



## ERASMUS+ TRAINEESHIP / PLACEMENT OFFER

**Project title:** Material laser processing and characterization for energy production and storage

### Project description:

Our lab is focused on processing materials with recourse to lasers. We focus on solar PV materials (classical Silicon, and upcoming thin film technology - CIGS, Perovskites) and also battery and super capacitor storage materials (carbon, graphite, metal-oxides).

Lasers have a wide scope of applicability in manufacturing industry. There are several reasons for this, namely high power, high speed, energy efficiency and continued cost reductions.

We aim to apply differing types of lasers to develop materials with new functionalities and to also achieve the same type of materials but at a higher throughput rate.

Candidate should have interest in one or more of the following areas: Solid state physics and devices, lasers, materials, electrochemistry.

Please note: this placement offer is continuously open.

**Department:** Geographic Engineering, Geophysics and Energy

**R&D Unit:** Instituto Dom Luiz (IDL) and Structural Chemistry Cen<sup>+</sup>

**Field of study:** Materials for energy applications: storage, conversion and solid-state illumination

**Supervisor:** Killian Lobato **Personal webpage:** https://ciencias.ulisboa.pt/en/perfil/klobato

**Number of weeks offered:** 12 to 24 **Within the months:** from September to July

**Number of working hours per week:** 10 to 35

**Publication date:** 23 / 10 / 2019 **Closing date:** - / - / -

### Requirements

#### General:

- A very good academic record;
- Good writing and presentation skills;
- Good social and organisational skills;
- Very good proficiency in spoken and written English; knowledge of Portuguese language is an asset.

#### Specific:

- Level of education: Bachelor's or Master's degree in Physics, Chemistry, Materials Science, Chemical Engineering;
- \_\_\_\_\_;
- \_\_\_\_\_.

### Applications

Applications should include the following information:

- a cover letter, including a description of your research interests and an explanation for why you are applying for this project;
- a curriculum vitae (CV);
- an official transcript of grades issued by your home institution;

and be submitted no later than - / - / - via email to [internacional@ciencias.ulisboa.pt](mailto:internacional@ciencias.ulisboa.pt).

### Contacts

For inquiries regarding this project you are welcome to contact: klobato@ciencias.ulisboa.pt.

For inquiries regarding the application procedure you are welcome to contact: [internacional@ciencias.ulisboa.pt](mailto:internacional@ciencias.ulisboa.pt).