



MAX PLANCK INSTITUTE  
FOR DYNAMICS OF COMPLEX  
TECHNICAL SYSTEMS  
MAGDEBURG



BIOPROCESS ENGINEERING

## PhD position (m/f/d) | Upstream processing for cell culture-based virus production

MAX PLANCK INSTITUTE FOR DYNAMICS OF COMPLEX TECHNICAL SYSTEMS, MAGDEBURG  
TYPE OF JOB  
PHD STUDENT

Animal Cell Culture Virus Production Process Intensification and Integration

Job offer from January 09, 2023

### Background

Manufacturing of next-generation vaccines and therapeutic viruses will need sustainable and highly efficient production processes with process integration on all levels. The team “Upstream Processing” in the department of “Bioprocess Engineering” at the MPI Magdeburg has developed a platform covering a large selection of cell lines, viruses and viral vectors, bioreactors, analytics and process strategies. By comparison of process options and combination of powerful unit operations, a deeper process understanding is gained allowing to achieve high yields needed for virotherapy. The increasing use of artificial intelligence/digital twins in bioprocessing and vaccinology offers many options to exploit potentials and discover bottlenecks. To further advance this platform technology, we are seeking an outstanding candidate that will support our Upstream Processing Team.

### Requirements

- Expertise in the field of cell culture engineering
- Master degree in biosystems engineering, bioprocess engineering, biotechnology, virology or a related field
- Independent working style and efficient self-management
- Motivation and scientific curiosity with an engineering spirit
- Strong team player
- Ready for collaboration with many partners, enthusiasm for exchange of ideas in workshops and conferences and very strong writing and presenting skills

### We offer

- Active participation in ongoing, cutting-edge research projects
- Three year contract
- Collaboration and direct exchange with industrial partners
- High standard of laboratory equipment and analytics
- Joining an international, high-performing and friendly team of young scientists
- Individual development and training opportunities
- Excellent support from our laboratory technicians and senior staff



- Involvement in tutoring laboratory courses at the Otto-von-Guericke-University Magdeburg

Your salary will be in accordance with the collective bargaining agreement for the public service (E13 TVöD-Bund) including corresponding social benefits.

## Application

Please send your application in German or English including a cover letter, your CV, relevant certificates and reference letters until February 20, 2023, to [genzel@mpi-magdeburg.mpg.de](mailto:genzel@mpi-magdeburg.mpg.de).

The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds. Furthermore, the Max-Planck society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.

Please note the [information regarding the storage of personal data](#).

## Start

March 2023 or earlier.

## Contact

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