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Continuing Education University Programme

Protein Chromatography



→ boku.ac.at/en/btlw/ibse

BOKU University

Department of Biotechnology and Food Science

Institute of Bioprocess Science and Engineering

→ boku.ac.at/agri/ibse

Interested? Questions?

Contact us:

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Chromatography has become an indispensable tool in biotechnological research. The method is frequently used for analytical and preparative processing. Equipment, separation media and auxiliary materials are now highly developed.

Contents & Benefits

 insight in the application of chromatographic theory with special emphasis on the determination and use of key scale-up parameters

Lectures will cover:

- downstream processing of biotechnological products
- different modes of operation of chromatography
- · characteristics of chromatographic media
- description of adsorption equilibria and mass transfer and their effects on chromatographic performance
- frontal analysis and linear gradient elution theories
- protein-protein and protein-surface interactions

Hands-on lab practice:

- pulse response experiments
- determination of retention factor and HETP
- frontal analysis and dynamic binding capacity experiments
- linear gradient elution experiments
- develop a column design that maximizes productivity
 Detailed course notes and spreadsheet-based tools for data analysis are available.

Expert Trainers

Prof. Alois Jungbauer (BOKU University) and Prof. Giorgio Carta (University of Virginia) are both experts in the field of chromatography. Together they published the book "Protein Chromatography: Process Development and Scale Up".

- Participation Certificate
- Duration: 1 week
- Language: English
- · Recognition: 5 ECTS credit points
- Participants: 20 max.
- Course Venue: BOKU University, Department of Biotechnology, Laboratory of Protein Technology and Downstream Processing

who should attend

This course is designed for

- bioprocess development engineers
- separation scientists, biologists, biochemists, technical managers
- validation specialists, regulatory agents having some familiarity with downstream process development who want to develop a deeper understanding of chromatographic processes and their scale-up
- graduate students
- separation scientists in academia
- ► The number of participants is limited, all info, dates and registration here:
 - → short.boku.ac.at/ulg-pch



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