

2 PhD positions LIC (Theoretical Chemistry)

Faculty of Mathematics and Natural Sciences The Leiden Institute of Chemistry (LIC)

The Leiden Institute of Chemistry is part of the Faculty of Mathematics and Natural Sciences of Leiden University. Leiden University is a member of the League of European Research Universities.

Vacancies are available at the LIC for:

2 PhD POSITIONS (M/F), (38 hours weekly)

Project description

Both PhD projects are integrated into the research programme “Quantum Pathways to Photosynthesis – Purpose-Driven Theoretical Chemistry for the Artificial Leaf” which is funded through a VIDI grant within the Innovative research Incentives Scheme by the Netherlands Organisation for Scientific Research (NWO). Project 1 addresses questions related to the energy-transfer dynamics in pigment complexes, while project 2 concerns methodological developments for radical ions and ion pairs in photosynthetic reaction centers. Both projects build on our earlier activities in the field of subsystem-based quantum chemistry. A list of recent publications relevant for this project can be found at www.theorchem.leidenuniv.nl/people/neugebauer.

Research environment

Currently, the research areas of our group comprise method development for excited states of pigment aggregates in photosynthetic systems, substrate effects on excitation energies of adsorbed molecules, vibronic spectroscopy, and subsystem-based methods for response properties. Within the Science Faculty of Leiden University, we benefit from a number of close collaborations and frequent interactions with other theoretical and experimental research groups. Excellent computational facilities are available locally and at the national level to optimize the conditions for productive work. Among the tasks of the PhD students are the development of algorithms as well as their implementation into quantum chemistry software. Moreover, the projects will require theoretical investigations of photosynthetic systems and their components by means of electronic-structure programs.

What we seek

We are searching for an ambitious candidate with a recent MSc in (theoretical/physical) Chemistry or Physics or comparable qualification. The ideal candidate has experience in scientific programming and in the application of quantum chemistry software.

We offer you an appointment for a period of one year with a possibility for prolongation up to four years. The appointment is for 1.0 full-time equivalent. The gross monthly salary is € 2.042,- in the first year and increases progressively each year to € 2.612,- in the fourth year in accordance to the Collective Labour Agreement for Dutch Universities (CAO Nederlandse Universiteiten).

For more information send an email to Dr. J. Neugebauer, j.neugebauer@chem.leidenuniv.nl

Web: <http://www.theorchem.leidenuniv.nl/>

Application

Qualified applicants are invited to submit applications that include a letter of interest, and a curriculum vitae. Consideration of candidates will start immediately and continue until the positions are filled. Applications should be sent to:

Faculty of Mathematics and Natural Sciences
LIC / TC, Gorlaeus Laboratories
Dr. J. Neugebauer, Associate Professor
P.O. Box 9502
2300 RA LEIDEN, The Netherlands
Email: j.neugebauer@chem.leidenuniv.nl

More information on working for the University can be found on: www.medewerkers.leidenuniv.nl (Dutch site only) and on www.leidenuniv.nl/en/staff (English site with information for international staff and PhD students).