Glishensky, IAF, Israel, "Minimizing Flutter in the T700 Turbo shaft Engine"</p>	H	F2	<p>Guy Issaki ZOK International Group, UK, "Shaping the Future of Gas Turbine Washing"</p>	E
D3	<p>Michael Veruno, Bet Shemesh Engine, Israel, "Designing a High Altitude Ignition Test Bench"</p>	H	E3	<p>Dr. Doron Gur, Head Metallurgic Laboratory, Engine Division, IAI, Israel, "Investigation of Jet Engines Failure"</p>	H	E3	<p>Jarrod Schell, Moog/Mid- America Aviation , USA, "Advanced Surface Repair Capabilities"</p>	E