



LCE-02-2015

## **SOLPART**

Full Title: High Temperature Solar-Heated Reactors for Industrial Production of Reactive Particulates

Aim:

The main objective of the SOLPART project is to develop, at a pilot scale, a high temperature (800-1000°C) 24h/day solar process suitable for particle treatment in energy intensive non-metallic minerals' industries.

Concept:

Hence, the challenges of the project are to demonstrate a pilot scale solar reactor suitable for e.g calcium carbonate decomposition (Calcination reaction:  $\text{CaCO}_3 = \text{CaO} + \text{CO}_2$ ) and to simulate at prototype scale a 24h/day industrial process (TRL 4-5) thereby requiring a high temperature transport and storage system. The solar test site of the project is CNRS-PROMES (Figure 1) solar facilities.

Start date:

16/05/2019

End date: