

Full Professor Positions “Biopharmaceutical Technology” and “Bioprocess Engineering”

The Institute of Applied Microbiology, Department of Biotechnology, IAM/DBT, BOKU-University, Vienna is seeking to fill two positions of full professors for “Biopharmaceutical Technology” as well as “Bioprocess Engineering” (in succession of the professors Hermann Katinger and Karl Bayer). Another full professor for “Animal Cell Factory Design” is nearly established.

The Scope

The IAM/DBT defines its identity in research and teaching by a collaborative integration of specialists, each providing contributions from specific scientific backgrounds to common problem-solving and innovation efforts.

The activities of the department are directed at the technological utilization of a broad spectrum of “cell factories” from procaryotes to higher eucaryotes on the one hand, and from genomics through proteomics to bioprocesses and products on the other hand (for details see www.boku.ac.at, www.vibt.at). The IAM/DBT maintains a long tradition of industrial collaborations, realized by bioprocess and technology platforms.

Presently 14 associate professors assisted by 40-50 post-docs and doctoral students form the scientific backbone of the department.

The organizational structure of the IAM/DBT is in principle flat and builds on a methodological division into project groups conducting individual projects but also participating in collaborative projects within the department. Therefore it is not planned to introduce any formal substructures within the department. Both, German and English are used as working languages and the rate of female to male staff is approximately 50/50.

Several biotech-related departments from the University of BOKU have, together with the IAM/DBT, formed a collaborative science platform, namely the Vienna Institute of Biotechnology (VIBT; Vienna Institute of BioTechnology, www.boku.ac.at/vibt.html) to generate a internationally visible unit of scientist at the University of BOKU by merging infrastructure of the individual departments and know how of scientists.

The IAM/DBT within the VIBT located at the site Muthgasse emerged to a worldwide recognised leading centre in biotechnology research and education in the recent decades. By combination of fundamental science and engineering capabilities an outstanding problem solving research and educational potential could be established along the key areas of the bio-industrial value chain.

In order to stay on the frontiers of bioprocess engineering the professorships require individuals with a well balanced interdisciplinary qualification and integrative skills capable to inspire the innovation of a broad spectrum of technology platforms. In this context the translation of information derived from the fast growing scientific knowledge of biological systems into innovations, process operations and training of students in this field are important issues.

Full Professorship “Biopharmaceutical Technology”

The scientific and innovative potential of “biopharmaceutical technology” is the product of a convergence of individual scientific disciplines.

The professorship “Biopharmaceutical Technology” needs to summarize technological know how concerning already launched biopharmaceutical products including corresponding manufacturing processes and drug delivery systems. Besides, we expect background knowledge in pharmacology regarding effectiveness of drugs. This is important for the development of new therapeutic concepts for future biopharmaceutical applications linked to corresponding innovative in vitro test systems.

Therefore we seek for personalities with a pronounced immunological and virological expertise and a firm biotechnological background for the establishment of new strategies with outstanding and innovative potential, integrated in the already existing scientific groups at the DBT and the disposition to be involved in high risk scientific projects and programs.

We take an integrative- and even more important an integrating personality for this position for granted as well as outstanding scientific qualification.

For this reason we intentionally do not wish to narrow the scientific profile of the candidate. In principle, applications are welcome, which will advance and focus the established strengths of the IAM/DBT. Detailed information may be obtained from our homepage www.boku.ac.at/iam.

We welcome applicants who will offer an innovative momentum from a background in immunology, virology, vaccinology or otherwise nano- and biophysics in biopharmaceutical technology.

The present location is undergoing expansion with a new building offering considerable laboratory space and new structural opportunities for new project groups.

Full Professorship for “Bioprocess Engineering”

In addition to the basic engineering competences, such as process operation and automation techniques, a comprehensive understanding of basic science is desirable. Therefore, the candidate should be experienced with the application of state of the art bioanalytical methods for the functional and structural analysis of cell factories including prokaryotic, eukaryotic and animal cell systems. In this context, expertise in data processing and integration of the acquired data sets for the development of *in silico* mathematical models for the simulation of pathways and bioprocesses is highly appreciated.

Moreover, due to the highly inter- and trans-disciplinary nature of bioprocess engineering, collaboration within the key areas of the DBT such as cell technology-platforms, design of equipment, thermodynamics, process operation and bioinformatics is highly desirable. In order to cope with the strong technology orientation of BOKU the candidate should be committed to industrial collaboration and contribute to the established competence centre ACBT (www.acbt.at) and to the planned centre (ACIB) in future as well.