Impact of Single Use Systems on the Design of a Facility used for Bioprocessing

October 11, 2010, Monday, 10:30am – 12:30pm

The Marriott at RTP

Marc Pelletier, Vice-Chair, BPE Subcommittee on Design

SESSION DESCRIPTION:
Single Use Systems have become mainstream in bioprocessing. The advantages of disposables include lower initial capital expenditure, lower consumption of purified water used otherwise for cleaning and sanitization operations, more efficient system batch-to-batch and product-to-product changeover, simplified facility infrastructure and reduced complexity of intersystem communication and automation control. Perhaps the most important benefit to using virgin single use systems is the ability to isolate the process from the environment by maintaining closed process and transfer systems. Closing a bioprocess in a verifiable manner can have a major effect on the design of the external environment housing the bioprocessing equipment. It is now possible to design higher value facilities that are simpler, more flexible and highly adaptable to changes in process, products or purpose.

TARGET AUDIENCE:
This workshop is an essential resource for engineers, scientists and other personnel involved in the design of bioprocessing equipment including suppliers, end-users, contracts and component suppliers.

INSTRUCTOR BIO:
Marc Pelletier is Director of the Strategic Biopharm Solutions Group at CRB Consulting Engineers which specializes in strategic planning, conceptual design, process engineering, risk assessment, compliance and validation for the Life Technologies. Although Marc is formerly trained in biochemistry, he has worked as a process engineer for most of his 25+ year career, all in the food and pharmaceutical and biotechnology sectors. Prior to consulting, Marc spent the majority of his career as an end user developing bioprocesses. His role on various projects include that of project manager, fermentation and downstream process design lead, equipment designer, facility designer, risk assessment moderator and validation manager. He is currently the vice-chair of the ASME BPE Design Committee. He has served as adjunct professor at the University of Manitoba, Canada and Bemidji State University, MN. He is a frequent lecturer for ASME and ISPE.