Protein purification and biophysical characterisation of the resulting protein are two major disciplines in modern biochemistry, both widely used in basic academic research and in industry. The equipment used to purify proteins continues to evolve in both functionality and utility. This training course, hosted at the University of Bedfordshire’s STEM Building, aims to expose participants to the latest hardware involved in protein purification and biophysical measurements of the hydrodynamic radius and sedimentation properties of a protein in the presence and absence of a ligand.

 Attendees will gain hands-on experience of AKTA START protein purification systems and Fluidity One-M, a bench top instrument that provides quick, reliable assessment of protein hydrodynamic radius to provide binding affinities using low sample volumes. A live link with UCL’s Department of Structural and Molecular Biology will demonstrate to learners how the multiwavelength Optima Analytical Ultracentrifuge (AUC) analyses samples in their native state under biologically relevant solution conditions. Lectures will provide background theory on the techniques used to ensure a comprehensive introduction to protein purification, microfluidics and AUC.

Register online: bit.ly/Protein-Purification-2023
Earlybird deadline: 13 May 2023