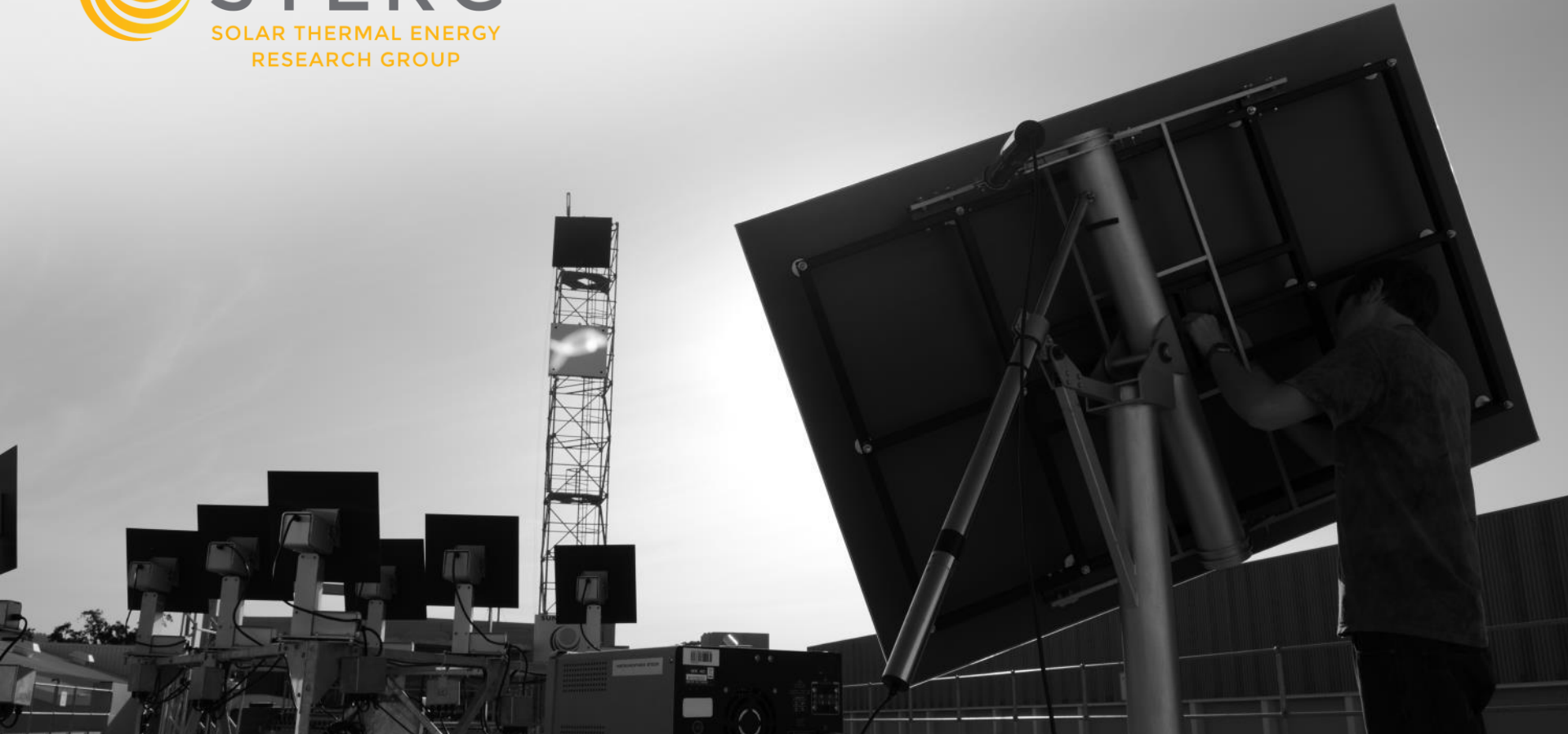




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SOLAR THERMAL ENERGY
RESEARCH GROUP



Optimization and Verification of a Parabolic Trough Power Plant

R.C.Barnes

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Co-supervisor: Prof Thomas Harms

Solar Thermal Energy Research Group (STERG),
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Contents

