

Leveraging technology for an inclusive student experience.

Dr Adrienne Fleming

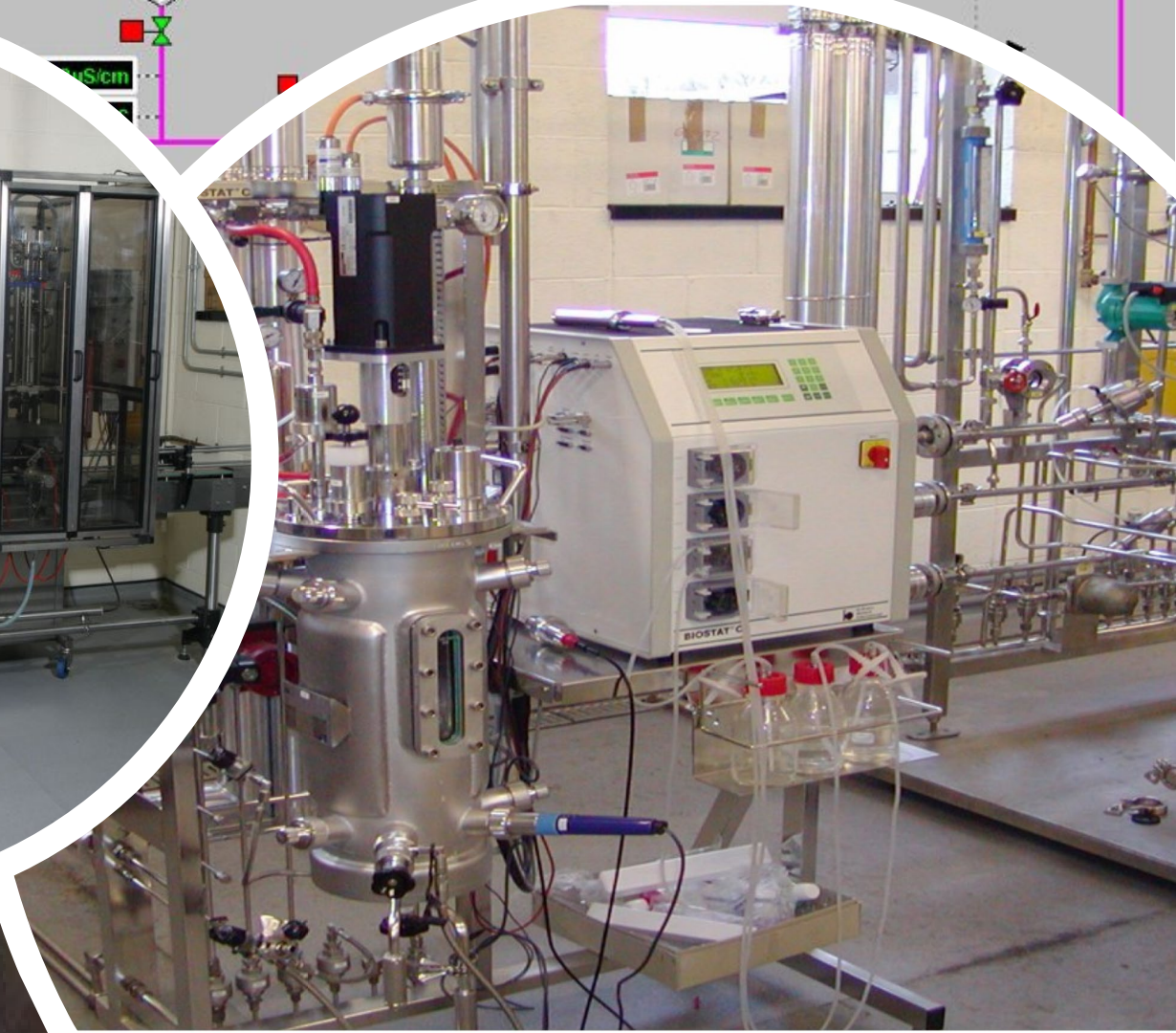
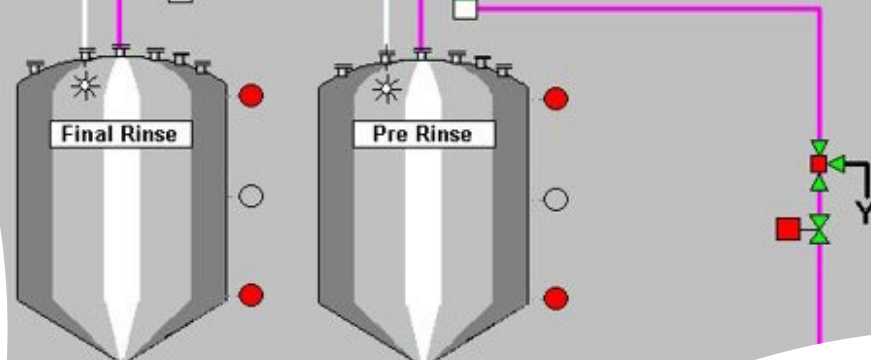
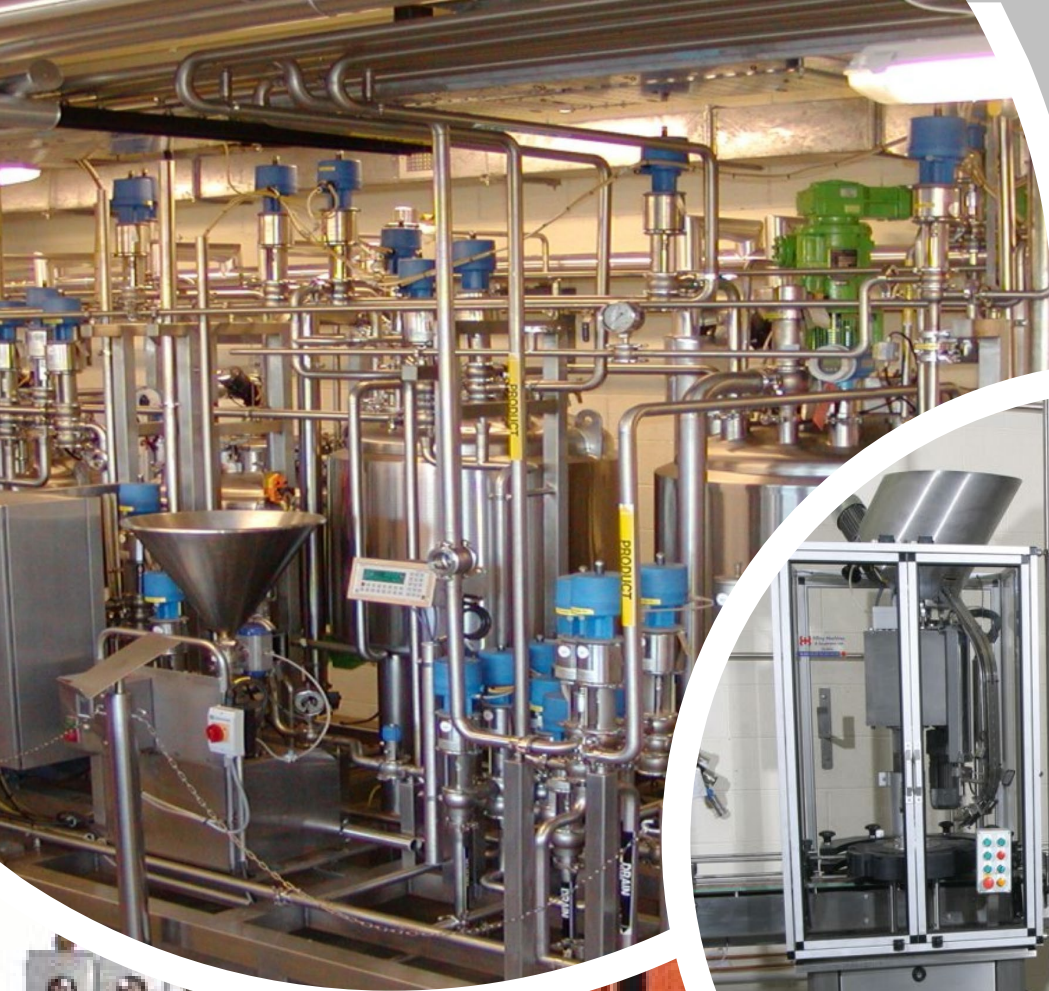
School of Chemical and Biopharmaceutical Sciences



