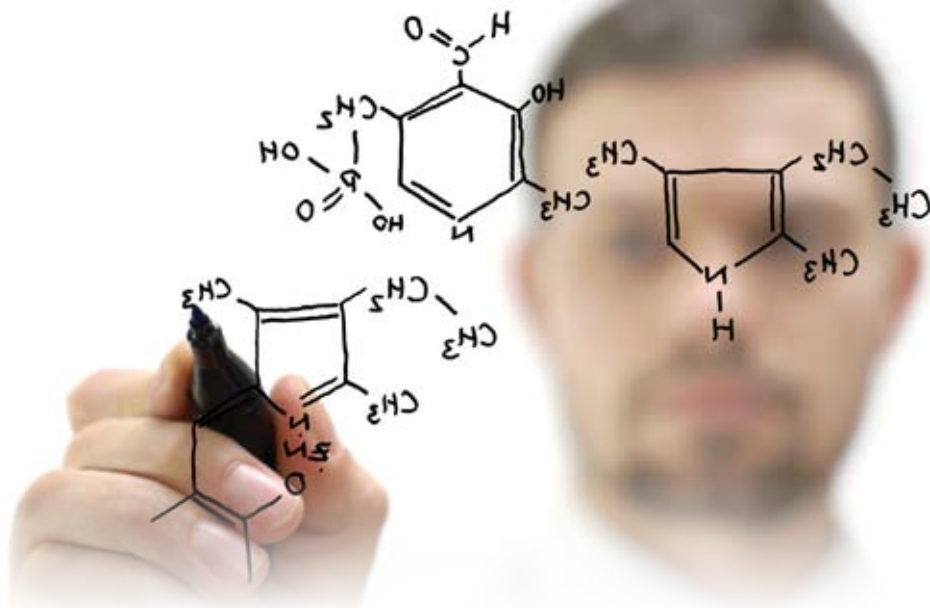




SAVE THE DATE:
MAY 26-28, 2010



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 and Glatt Air Techniques

MAY 26-28, 2010: SAN JUAN, PUERTO RICO

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

INTERCONTINENTAL SAN JUAN HOTEL IN BEAUTIFUL ISLA VERDE, PUERTO RICO

PROGRAM

Day 1: Powder Fundamentals

- 7:30 - 8:30 Registration and Breakfast
8:30 - 9:30 Overview of Powder-Based Products: Tablets, Capsules, and Aerosol Products *Professor Muzzio*
9:30 - 10:30 Powder Sampling, NIR Spectroscopy, and Other PAT Methods *Professor Muzzio*
10:30 - 12:00 Fundamentals of Batch Powder Mixing *Professor Muzzio*
12:00 - 1:00 Lunch (one-on-one consultation available)
1:00 - 2:30 Powder Segregation and Agglomeration *Professor Muzzio*
2:30 - 4:00 Powder Lubrication and Overlubrication *Professor Muzzio*
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 *Professor Muzzio*
10:00 - 12:00 Critical Material Properties: Cohesion, Density, Hydrophobicity, Electrostatics *Professor Muzzio*
12:00 - 1:00 Lunch (one-on-one consultation available)
1:00 - 2:00 Fundamental Process Parameters: Shear, Strain, Compression Force and Speed *Professor Muzzio*
2:00 - 3:30 Effect of Material Properties on Product Performance: A QbD Approach to Tablet Dissolution, Hardness, CU *Professor Muzzio*
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 General Design Principles of a Continuous Manufacturing Operation *Professor Muzzio*
9:30 - 11:00 Theoretical Aspects and Main Design Principles of Continuous Mixing Processes *Dr. Ralf Weinekötter, Gericke*
11:00 - 12:00 Loss in Weight Feeders *Professor Muzzio*
12:00 - 1:00 Lunch (one-on-one consultation available)
1:00 - 2:30 Continuous Mixing – Case Studies *Professor Muzzio*
2:30 - 3:30 Roller Compaction *Professor Muzzio*
3:30 - 5:00 Tableting and Encapsulation *Professor Muzzio*

MEET THE EXPERTS

Dr. Fernando Muzzio, PhD. Professor Rutgers University. Director Engineering Research Center on Structured Organic Particulate Systems. Expert on Pharmaceutical Powder Processing.

Mr. Tim Freeman, Director of Operations, Freeman Technology. Expert in powder flow ability in relation to processing and formulation development.

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

Dr. Ralf Weinekötter is the General Manager of 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!

Delightful beach resort and casino within minutes from San Juan International Airport and less than five miles from fantastic Old San Juan.



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 April 23, 2010 ♦ Government and full-time student rate: \$300 per day ♦ On-site registration: \$700 per attendee per day ♦ 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

May 26-28, 2010 ~ Intercontinental San Juan Hotel 5961 Isla Verde Avenue, Carolina, PR 00979 (Tel: +1 787-791-6100)

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 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 April 23, 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.