



PhD vacancy

“P-stereogenic phosphine ligands for asymmetric C-C coupling, carbonylation and hydrogenation reactions”

419-02/2018

The Leibniz Institute for Catalysis (LIKAT) is one of the leading European research institutions in the field of homogeneous and heterogeneous catalysis. Several materials concepts are currently being investigated to connect both disciplines. Major goals of our scientific work are the elaboration of knowledge in basic research in all areas of catalysis as well as the transfer of results into technical applications. In this regard, LIKAT offers a PhD-student position for a period of 3 year(s) with the topic “P-stereogenic phosphine ligands for asymmetric C-C coupling, carbonylation and hydrogenation reactions”.

The PhD candidate will investigate the synthesis and application of chiral mono- and bidentate P-donor ligand in homogeneous catalysis. The ligands will be derived from chiral phosphanorbornane- und 2,3-dihydrophospholane-compounds, which have been developed in the group of Prof. Hey-Hawkins at the University of Leipzig. Several ruthenium, rhodium and palladium catalysts will be explored in enantioselective transformations. The research will be performed in collaboration with the group of Prof. Evamarie Hey-Hawkins at the University of Leipzig.

A diploma degree in chemistry or an international equivalent is required. The candidate should have experiences in homogeneous catalysis, organic synthesis or inorganic chemistry. Experiences in the field phosphorus chemistry, computational studies are desirable. Solid knowledge in computing, interpretation of data and their presentation is necessary.

We offer a challenging PhD position in an international research group in an excellent environment at the LIKAT Rostock. The position with a working time of 20 hour per week is available from now on and is limited to 3 years. The salary is based on public service rates of the German states (EG13 TV-L, 50%).

Highly motivated applicants are kindly asked to submit their application letter together with a detailed CV and a copy of the masters/diploma certificate as an e-mail (in one pdf file) stating the reference number **419-02/2018** to

paul.kamer@catalysis.de

or contact him for further information.

The application deadline is the **31st of October 2018**. LIKAT support professional equality of women and men and so applications from women are most welcome. Because in this sector of LIKAT women are underrepresented preference will be given to women with equal qualification. Severely disabled applicants with equal qualification and aptitude will be given preferential consideration.