Invited Sessions and Speakers

Wednesday, 8 June

Session I-W-1A
Title: Process/Design Excellence for Small and Medium Sized Enterprises
Session Organizer: Jiju Antony, University of Strathclyde

“Quality Improvement Tools and Techniques in UK Manufacturing Companies: An Empirical Study”, Jiju Antony, University of Strathclyde

“Design for Six Sigma: An Application”, Ronald J.M.M. Does, Jeroen de Mast and Gerjan Diepstraten, Institute for Business and Industrial Statistics, University of Amsterdam

"Application of Design of Experiments for Optimising an Injection Moulding Process", Werner Timans, Stenden University

Session I-W-1B
Title: DOE for Computer Experiments
Session Organizer: Bradley Jones, SAS-JMP

“Sliced Latin Hypercube Designs”, Peter Qian, Univeristy of Wisconsin

“Bridge Designs for Modeling Systems with Small Error Variance”, Rachel Silvestrini, Naval Postgraduate School

Using Least-Squared Jackknife Residuals to Fit Gaussian Process Models”, Katie Kennedy and Doug Montgomery, Arizona State University

Session I-W-2A
Title: Multivariate and Autocorrelated Data
Session Organizer: Bjarne Bergquist, Luleå University of Technology

"Multivariate Process Capability Indices - A Graphical Approach", Kerstin Vännman, Umeå University and Luleå University of Technology

"Statistical Process Control with Multivariate Data", Prof. Murat Kulahci, Technical University of Denmark

"Multivariate Design Space - Building a Capable Process", Johan Trygg, Umeå University
Session I-W-2B
Title: Statistical Issues in Aerospace/Aeronautics
Session Organizer: Scott Kowalski, Minitab

― Applying DOE in Large Organizations – Military Test and Evaluation”, Alex Sewell, Jim Simpson, and Greg Hutto, Eglin Airforce Base

― Statistical Challenges and Opportunities in the Aerospace Industry”, Stephen Jones, The Boeing Company

― Aerospace Measurement System Characterization”, Pete Parker, NASA – Langley Research Center

Session I-W-3A
Title: Latin American Session
Session Organizer: Jose Vargas N., National University of Colombia, Bogata

― Ways to Reduce the Effect of the Autocorrelation on Chart Performance”, Antonio F.B. Costa - Universidad de Sao Paulo, Brasil

― Bayesian Analysis of Very Small Unreplicated Experiments”, Victor Aguirre - ITAM, Mexico

― Characterization of Dependence in Competing Risks Models”, Sergio Yanez - Universidad Nacional de Colombia, Colombia

Session I-W-3B
Title: Design of Experiments in the U.S. Department of Defense
Session Organizer: Laura Freeman, Institute for Defense Analysis

Being Organized.
Thursday, 9 June

Session I-T-1A
Title: Multivariate Tools for Quality Improvement
Session Organizer: Alberto Ferrer, Universidad Politécnica de Valencia

“Multivariate Analysis and the Quality by Design Initiative in Pharmaceutical Industry”, Theodora Kourtii, GlaxoSmithKline

“Modeling and Robust Parameter Optimization of Profile Response Experiments”, Hussam Alshraideh and Enrique del Castillo, Pennsylvania State University

“A Comparative Study of Different Methodologies for Fault Diagnosis in Multivariate Quality Control”, Santiago Vidal-Puig and Alberto Ferrer, Universidad Politécnica de Valencia

Session I-T-1B
Title: Statistical Engineering
Session Organizer: Stephanie DeHart, DuPont

Being Organized

Session I-T-2A
Title: Robust Design and Design of Experiments for Time Series Data
Session Organizer: Bjarne Bergquist, Luleå University of Technology

"A Re-Interpretation of the Loss Function Reasoning", Stefano Barone and Bo Bergman, Chalmers University of Technology

"Towards Improved Analysis Methods for Two-Level Factorial Experiments with Time Series Responses", Erik Vanhatalo, Luleå University of Technology

"Non-Regular Designs. Properties and Analysis", John Arne Tyssedal, Norwegian University of Science and Technology

Session I-T-2B
Title: Topics in Statistical Process Control
Session Organizer: Bill Woodall, Virginia Tech

“The Use of Control Charts with Image Data”, Fadel M. Megahed, William H. Woodall, and Jaime A. Camelio, Virginia Tech.

