Please return this document at

Horizon2020@recherche.gouv.fr

**Partner search**

**Date (10/09/20)**

* **(\*) Indicate numbers of relevant topics for Green Deal call:**

|  |
| --- |
| **LC-GD-2-1-2020** |

* **Quick description of the project**

|  |
| --- |
| **(describe the objectives, activities, partners requested and their skills)** |

* **(\*) Do you intend to apply as ? :**

**Coordinator: No**

**Participant: Yes**

**(\*) Either Description of the expertise requested (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

|  |
| --- |
| **Xxxxxxxxx****+ key words :**  |

**Or Description of the expertise proposed (up to 1000 characters) - *specify which points of the "expected impact" of the call you are targeting***

|  |
| --- |
| **Expertise on the design of concentrated solar collector: FRESNEL linear collectors, small parabolic trough, beam down solar concentrators.Development of numerical codes for the design of solar concentrators and concentrated solar power plants. These codes are based on Monte Carlo Methods that deal with complex geometries, using computer graphic techniques. The main advantage of these techniques, that are meshless, is to handle large ratio scales in time and space. We have extended these techniques to heat transfer (and not only radiation) to take into account thermal heat transfer inside receivers.****The observables are determined with a precision (error bar) and sensitivity to many parameters without increasing the calculation time. This latter point is interesting for optimization issues. We also develop symbolic Monte Carlo models to produce reduced models for control-command of the processes.****+key words : concentrated solar processes, design and modelling, Monte Carlo Methods, Heat transfer, Solar receivers, solar chemical reactors, Optimimization** |

**Organisation information**

|  |
| --- |
| **Organisation and country:****Centre RAPSODEE – UMR CNRS 5302****IMT Mines Albi****France** |
| **Type of organisation:****□ Enterprise □ SME X Academic X Research institute □ Public Body □ Other: Association** |
| **Former participation in FP European projects?****X Yes □ No** |
| **Web address:**<https://www.imt-mines-albi.fr/en/rapsodee-umr-cnrs-5302> |
| **Description of the organisation:** |

**(\*) Contact details**

|  |  |
| --- | --- |
| **Contact person name** | **Pr EL HAFI Mouna** |
| **Telephone** | **33 5 63 49 31 49** |
| **E-mail** | **elhafi@mines-albi.fr** |
| **Country** | **France** |

**(\*) –Mandatory**