



PhD Position on Multi-scale Modeling of Drug/MOF (Metal-Organic-Framework) Interaction within a collaboration between INOMAR in HCM City and the Key Laboratory for multi-scale modeling in Hanoi

The Center for Innovative Materials and Architecture (INOMAR, <http://inomar.edu.vn>) is one of leading international research laboratories in Metal - Organic Framework in Vietnam. Being affiliated with the Vietnam National University in HoChiMinh City (VNU-HCM), it conducts basic and applied cutting-edge research on nano-(bio) structured materials with international standard. Publications from the lab include *Angewandte Chemie* and *J. Am. Chem. Soc.* INOMAR promotes high-quality postgraduate programs through global mentoring.

The Key Laboratory for Multiscale Simulations for Complex System at the VNU University of Science in Hanoi (<http://www.fz-juelich.de/IAS/IAS-5/EN/VNU-KeyLab/Home.html>) is a new initiative between VNU-Hanoi and the Computational Biomedicine Institute in FZ-Julich, Germany (http://www.fz-juelich.de/ias/ias-5/EN/Home/home_node.html). It fosters cutting-edge computational research in neurobiology and molecular medicine.

Within a novel collaboration with the Key Laboratory, the INOMAR is now starting an exciting research project in computational biomaterials for medical applications. Specifically, it recruits a talented PhD student for multi-scale modelling design of ligand/MOF (Metal-Organic Framework) complexes for drug delivery in brain diseases, in close collaboration with the experimental scientist from INOMAR. The successful applicant will perform his/her PhD thesis under joint supervision by professors from the KeyLab and INOMAR. He/she will be given the possibility to visit the Computational Biomedicine Institute in FZ-Julich, equipped with one of the largest High-Performance Computer facilities in the EU.

Knowledge skills and experience

Essential

1. Excellent knowledge on fundamental quantum mechanics and statistical thermodynamics.
2. Good knowledge of the English Language in term of verbal and written communication skills.
3. Age less than 30
4. Master from Physics or Chemistry

Desirable

1. Basic knowledge on programming skills and methods of molecular simulations
2. Basic knowledge on chemistry of molecules.
3. Basic knowledge on material physics.

Contact information

If you would like to apply and/or have any questions regarding the PhD position, please contact us:

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