“A Robust Standard Deviation Control Chart”, Marit Schoonhoven and Ronald J.M.M. Does, University of Amsterdam.

**Session I-T-3A**  
**Title:** Advances in Reliability and Design  
**Session Organizer:** Connie Borror, Arizona State University

“A Comparison of Maximum Likelihood and Median Rank Regression for Weibull Estimation”, William Q. Meeker, Iowa State University

“Sequential Design for Improved Reliability Estimation”, Christine Anderson-Cook, Los Alamos National Laboratory

“Experiments for Reliability Achievement”, Steven Rigdon and Brandon R. Fish, Southern Illinois University at Edwardsville; Rong Pan, Connie M. Borror, and Douglas C. Montgomery, Arizona State University

**Session I-T-3B**  
**Title:** Measurement Systems and Uncertainty  
**Session Organizer:** Connie Borror, Arizona State University


“Schemes for Gauge Matching in an Industrial Environment”, Di Michelson, Ben Bunday, and Victor Vartanian, SEMATECH


**Session I-T-4A**  
**Title:** Prognostics and Field Reliability  
**Session Organizer:** Necip Doganaksoy, GE Global Research

“An Analytical Approach to Assessing Maintenance Cost and Scheduling Proactive Repair”, Brock Osborn, GE Global Research

“A General Framework for Predicting the Remaining Useful Life of a Single Unit under Time-Varying Operating Conditions”, Haitao Liao, University of Tennessee

“Degradation Models, Data Analyses and an Application in Service Life Prediction”, Yili Hong, Virginia Tech
Session I-T-4B
Title: Measurement Systems Analysis
Session Organizer: Ronald Does, Institute for Business and Industrial Statistics, University of Amsterdam

“Assessing a Binary Measurement System with Varying Misclassification Rates and a Random Effects Model”, Stefan Steiner, University of Waterloo

“Measurement System Analysis for Binary Inspection: Continuous versus Dichotomous Measurands”, Tashi Erdmann, University of Amsterdam

Friday, 10 June

Session I-F-1A
Title: Quality Issues in the Pharmaceutical Industry
Session Organizer: Connie Borror, Arizona State University

“Assessing Measures of Precision for Method Transfer Studies when Random Effects are Sampled from Finite Populations”, Jorge Quiroz, Merck Research Laboratory

“Reducing Variability in Biological Assays”, Tom Steinmetz and Julia O’Neill, Merck & Co., Inc.

“Change Point Analysis: Looking Back at What Happened”, Rebecca Elliott, Eli Lilly & Company

Session I-F-1B
Title: “Modeling and Analysis of System Reliability”
Session Organizer: Christine Anderson-Cook, Los Alamos National Labs

“Selecting an Optimal Consumption Strategy based on Multiple Reliability Criteria Utilizing a Pareto Frontier”, Lu Lu, Los Alamos National Laboratory

“Bayesian Model Selection for Good Prediction of Future Reliability Using a Generalized Linear Model”, Adam L. Pintar, National Institute of Standards & Technology; Christine M. Anderson-Cook’ Los Alamos National Laboratory; and Huaiqing Wu, Iowa State University

Roger Zoh, Iowa State University

Session I-F-2A
Title: “Choice Experiments”
Session Organizer: Bradley Jones, SAS-JMP

“Bayesian Optimal Design of Discrete Choice Experiments for Large Numbers of Attributes,” Roselinde Kessels, Peter Goos, both of University of Antwerp, and Bradley Jones, SAS-JMP

“Optimal Stated Choice Designs”, Fangfang Sun and Angela Dean, Ohio State University
“1-Optimal Designs for Mixture Experiments with Linear Inequality Constraints”, Laura Lancaster and Chris Gotwalt, SAS Institute

Session Title: Mary Natrella

Chair or Member of the Natrella Selection Committee

Awardee I
Awardee II