Job posting

Type of position
☒ scientific
☐ administrative

Target group
☒ graduates
☐ post docs
☐ other

Title
University Assistant (praedoc)
at the X-ray Structure Analysis Centre,
Faculty of Chemistry, University Vienna

Institution

Position
University Assistant (praedoc)
at the X-ray Structure Analysis Centre

Reference number: 10849

Applications are invited for a joint predoctoral assistant position of the Department of Inorganic Chemistry (head: Prof. Bernhard Keppler) and the Centre for X-ray Structure Analysis (head: Dr. Tim Gruene).

Duration of employment: 4 years
Extent of Employment: 30 hours/week
Job grading in accordance with collective bargaining agreement: §48 VwGr. B1 Grundstufe (praedoc) with relevant work experience determining the assignment to a particular salary grade.

Responsibilities
Topic of the PhD project will be the experimental assessment of the oxidation state of metals in bioinorganic complexes. Such complexes are central to the development of novel tumour therapeutics. The experimental determination of the oxidation state will lead to the creation of rational synthesis design for optimal drug uptake and drug delivery to the tumour tissue. In particular, the PhD project will study on KP-1339, a Ruthenium based anti-cancer drug [1]. The project focuses on the hypothesis "activation by reduction" of Ru(III) to Ru(II) by means of 3D electron crystallography [2]. The PhD candidate will synthesise and crystallise bioinorganic complexes starting from KP-1339 to control its oxidation state. The candidate will collect and analyse electron diffraction data. Samples with well known oxidation state serve for calibration. The results will be used to rationalise the synthesis of improved anti-cancer drugs that will be inactive during uptake into the
body and become activated once the drug has arrived in the
tumour tissue. Further, the candidate will develop peptide-based
delivery systems for such compounds.
We expect the successful candidate to sign a doctoral thesis
agreement within 12-18 months. Furter ...
- Participation in teaching and independent teaching of courses
  as defined by the collective agreement (excellent command of
  written and spoken German required)
- Supervision of students
- Involvement in the organisation of meetings, conferences,
symposia
- Involvement in the department administration as well as in
teaching and research administration

Requirements
Master degree in chemistry or equivalent that qualifies to start a
PhD position.
Lab experience including Schlenk line and glove box
techniques, design and
synthesis of metal-inorganic complexes. Knowledge in
crystallography,
preferable documented through course work, experience with
crystallographic and
simulation software (e.g. Gaussian, NBO, AOMix, HyperChem),
and generally good
computational skills.
Co-authorship for at least one scientific publication with a topic
related to metal-inorganic chemistry or crystallography is a plus.
Very good english-knowledge is a must.
The candidate should have good communication skills and
should be a good team player. The candidate will be involved in
teaching in German. The candidate must be willing to learn
German at the beginning of the project.

Application documents:
- Motivation letter (including research interests)
- Curriculum vitae
- List of publications, evidence of teaching experience (if
  available)
- Degree certificates

Research fields:
Main research field: Chemistry
Special research fields: General chemistry
Importance: must

Education:
Educational institution: University
Educational level: Chemistry
Special subject: General Chemistry
Importance: must
Languages:
English:
Language level: Very good knowledge
Importance: must
German:
Language level: Very good knowledge
Importance: must

Computer-Skills:
Type of computer skills: Basic Knowledge
Specified computer skills: MS Office
Importance: must

Application procedure (deadline etc.)
Applications including a letter of motivation (German or English) should be submitted via the Job Center to the University of Vienna (http://jobcenter.univie.ac.at) no later than 08.06.2020, mentioning reference number 10849.

The University pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity (http://diversity.univie.ac.at/). The University lays special emphasis on increasing the number of women in senior and in academic positions. Given equal qualifications, preference will be given to female applicants.

Human Resources and Gender Equality of the University of Vienna
Reference number: 10849
E-Mail: jobcenter@univie.ac.at
Privacy Policy of the University of Vienna

Contact
For further information please contact Grüne, Tim +43-1-4277-70202.