

Revolutionary ideas in the field of compressors considering

- * mobile application,
- * refrigeration technology,
- * process gas industry and
- * turbo compressor application

have been developed and investigated in the recent past.

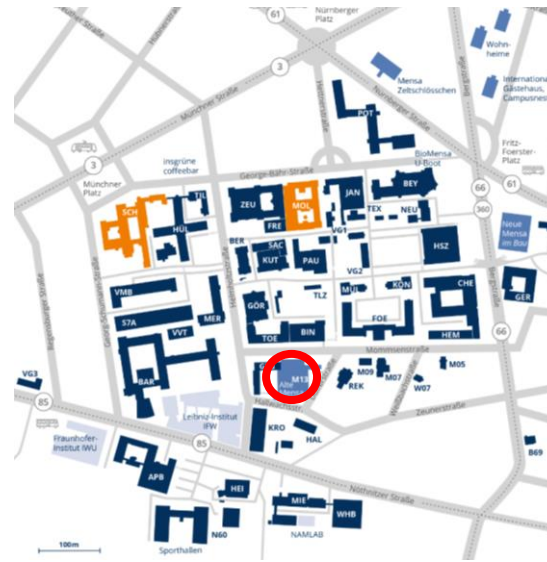
The focus of the 2nd Innovation Day of Compressor Technology is on the bearings of different types of compressors. Small scale compressors for household applications, industrial cooling, and transport cooling as well as for process gas are considered. Presentations on specific challenges, tribology aspects and guidelines will be given by experts of the respective field of research.

The number of participants is limited due to the premises. Registrations will be considered with respect to the date of their receipt.

The participation in the 2nd Innovation Day of Compressor Technology is free of charge.

For your participation please use the form under the link until September 23th, 2019:

[2nd Innovation Day of Compressor Technology](#)



Dülferstraße, 01069 Dresden

For any further information please contact:

Dr. Christiane Thomas
 christiane.thomas@tu-dresden.de
 +49 351 463 32546

<https://tu-dresden.de/ing/maschinenwesen/iet/kkt>

2nd Innovation Day of Compressor Technology

Bearings – Stress with the Load

October 11th, 2019
Dülfer-Saal
Technische Universität Dresden
 Dülferstraße, 01069 Dresden

Thursday, October 10th, 2019

Beginning: 6:30 pm

Welcome Reception with Lab tour at the Bitzer Chair of Refrigeration, Cryogenics and Compressor Technology

Welcome:
Prof. Dr.-Ing. Ullrich Hesse

Location: Evening event: TU Dresden, Alte Mensa, Westsaal. Use the entry from Helmholtzstraße.

Friday, October 11th, 2019

9:00 am **Reception Desk**

9:20 am **Welcome**
Prof. Dr.-Ing. Ullrich Hesse, Bitzer Chair of Refrigeration, Cryogenics and Compressor Technology, TU Dresden

Location: TU Dresden, Dülfer-Saal/Alte Mensa. Use the entry from Dülferstraße

Part 1: Bearings

9:30 am **Introduction of Bearing Technology**
Prof. Dr.-Ing. Berthold Schlecht, TU Dresden

10:05 am **Tribology Examinations**
Dr. Christian Beck, Fa. Bruker

10:40 am **Simulation of Bearings**
Dr. Björn Juretzki, IME Aachen GmbH

11:15 am **Plastic Plain Bearings --> Application Limits and Possibilities**
Stefan Loockmann-Rittich, Igus

11:50 – 12:50 pm Lunch Break

Part 2: Lubricants

12:50 pm **Lubricants for Bearings**
Prof. Christian Busch, WHZ Zwickau

1:25 pm **Surface Tension of Lubricants**
Ramona Nosbers, TU Dresden

2:00 pm **Lubrication of Bearings with Low-viscosity Fluids**
Thomas Mösch, TU Dresden

02:35 – 02:55 pm Coffee Break

Part 3: Special Applications

2:55 pm **Opportunities and limitations of gas lubricated bearings for turbocompressors**
Prof. Jürg Schiffmann, EPFL, Schweiz

3:30 pm **Stabilization of High-speed Rotors with Magnetic Bearings**
Markus Hutterer, TU Wien

4:05 pm **Hybrid and Ceramic Rolling Bearing Technology**
Johannes Mohr, CEROBEAR GmbH

4:40 pm **WRAP-UP**
Prof. Dr.-Ing. Ullrich Hesse, TU Dresden