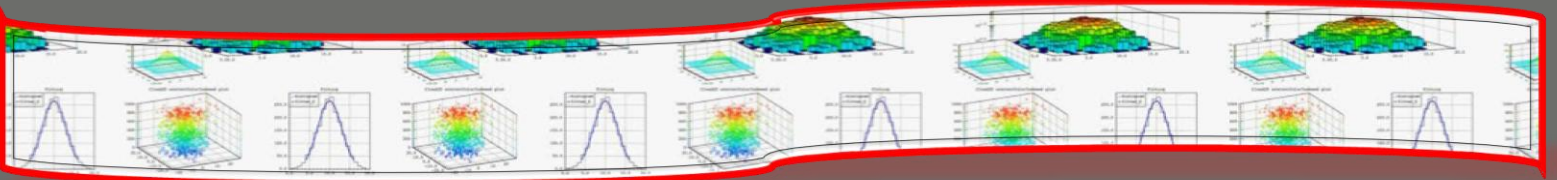


Join Us at the

# Advanced Hands-on PAT Seminar Series: 4.0 Multivariate Analysis for Process Control

*Increasing Competitiveness & Quality*



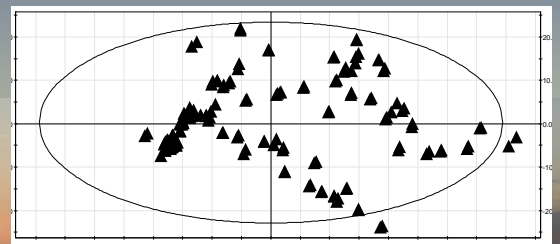
Presented by:



With Distinguished Speaker Dr. David González



Design	Exp	CP	Design	p	Design	p	
CCC-2a	6	2	Defactorial	12	0	CCF-3a	11
CCF-1a	7	1	CCF	8	4	D-Optimal	11
CCF	8	0	D-Optimal	10	2	CC-3a	
CCF-2a	6	2	Mod Def	10	2	BB-1	
D-optimal	7	1	Factorial	6	6	Doehlert	
CCF-1f	7	1	CCC	8	4	Doehlert	
Doehlert	6	2					
CCC-1a	7	1					



September 16, 2011 Marriott Courtyard Isla Verde

## Objective and Course Description

One day seminar geared towards industry professionals interested in acquiring greater proficiency in the use of Multivariate Analysis for process improvement and control. The course starts with an overview of MVA methods from a theoretical stand point. Then, it moves towards the application of these tools for process understanding and control. Besides presenting examples, hands-on practice problems will be worked with participants. Participants need to bring a lap-top computer for the hands-on portion of the seminar. Information on installation in the laptops of the software that will be used for the hands-on portion of the seminar will be provided upon registration.

### Topics Covered:

- Principal Component Analysis (PCA) and Partial Least Squares (PLS) MVA methods theory.
- Use of MVA for determination of critical process parameters affecting processes adversely.
- MVA as a tool for early fault detection.
- How is MVA used to control processes.

## Benefits - Participants will take home:

- A comprehensive understanding on the theory behind PCA and PLS MVA Methods.
- Understanding on how MVA can be used to improve processes.
- The use of MVA to control and maintain processes under desired operating conditions.

## Who should attend

- QA/QC
- Process Engineers
- Scientists
- Technology & Production Personnel

For On-line Registration Go to: [http://www.ibscaribe.com/?page\\_id=1585](http://www.ibscaribe.com/?page_id=1585)

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Registration Fee  
(DOES NOT INCLUDE Lodging)

- \$550 U.S. (Before August 1<sup>st</sup>.)  
 \$650 U.S. (After August 1<sup>st</sup>)
- 15% Discount for PAT Certification Graduates  
 10% Discount for more than one participant per Company  
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**Cancellations:** If you are unable to attend, you may be substituted by another person. Some penalties may apply for cancellations after the registration has been processed. Dates posted in this brochure may change for unforeseen reasons in which case an alternative date or reimbursement of funds will be provided.

**Disclaimer:** If for unforeseen circumstances, whereby meeting facility is not operating for business, due to acts of God, government authority, disaster, strikes, construction, remodeling or other reasons outside our control an alternative venue and dates of comparable quality will be offered.

Send filled form to [manuel@ibscaribe.com](mailto:manuel@ibscaribe.com). You will receive a confirmation email after your registration and payment has been processed.  
If you do not desire to submit credit card information in this form contact IBS Caribe, Inc at 787-245-1841.