







## **Report - On Site Training**

## SOLTRAIN - Specialized Training Course on Solar Cooling and Air Conditioning

28 – 30 November 2018 Conference Centre at the Faculty of Theology, Stellenbosch, South Africa

A specialised course for a restricted number of experts was held in Stellenbosch from 28<sup>th</sup> - 30<sup>th</sup> November 2018.

This training course was carried out in co-operation of the Solar Academy of the IEA Solar Heating and Cooling Programme and the SOLTRAIN project. The workshop was hosted and organized by the SOLTRAIN project partner CRSES from Stellenbosch University.

42 participants from 6 countries from southern Africa were attending the course. The participants comprised researchers, solar suppliers and members of public institutions from South Africa, Botswana, Namibia, Lesotho, Mozambique and Zimbabwe.

The course was lectured by Dr. Daniel Mugnier (IE SHC chair and OA of Task 53) and Dr. Christian Holter from the Austrian engineering company SOLID and expert in Task 53.

The 3-day training programme was based on the training materials developed partly within the IEA SHC Task 53 on "New Generation Solar Cooling & Heating Systems (PV or solar thermally driven systems" and materials developed in previous Tasks 38 and 48 on this topic.

The training included the following topics:

- Solar cooling in the future southern African energy context in the view of the IEA
- State of the art of small/medium PV & ST cooling systems
- State of the art of large-scale solar cooling and air conditioning systems
- System concepts and preconditions (from small PV-driven systems to medium solar thermal driven systems)
- Building analysis, all components such as heat rejection and storages
- Large-scale systems: Concepts and system integration with DHW
- Best practice and monitoring results small/medium systems
- Best practice and monitoring results large systems
- Design and dimensioning
- Financing









The feedback of participants was unanimous in that they derived great benefit from attending the course, and expressed great interest in any future courses.



Participants of the On-site Training Course in Stellenbosch, South Africa