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The Ludwig-Maximilians-University of Munich is one of the largest and most renowned universities in Germany. The Chair of Chemical Biology for Drug Research (Prof. Dr. Ivan Huc) at the Faculty of Chemistry and Pharmacy of the LMU is looking for a full-time:

Laboratory Engineer, or Assistant Engineer, in Synthetic Chemistry

In the context of the research program of the chair of chemical biology for drug research, the initial mission will be to chemically synthesize and purify organic precursors – typically aromatic amino acids – that serve in multi-step syntheses in different research projects, including increasing reaction scales, optimizing protocols, and eventually developing entirely new protocols. The engineer or assistant engineer will have a key and central role in the synthetic chemistry activities of the laboratory.

Your tasks: The engineer's activities will encompass (1) setting up chemical reactions to prepare aromatic and heterocyclic amino acids according to established protocols; (2) carrying out these experiments in order to increase reactions scales up to tens or hundreds of grams and to increase reaction yields; (3) implementing adequate purification methods to deliver pure products, including crystallization, liquid chromatography on silicagel and eventually preparative HPLC; (4) controlling and characterizing the synthesized molecules using routine spectroscopic techniques; (5) writing down experimental protocols in English; and (6) properly maintaining a laboratory notebook. The engineer will also: (7) oversee that hygiene and safety rules are well respected in the laboratory and show best practices in synthetic chemistry; (8) assist the group in the order of chemicals from commercial suppliers; and (9) supervise the organization of the laboratory chemical stockroom using a dedicated software. Other activities include (10) maintain the solvent purification system (filtration on activated alumina) and (11) maintain small equipment dedicated to chemical synthesis, in particular that dedicated to large scales. The engineer shall (12) keep up to date their knowledge of synthetic methods.

Your profile:

- You have completed or will soon obtain an MSc or BSc degree in chemistry
- *You have a strong inclination for laboratory work and chemical synthesis: you love to make molecules!*
- General and theoretical knowledge: General knowledge of chemistry and in particular of organic chemistry. General knowledge of some methods used to identify synthesized organic molecules (nuclear magnetic resonances, mass spectrometry, infra-red spectroscopy).
- Practical know-how: Master the technical principles of preparation of organic molecules (anhydrous conditions, temperature, micro-wave, pressure). Master different purification methods (crystallization, silicagel column liquid chromatography; preparative HPLC), their principle and their specificity. Handle reagents and implement chemical techniques while respecting hygiene and safety rules.
- Language skills. The group provides an international environment and a very good command of oral and written English is indispensable for daily use. The recruited person should be comfortable reading and writing technical documents and experimental protocols in English. Knowledge of German is not required.
- Other skills. Work in interaction with the research group. Use bibliographic research tools. Interact with instrument suppliers and maintenance and after sale services. Anticipate on needs for parts, consumables and reagents. Have a good knowledge of hygiene and safety rules. Have a good knowledge of the risks



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associated with the techniques and reagents used. Have a good understanding of the organization of the laboratory and of its research program to understand the stakes and objectives of analyses and purifications.

Our offer: We offer you an interesting and responsible job in a young international team with a pleasant working atmosphere. Your workplace is located in Munich-Großhadern and is easily accessible by public transport. The position is initially for 12+12 months, with the possibility of make it become permanent. Salary depends on qualification and experience. Part-time employment is possible. Severely disabled persons will be given preference if their suitability is otherwise essentially equal. Applications from women are encouraged.

Please send your application documents (CV, motivation letter, recommendation letters) exclusively by e-mail to Prof. Ivan Huc: ivan.huc@cup.lmu.de.

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