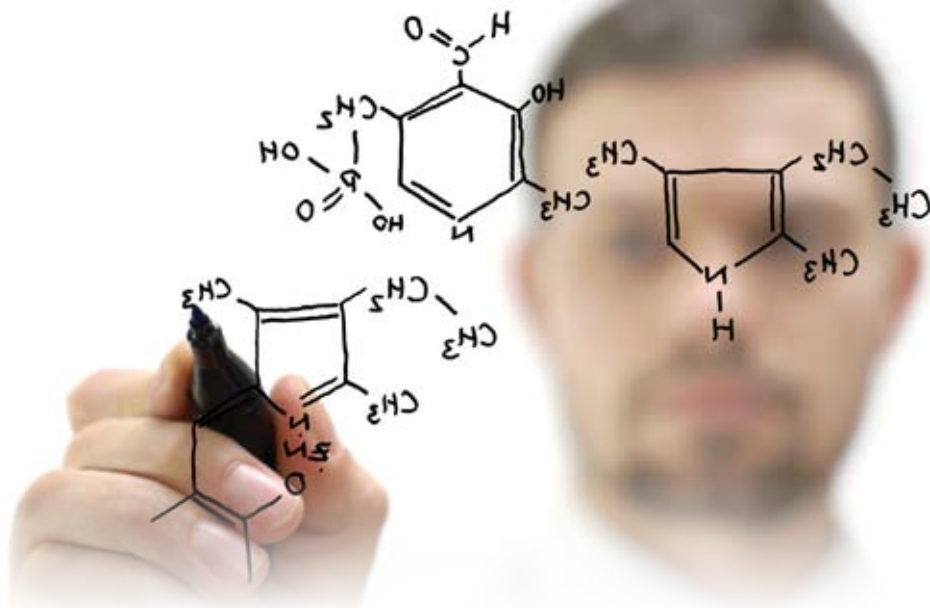




SAVE THE DATE:
OCTOBER 27-29, 2010



Mixing Consultants, Inc. Presents:

ADVANCES IN PHARMACEUTICAL PROCESS DESIGN

by Academic Experts from Rutgers University, NJ and Recognized Industry Leaders
Sponsored by Freeman Technology, Gericke, Glatt Air Techniques and K-Tron Process Group

OCTOBER 27-29, 2010: ROCKVILLE, MARYLAND

POWDER PROCESSING FUNDAMENTALS

Overview of solid dose and inhalable products. Design of sampling methods. Thief sampling. Thief errors. NIR spectroscopy and other PAT methods for blending. Batch blending fundamentals. Critical variables in batch blending. Types of equipment. Failure modes. Segregation, segregation testing. Design of the lubrication step. Blend overlubrication. API agglomeration, causes and diagnosis. Failure modes.

QBD METHODOLOGIES

Statistical methods for characterization of products and processes. Critical material properties: cohesion, density, hydrophobicity, electrostatics. Critical process parameters: shear, strain, compression force and speed. Effects on product quality attributes: dissolution, content uniformity, weight uniformity. Characterization of powder flow properties and their effects on process and product performance.

CONTINUOUS MANUFACTURING

Design fundamentals. Feeders. Continuous mixers. Roller compaction. Tableting. Capsule filling. Equipment, critical variables.

ABOUT MIXING CONSULTANTS, INC.

Mixing Consultants, Inc. provides technical services, supporting research and development and technology transfer in all areas regarding characterization, design, optimization and control of mixing processes for powders, liquids and suspensions. Our focus are pharmaceutical, food, chemical and energy industries. Our mission is to support and educate industry in the application of technical knowledge and modern methods to achieve excellence in product and process design, manufacturing, scale-up, technology transfer and control.

*Additional information and inquiries by e-mail to info@mixingconsultants.com
or phone +1 (954) 727-3120.*

Visit us at www.mixingconsultants.com

SHERATON ROCKVILLE IN ROCKVILLE, MARYLAND

PROGRAM

Lectures will be presented by Professor Muzzio unless otherwise indicated.

