Task 38 follow up – interests and inputs
Institute of Air Handling and Refrigeration – Mathias Safarik

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
Short history

- 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

Running projects

- 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?