



Keynote Session	Leading Pilot Facilities for the Bioeconomy (Pilots4U)
Title	FlexBIO: A Flexible Platform for Pilot-Scale Bioprocessing & Future Workforce Training
Company	Industrial Biotechnology Innovation Centre (IBioIC)
Speaker	Dr Sheena Fraser
Keywords feedstock (max 2)	various
Keywords technology (max 2)	various
Keywords End-Product (max 2)	various
Abstract:	
The Industrial Biotechnology Innovation Centre (IBioIC) is a leading organisation in Scotland that drives collaboration across industry, academia, and government to accelerate the development and commercialisation of industrial biotechnology (IB). Central to this mission is the IBioIC-managed FlexBIO Scale-Up Facility, hosted at Heriot-Watt University in Edinburgh. FlexBIO plays a pivotal role in helping academic groups, startups, and SMEs de-risk their technologies, scale sustainably, and bring circular bio-based innovations to market. FlexBIO offers deep expertise in upstream and downstream bioprocessing, supported by pilot-scale equipment that enables innovators to advance their technology readiness levels. In 2025, the facility expanded its microbial fermentation capacity tenfold with the commissioning of a 300L Infors Techfors fermenter. It also launched a mammalian cell culture platform ranging from 0.5L to 15L, supported by Geringe and Chemometec, with matching downstream capabilities from harvest to purification. FlexBIO supports a wide range of applications—from renewable feedstock fermentations and biotransformations to alternative protein and cultivated meat production. It also serves as a training ground for early-career scientists, fostering the next generation of bioprocessing talent and strengthening the bioeconomy within Scotland and beyond.	