

**School of Engineering Special Lecture**  
**“Leading-Edge of Next Generation Aircraft Engine Development”**  
**Dr. Frank Haselbach, Head of Subsystems, Aerospace at Rolls-Royce**

Rolls-Royce is one of the world leading producers of aero engines for large civil aircraft and corporate jets. The aerospace market is rapidly growing with the globalising economics. We estimate that the global civil engine market will be worth approximately \$1,900 billion over the next 20 years. Rolls-Royce currently holds more than 50% market share in the large civil engines with order book worth \$96 billion. Technology and innovation are the heart of Rolls-Royce. We anticipate technology then create products and services that our customer need ahead of market requirements, investing \$1.8 billion in 2014 in R&D.

The lecture will be given by Dr. Frank Haselbach, Head of Sub-Systems, Aerospace, Rolls-Royce. The lecture will introduce basic design aspects of a gas turbine engine to provide overview of how an engine is designed. The lecture will also introduce environmental challenges that aircraft engines are facing, and how Roll-Royce is developing its technologies to meet and exceed the goals in near and long term future.

**Information:**

Date: 2015/6/1(Mon) 17:15-18:15 (open from 17:00)

Place: Tokyo Tech Ookayama Campus West Bldg 5, 3F  
Tokyo Tech Lecture Theatre (W531) (capacity: 274)  
<http://www.titech.ac.jp/maps/ookayama/ookayama.html>

Lecturer : Dr. Frank Haselbach  
Head of Sub-Systems, Aerospace, Rolls-Royce

Lecture Title :  
“Next Generation of Large Civil Aircraft Engines – Concepts & Technologies”

Fee: Free

**Get-Together event:**

Tokyo Tech Front (TTF), Conference Room L (Bldg. B 2F)  
18:40 registration start (after the lecture)  
Fee: 3,000 yen

**Registration:**

Pre-registered participants are preferred due to the capacity though on-site registration is accepted. Please register from the website of School of Engineering.

<http://www.navier.mes.titech.ac.jp/RRlecture/index.php>  
(Accessible from Tokyo Tech domain only)

[Due date of registration] 2015/5/27 (Wed)

Please make a registration if you join the get-together event.

Sponsor: Tokyo Institute of Technology, School of Engineering

Co-sponsor: Dept. Mechanical and Aerospace Engineering, Dept. Mechanical Sciences and Engineering, Dept. Mechanical and Control Engineering, Dept. Metallurgy and Ceramics Science, Academy for Co-creative Education of Environment and Energy Science (under request included)

Contact: Prof. Mamoru Tanahashi  
Chair of Department of Mechanical and Aerospace Engineering