



UCLouvain

PhD Position in Condensed Matter Physics and Nanosciences in UCLouvain (Belgium)

The *Ab initio* Modelling Division at UCLouvain has one PhD student opening with an expected starting time frame in September 2020.

The research will focus on the prediction of the structural, electronic, optical, and quantum transport properties of new carbon forms (in close collaboration with experimental groups), as well as other 2D materials using state-of-the-art *ab initio* simulation techniques.

The ideal candidate should have :

- A Master degree in Material Science or Physics, or related fields
- Previous exposure to quantum mechanical theory and condensed matter physics
- Experience in DFT-based codes (ABINIT, VASP, Quantum ESPRESSO, CP2K, ...)
- Experience in developing simulation software is a plus
- Excellent communications skills in English
- Basic knowledge in French (mandatory due to small teaching duties)
- Strong personal motivation to work in a diverse international research team and collaborate with experimentalists.

The application should consist in :

- A one-page motivation letter,
- A curriculum vitae,
- The master thesis (or a draft thereof) and possible publications (or preprints),
- Copies of the graduation certificates including transcripts of records.

All application materials should be sent as **one pdf file** to jean-christophe.charlier@uclouvain.be and gian-marco.rignanese@uclouvain.be

Application deadline : June 30th 2020 or until the position is filled...

Additional information on the recent research of the *Ab initio* Modelling Division at UCLouvain can be found at the following webpage: <https://uclouvain.be/en/research-institutes/imcn/modl>