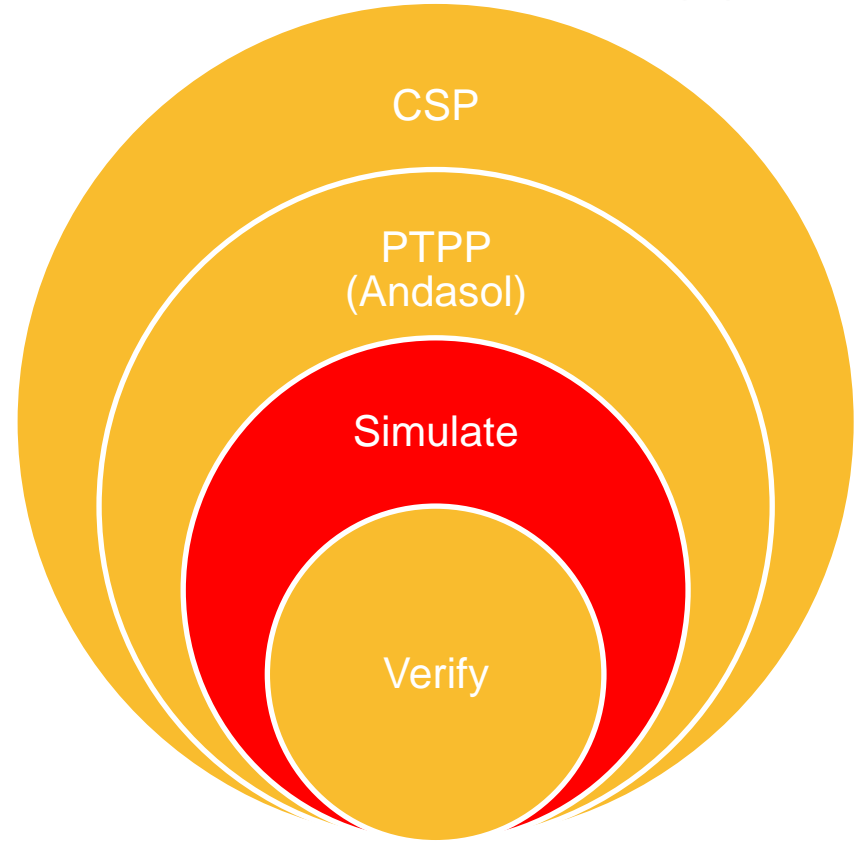
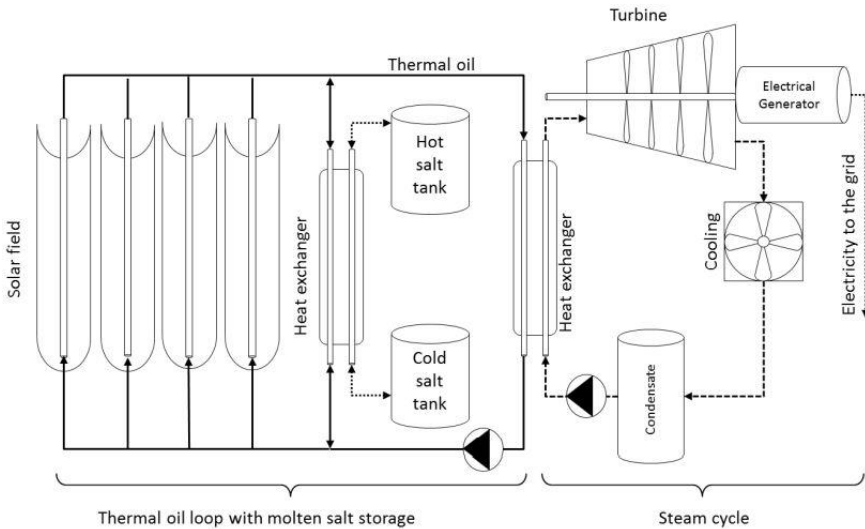


- Introduction
- Objectives and Overview
- Planned Activities
- Conclusion

Introduction



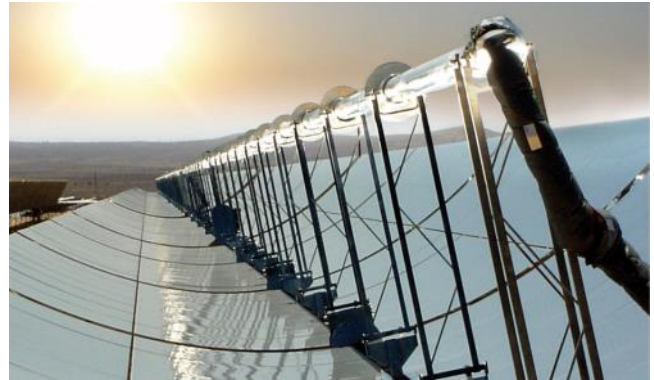
The Focus of the Thesis:



Objectives and Overview



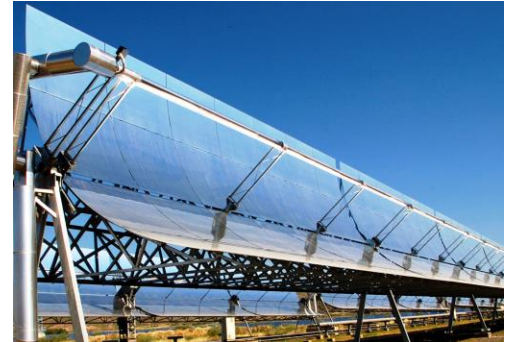
1. Investigate Optimisation Areas
2. Simulate the Andasol Power Plant
3. Optimise the Power Plant
4. Validate the Results
5. Conclude and Recommend



Planned Activities



1. Literature Study
2. Identification of Key Optimisation Aspects
3. Andasol Simulation (Matlab)
4. Optimise the PTPP and Reduce Gas
5. Comparison of the Results
6. Final Thesis Report



Conclusion



Purpose of this thesis:



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- Provide information and results that allow the plant to be optimised.
(Provide a simulation program for parabolic trough plants like Andasol)
- Promotes new and developing trough technology entering the market and reduces operational costs.

THANK YOU

ACKNOWLEDGEMENTS:

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