OCTOBER 10 – 11, 2019

Pharmaceutical and Biotech workshop at NC State University sponsored by ABB and Optimal

ABB and Optimal Industrial Automation invite you to a Pharmaceutical and Biotech workshop hosted by North Carolina University at their Biomanufacturing Training and Education Center (BTEC) in Raleigh, NC.

GENERAL INFORMATION

| ABB contact          | Dean Hammond – (609) 980-7523  
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|----------------------|------------------------------|
| Location             | North Carolina State University Biomanufacturing Training and Education Center (BTEC)  
850 Oval Drive, Raleigh, NC 27606 |

OCTOBER 10, 2019

08:00 Registration and continental breakfast

09:00 – 10:30 Operator Effectiveness - Alarm Management, High Performance Graphics, and Control Room Design

Control room operators make hundreds of decisions every working day – decisions that have a great impact on productivity, quality, and safety. What’s more, the more alert, stimulated and harmonious they are, the better the decisions they make. For plant control and control room managers, the key question is thus how to create and maintain operator well-being at levels that ensure their very best performance. In this session we will address issues that impact operator performance including alarm management, graphic design and control room design.

10:30 – 11:00 BREAK

11:00 – 12:30 Quality by design (Qbd) by applying advanced PAT (with Optimal SynTQ)

The emergence of pharmaceutical QbD promises reduced manufacturing costs, improved product quality and reduced time to market. QbD requires thorough and real-time knowledge about your production process. Learn how ABB Ability™ System 800xA interacts with Optimal synTQ, the leading PAT knowledge management software. The combined ABB/Optimal solution provides tools to implement process analytical technology (PAT) management concepts and enables “right first time” (RFT) production.

12:30 – 1:30 LUNCH

1:30 – 3:00 Modular Automation

Modular automation is the cornerstone of future process plants and crucial in the pharmaceutical industry, enabling reduced time to market, increased automation efficiency and higher flexibility. Modular automation is the future for the flexible process plant production and a key element for the industrial internet of things (IIOT) and Industry 4.0. This technology helps process industries that face requirements such as more customized
products, shorter delivery times and smaller batch series. Attendees will leave this session with a better understanding of:

1. What is Modular Automation and the layers of a modular automation system
2. The Namur proposed standard for Modular Automation systems
3. Modular Automation terminology

The life sciences industry is facing a harsh global competition and changing market requirements such as more customized products, shorter delivery times and smaller batch series down to batch size 1. This goes in hand with an accelerating pace of innovation. ABB has developed a solution for cost-effective modularization with plug and produce capabilities and a pilot is currently ongoing with one of the major life science companies, Bayer AG. Several so-called Module Type Package (MTP) control sub systems and a modular configuration tool have been delivered and are currently running with a modular enabled system for the orchestration.

3:00 – 3:30  BREAK

3:30 – 5:00  Digitalization of Industry

The Life Sciences industry is experiencing hyper growth and corporate leaders are looking to digital technology as a means of delivering competitive advantage. Population growth, an aging population, and individualized medicine are just some of the trends impacting the industry transformation needs. In the session ABB will demonstrate how the concepts of automation and digitalization can be applied to life sciences operations to make them more efficient and productive by significantly reducing costs, schedule and risks. ABB will offer practical examples of the implementation of digitalization in the life sciences industry.

OCTOBER 11, 2019

08:00  Registration and continental breakfast

08:30 – 10:00  Distributed Control System (DCS) Basics

Today's automatic process control systems can increase productivity dramatically. However, if these controllers are set up incorrectly, they can actually hurt productivity. During this session you will be given a practical, non-theoretical explanation of process control along with an overview of the evolution of the traditional distributed control system into today’s more capable and all-encompassing process automation architecture.

10:00 – 10:30  BREAK

10:30 – 12:00  QbD & PAT for Dummies

Quality by Design (QbD) and Process Analytical Technology (PAT) are innovative approaches to improving manufacturing efficiency and quality. QbD stresses designing quality in manufacturing, rather than testing for quality after the event. In contrast, PAT enables real-time, quality-based adjustments to your process. By attending this session, you will get a better feel for the principles behind the initiative.

12:00 – 1:00  Lunch and adjourn