

The Division of Chemistry and Bioanalytics of the Paris Lodron University Salzburg invites applications for a PhD vacancy in Analytical Chemistry.

The PhD position is situated within a highly motivated research group specialized in bioanalytics/protein chemistry with special emphasis on allergen characterization and will cover a period of 36 months within a project of the Austrian Science Fund (FWF). The project will start in April 2010. Salary is according to the usual FWF rate for PhD. The candidate should have a strong background in (analytical) chemistry. A university degree (MSc.), which covers analytical chemistry or a related scientific discipline, is required. Applied techniques within the project will cover various modes of capillary electrophoresis (CE), e.g. CZE, CIEF, CITP, affinity-CIEF and CZE-ESI-microTOF. In addition, circular dichroism spectrometry will be used for protein characterization. Independent and responsible research is required. Research strategy of the project combines bioanalytical and immunological approaches, the latter being covered by a second PhD student of the immunological group. The applicant will interact strongly with members of the immunological partner group which is also part of the project.

Topic: Proteins/allergens modified by environmental pollutants are suspected to induce enhanced allergic reactions. In particular the nitration of allergens is a major candidate for inducing increased allergenicity as supported by recent data and can equally occur *in vivo* in the course of inflammations. Therefore, various recombinant airborne allergens which are in-lab nitrated to a different extend will be physico- and immunochemically characterized prior to a testing of their effect on immune reactions. Additionally, nitration grades of environmental samples will be investigated. In this context, beside appropriate on- and off-line pre-concentration techniques, CE separations have to be developed and validated by the candidate including hyphenation to MS.

Applicants should send their curriculum vitae, including name and contact details of at least one reference, a summary of their MSc. work and a letter of motivation until the 20th of February 2010 to Assoc. Prof. Dr. Hanno Stutz, Department of Molecular Biology, Division of Chemistry and Bioanalytics, email: hanno.stutz@sbg.ac.at, at Paris Lodron University Salzburg, Hellbrunner Str. 34, A-5020 Salzburg, Austria.