

09/11/2015

Subject: Report on Workshop on Advances in Multidisciplinary Turbomachinery Design Optimization and Gas Turbine Combustion

On November 3rd 2015, for the third consecutive year, a turbomachinery workshop organized by Asst. Prof. Beni Cukurel was held at the Technion Aerospace Department. The training activities were geared towards creating a platform for world's leading minds in the field of turbomachinery to come and share their knowledge with students, members of academia and industry.



This year we had the honor of hosting Prof. Tom Verstraete and Dr. Michael Klassen – experts in the fields of multidisciplinary optimization, and combustion respectively.

Prof. Verstraete's session was on the topic of Advances in Multidisciplinary Turbomachinery Design Optimization, and included:

- Introduction to multidisciplinary design optimization for turbomachinery.
- Zero and first order optimization methods.
- Application of optimization techniques to micro turbomachinery design.

Dr. Klassen presented on the topic of Combustion for Micro Gas Turbines, and covered aspects such as:

- Introduction to combustion and combustion chemistry.
- Pollution formation in gas turbines.
- Chemistry modeling techniques for combustor design.

Members from branches of MAFAT, Israeli Air Force, Bet Shemesh Engines, Rafael, Israeli Aircraft Industries and Technion faculty/staff/students attended the event. Total registration included over 40 participants. We have received significant positive feedback from all those who attended the sessions.

Thank you for your support,

With best regards,

Asst. Prof. Beni Cukurel