



# Poster Presentation

**Millie Ullah, PhD** • Thermo Fisher Scientific

## ***S.U.B. TK System***

**ABSTRACT:** This poster presents key characterization data for a new platform of Single-Use Bioreactors (S.U.B.s) from Thermo Fisher Scientific. This new turnkey system comprises a re-designed vessel and skid, a cable and tubing organizer “tree,” and a companion “tower” unit housing a control system, human machine interface screen, and a temperature control unit (for jacketed systems). The S.U.B. TK (turnkey) comes ready to setup and run out of the box. This poster presents key test data demonstrating system mixing efficacy, temperature regulation, mass transfer performance, power input, sensor and control functionality, and actual cell culture performance.

**BIOGRAPHY:** Millie Ullah, PhD currently serves as Senior Product Manager for Single Use Bioreactors, at Thermo Fisher Scientific Cell Culture and Bioprocessing in Logan, Utah. She holds a PhD in Applied Microbiology from the University of Westminster in London and has worked for various small companies in biotech research and development throughout England, prior to her move to the states. Millie also worked in Sales and Product Management functions at Sartorius Stedim Biotech, both in England and in North America for 8 years. In total she has over 15 years’ experience in the medical devices and biotechnology industries, and has written several publications in industry journals both on research and development projects and on the subject of single-use bioreactors.