



ILK Dresden – R&D company



- ▶ Re-established as independent research institute in 1991
- ▶ Employees: 125
- ▶ Academics: 72 %
- ▶ mean age: 44

- ▶ Laboratory area: 3070 m²
- ▶ Test rigs: ~56
- ▶ Phys. / Chem. Laboratories: 25





- ▶ ILK (Prof. Franzke) was involved in Task 25 (Design Tool) and Task 38 (commissioning guidelines)
- ▶ ILK built its first solar thermal cooling systems in 1998 → ETC with 15 kW ammonia/water chiller
- ▶ ILK → close development/engineering cooperation with Abs.chiller manufacturers (EAW and AGO)
→ know their perspectives and problems and are able to represent their views within the task



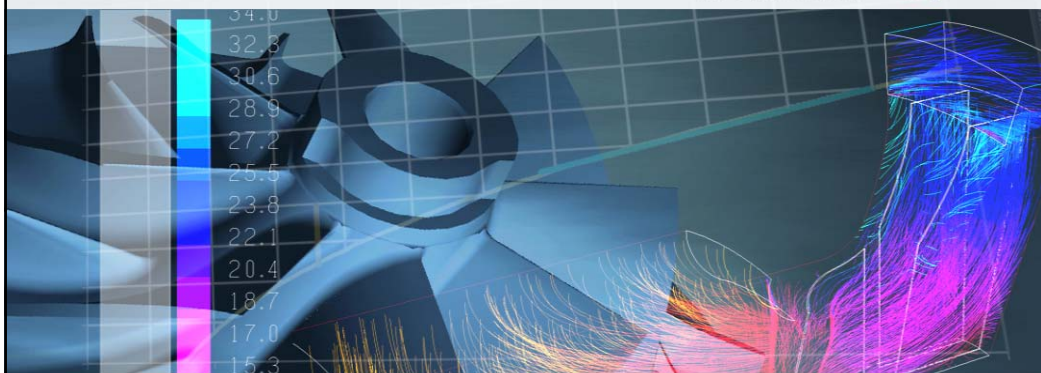
- ▶ EvaSolK - Evaluation of chances and limits of solar cooling compared to reference technologies – Analysis of solar thermal and photovoltaic driven cooling
- joint project: ISE – ZAE – ILK; 06/2010...12/2012
- ▶ SolTri – Components for decentralised solar-assisted trigeneration systems
- Development of a small (diameter: 2 m) and inexpensive parabolic trough collector (company: Mithras, University of Braunschweig)
- Development of an adapted small capacity Double Effect absorption chiller (EAW; ILK)
- ▶ Coach – Components for an optimised air-cooled absorption chiller
goal: - directly air-cooled small capacity (~8 kW)
- ▶ Planned: Greenchiller - Project for optimisation of re-cooling in SAC systems
→ (running) cost reduction possible

Main interests



- ▶ Cost reduction mainly on the component level
- ▶ Quality assurance on the chiller level
- ▶ Combination with other heat sources?

ILK Dresden



Thanks for your attention!

Institut für Luft- und Kältetechnik
gemeinnützige Gesellschaft mbH
Bertolt-Brecht-Allee 20, 01309 Dresden

Mathias Safarik

Tel.: +49 351 / 4081-713
E-Mail: mathias.safarik@ilkdresden.de