2024 Showcase Teaching, Learning & Assessment

Leveraging Technology for an Inclusive Student Experience

Dr Adrienne Fleming, School of Chemical & BioPharmaceutical Sciences



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To Plant





What did we do?

- **Workshop in Pilot Plant**
- **Student - Mobility issues**
- **Space Considerations**
 - Learning Environment
 - Physical Space
 - Tasks
- Challenge: Limited access to certain pieces of equipment
- Solution: Use of AT in the Laboratory setting

What did we learn?



Preparation is key



Being adaptive and innovative



Ensuring good student experience for all



Small class group

How might others use this?



Consider UDL principles in design of the laboratory practicals



Explore use of AT to support teaching and learning



Use of add-on technologies to circumvent the difficulties potentially posed by equipment or facilities.

Principles of Universal Design

- Equitable Use
- Flexibility in Use
- Simple, Intuitive Use
- Perceptible Information
- Tolerance for Error
- Low Physical Effort
- Size and Space for Approach and Use



References

Universal Design for Learning / Learning Spaces – CPD modules

Moon, N. W., Todd, R. L., Morton, D. L., & Ivey, E. (2012). Accommodating students with disabilities in science, technology, engineering, and mathematics (STEM). Atlanta, GA: Center for Assistive Technology and Environmental Access, Georgia Institute of Technology, 8-21

Jeannis, H., Goldberg, M., Seelman, K., Schmeler, M., & Cooper, R. A. (2019). Barriers and facilitators to students with physical disabilities' participation in academic laboratory spaces. *Disability and Rehabilitation: Assistive Technology*

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