Research day program, 7th and 8th September, 2017

Competence Center for Gas Exchange @ KTH

7th September
Lindstedtsvägen 26, KTH Campus, Room F3

11:00 Meet and Greet Registration

11:30 Introduction - Research Directions for ICE/Gas Exchange Systems, Swedish/Global perspective. Anders C. Erlandsson

12:00 High Efficiency and Gas Exchange, Jari Hyvönen, Wärtsilä Oy.

12:30 Lunch

13:30 Research Area presentations: COLDSIDE, HOTSIDE, EAT, SYSINT by Mihai Mihaescu, Mikael Karlsson, Anders C. Erlandsson

14:00 Project presentations PhD students (15 minutes + 5 min questions / each)

Elias Sundström, KTH-Mek; *Large Eddy Simulations of Compressor Flows at Low Mass Flow Rates.*
Asuka Gabriele Pietroniro, KTH-Mek/MWL/Volvo Cars; *On the Aerodynamically generated Sound in Centrifugal Compressors.*
Valeriu Dragan KTH-Mek; *Analysis of non-axisymmetric Vaneless Diffuser Configurations – impact on range of Operability and Performance.*
Nicholas Anton, KTH-ICE/SCANIA; *Engine Optimized Turbine Design.*

15:30 Coffee Break

15:45 Project presentations PhD students

Marcus Winroth, KTH-Mek; *Gas Dynamics at Exhaust Valves and Ports.*
Ted Holmberg, KTH-ICE; *Valve Strategies and Exhaust Pulse Utilization.*
Shyang Maw Lim, KTH-Mek; *Flow and Heat Transfer in a Turbocharger Radial Turbine.*
Sandhya Thantla, KTH-ICE; *Low Temperature Waste Heat Recovery (WHR) in IC Engines.*

17:15 Lab visit CCGEx turbo/MWL & Refreshments All, Bengt guides

18:15 Dinner – Syster & Bror All

8th September
Brinellvägen 68, Room M312

08:30 Project presentations PhD students

Zhe Zhang (Simulations), KTH-MWL; *Grouping of Particles in Gas Exhaust Systems by using Acoustics.*
Ghulam Majal (Simulations), KTH-MWL/Mek; *Control of Particle Agglomeration with relevance to After-Treatment Gas Processes.*
Arun Prasath (Exp), KTH-ICE; *Particulate characterization in the Gas Exchange Systems of DI/SI Engines.*
Senthil Krishnan Mahendar, KTH – ICE; *Heavy Duty DISI Gas Exchange Processes with Alternative Fuels.*

10:00 Coffee break

10:15 CCGEx targets & focus areas 2018-2021 – Proposed research questions by Anders C. Erlandsson, Mihai Mihaescu, Mats Åbom

10:35 Workshop on research questions and feedback collection All

12:15 Conference summary & closing remarks by Anders C. Erlandsson

12:30 Lunch, Alba Nova All

13.45 ICE lab visit ALL, guided by Christer Spiegelberg

14:30 Conference close
