



American Society for Quality (www.asq.org) – Washington D.C. and Maryland Metro, Section 509 (www.asq509.org)

Biomed/Biotech Special Interest Group (SIG) Meeting

Automation & Control Systems in Pharmaceutical Manufacturing Facilities

To Be Presented by

Tim Yang, MS, PhD
Automation Engineer
MedImmune

Thursday, April 28, 2011

6:00 – 6:20 PM – Networking; Pizza/drink

6:20 – 8:50 PM – Program (a 10-min break at 7:40 pm)

8:50 – 9:00 PM – Door-prizes drawing; Networking

Online Registration site: <http://www.asq509.org/ht/d/DoSurvey/i/35817>

Open to Public:

- Free to [ASQ Members](#) (*Become a ASQ Member & Save*);
- Free to [Local Students, interns, and FDA Commissioner's Fellows](#);
- \$5 for [non-ASQ members](#) to cover pizza/drink cost

Location: Kelly's Deli Conference Center, 7519 Standish Place, Rockville, MD 20855

Registration Deadline: Please register by Thursday noon, April 28, 2011.

Question: Please contact Dr. C.J. George Chang, Chair of Biomed/Biotech SIG, ASQ509; gchang2008@yahoo.com or 240-793-8425 (cell).

Driving directions:

By car: From I-270 (N or S bound): Take Exit 9A and exit from the FIRST right exit; turn left (east) onto Shady Grove Dr.; turn right (south) onto **Rockville Pike (Route 355)**; turn left (east) onto **East Gude Dr.**; turn left (north) immediately onto **Crabb's Branch Dr.**; turn left (west) immediately onto **Standish Place**. The first building on your right side is 7519 Standish Place; open parking). The conference room is on the first floor with its entrance opposite to the left side of building main entrance.

By Metro: Off from Red Line **Shady Grove Station**, and take **Route 59 TOWARD ROCKVILLE** and get off from "Calhoun Place" stop. Standish Place is next to the Bus stop. Our venue is within 2 min of walking distance from the stop.

Presentation Summary:

“Automation & Control Systems in Pharmaceutical Manufacturing Facilities”

This presentation will introduce common automation and control systems that are used in pharmaceutical manufacturing facilities.

Basic concepts of automation systems highlighting the importance of the quality of the automation systems and the **GAMP 5 lifecycle approach** for achieving quality management of the automation systems will be explained. **Common automation system components and their functions** will also be provided to lay a ground for understanding of automation systems and technologies. Descriptions of **Building Management System and Process Control System**, the most common automation systems in pharmaceutical manufacturing facilities, will also be given.

The last part of the presentation will be devoted to the audiences who are interested in deeper automation system knowledge. **ISA 95 standard** and how to apply it to automation system architecture design and what is **ISA 88 standard** and how to implement it in batch control operations will be explained.

Presenter's Bio:

Tim Yang, MS, PhD (skymountains2000@yahoo.com)

Dr. Tim Yang currently serves as the **Automation Engineer** with MedImmune. He has seven years experience in the pharmaceutical industry and nine years in the chemical industry since 1995. Dr. Yang is specialized in both Automation/Control System Architecture Design and GxP Automation System Commissioning and Validation.

Before joining MedImmune in 2007, Dr. Yang served as a **Project Engineer** in Huish Detergents, Inc. (UT), **Senior Electrical Engineer** in Goss Graphic System, Inc. (PA), **Senior Electrical & Control Engineer** in Orion Project (TX), and **Senior Process Control Engineer** in the Eli Lilly and Company (VA). He received his BS and MS degree in Electrical Engineering from Lanzhou University, China and his PhD degree also in electrical engineering from West Virginia University in US.