

▪ **Solar collectors and systems**

- Design improvements of solar thermal collectors aiming at higher efficiencies, investigation of new materials for better performance, longer life cycles and better quality.
- New technologies such as those based on heat pipes and Dewar-type evacuated tubes (with water or air as the working fluid), “4<sup>th</sup> generation” solar collectors using nanofluids as the working fluid.
- New methodologies for the modelling of collectors and systems, development of tools for the integrated design of large-scale solar heating plants
- Solar-air conditioning, cooling technologies utilizing a thermal source (such absorption and desiccant cooling systems).