Day 1: Powder Processing Fundamentals

- 7:30 - 8:30 Registration and Breakfast
8:30 - 9:30 Overview of Powder-Based Products: Tablets, Capsules, and Aerosol Products
9:30 - 10:30 Powder Sampling, NIR Spectroscopy, and Other PAT Methods
10:30 - 12:00 Fundamentals of Batch Powder Mixing
12:00 - 1:00 Lunch (one-on-one consultation available)
1:00 - 2:30 Powder Segregation and Agglomeration
2:30 - 4:00 Powder Lubrication and Overlubrication
4:00 - 5:00 New Technical Solutions for Automated NIR Applications for Powder Blending
Mr. Ralf Kretzschmar, Glatt

Day 2: QbD Methodologies

- 7:30 - 8:30 Registration and Breakfast
8:30 - 10:30 Statistical Characterization of Materials, Products, and Processes
10:00 - 12:00 Critical Material Properties: Cohesion, Density, Hydrophobicity, Electrostatics
12:00 - 1:00 Lunch (one-on-one consultation available upon request)
1:00 - 2:00 Fundamental Process Parameters: Shear, Strain, Compression Force and Speed
2:00 - 3:30 Effect of Material Properties on Product Performance: A QbD Approach to Tablet Dissolution, Hardness, CU
3:30 - 5:00 Measuring and Understanding Powder Flow
Mr. Tim Freeman, Freeman Technology

Day 3: Continuous Manufacturing

- 7:30 - 8:30 Registration and Breakfast
8:30 - 9:30 Theoretical Aspects and Main Design Principles of Continuous Mixing Processes
Dr. Ralf Weinekötter, Gericke
9:30 - 10:30 Operational Principles of Loss in Weight Feeders and their Refill in Continuous Operations
Ms. Sharon Nowak, K-Tron
10:30 - 12:00 Loss in Weight Feeders and Continuous Mixers – Case Studies
12:00 - 1:00 Lunch (one-on-one consultation available upon request)
1:00 - 2:00 Roller Compaction
2:00 - 3:30 Tableting and Encapsulation
3:30 - 5:00 General Design Principles of a Continuous Manufacturing Operation

MEET THE EXPERTS

Dr. Fernando Muzzio, PhD. Professor, Rutgers University. Director, Engineering Research Center on Structured Organic Particulate Systems. He is one of the world's leading experts on Pharmaceutical Powder Processing.

Mr. Tim Freeman. Director of Operations, Freeman Technology. He is a recognized expert in powder flow ability in relation to processing and formulation development.

Mr. Ralf Kretzschmar. President, Glatt Systemtechnik GmbH. He is a recognized expert in Pharmaceutical Manufacturing, with special focus in powder handling.

Ms. Sharon Nowak. Global Business Development Manager, K-Tron Process Group. She is a recognized leading expert in the fields of macro/micro feeding and conveying of pharmaceuticals, and in pharmaceutical process engineering/equipment design.

Dr. Ralf Weinekötter. General Manager, Gericke AG. He is one of the world's leading experts in the design and implementation of continuous powder handling, feeding, and mixing systems.

ENJOY THE LOCATION!

Experience the excitement of the Country's capital: visit the Smithsonian Museums, savor delectable cuisine, discover exhilarating nightlife. From Rockville, Washington DC is only a 20 minute ride.



MIXING CONSULTANTS, INC.

Registration Fees (per attendee): 1-2 days: \$600 per day; 3 days: \$1,500 ♦ Early registration: 1-2 days: \$550 per day; 3 days: \$1,400
Early registration expires on September 24, 2010 ♦ On-site registration: \$700 per attendee per day ♦ FDA and other Government agencies: Please call to confirm approved rates ♦ Multiple registrations: Special fees are available for companies registering 5 or more full time participants.

Registration:

Complete the following information and fax it to Mixing Consultants, Inc. at +1 (954) 880-0228 or e-mail a signed scanned copy to info@mixingconsultants.com.

Please register me for the **October 27-29, 2010** ~ Sheraton Rockville 920 King Farm Blvd, Rockville, MD 20850 (Tel: +1.240.912.8210)

Last Name _____ Name on badge _____

Title _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone: _____ Ext. _____ Fax: _____

E-mail: _____

Day 1: Powder Processing Fundamentals Day 2: QbD Methodologies Day 3: Continuous Manufacturing

I agree to pay _____ regardless if I attend.

Total days registered: _____ Total cost: _____ Signature: _____

How did you hear about this seminar: Freeman Technology Gericke Glatt Air Techniques K-Tron Process Group

Mixing Consultants, Inc. Colleagues, word of mouth, etc. _____

Payment method: Major credit cards or check to Mixing Consultants, Inc., 5093 SW 153rd Terrace, Davie, FL 33331 USA

Cancellation policy: Cancellations will be assessed a non-reimbursable fee of \$200 per attendee per day. Cancellations made after September 24, 2010 will not be reimbursable and will require full payment. Attendee replacements within the same company are welcome with prior express agreement by Mixing Consultants, Inc.

Mixing Consultants, Inc. reserves the right to change the location, dates, and speakers of the event.

Discounted hotel rates are available but limited. Contact us for reservations.

Additional information and inquiries by e-mail to info@mixingconsultants.com or call +1 (954) 727-3120.