

Design with Purpose at IMCA-CAT: Focusing on Industry Needs

Lisa J. Keefe

IMCA-CAT, Advanced Photon Source and Hauptman-Woodward Medical Research Institute, USA

Abstract

Purpose-driven design for accelerating pharmaceutical drug discovery has guided the strategic development of the IMCA-CAT synchrotron-based structural biology research facility. Located at the Advanced Photon Source at Argonne National Laboratory, IMCA-CAT is a significant resource precisely designed to respond to the evolving needs of industry. State-of-the-art equipment and ready access enable the delivery of high-quality structural data when it is needed. The broad experiment envelope of capabilities for both protein crystallography and complementary techniques ensures the successful measurement of structure data from a wide variety of samples. Since capacity is never limiting, security is unfailing, and data flow is year-round, IMCA-CAT is tailored for fragment-based and structure-guided drug design research. Purposeful design with a focus on five core principles is what strategically positions IMCA-CAT to sustainably meet the evolving needs of progressing industry target portfolios. Opportunities abound for researchers in all pharmaceutical and biotechnology organizations to access IMCA-CAT for structural data, and thus significantly advance their drug discovery and product development programs.