SEPTEMBER 2023 NEWSLETTER

Join our Next Webinar!

Maria Lanzerath, Global Statistics Leader at W.L. Gore & Associates, will be giving our next webinar on **Wednesday September 20, 2023 at 10:00am ET**. Click here to register for the webinar.

A Case Study of Mixed-Level OMARS Design

OMARS (orthogonal minimally aliased response surface) designs represent a new class of highly efficient designed experiments with a true potential to combine a screening experiment and a response-surface experiment into just one. This leads to significant savings in time and resources, which can be particularly critical for costly experiments. In the case study that is going to be presented, an OMARS design was used for the development of a chemical product, the validation of a new resin. I will talk through the model and design finding, setup, model analysis for several responses, and the results. The design had eight factors in total, with five of them executed on three levels, and three on two levels, therefore a mixed-level design. In addition, covariates were considered in the analysis.

Keep Up with Previous Webinars

Note that if you want to watch *any* of our past webinars, you can do so on the ISEA YouTube Channel.

Upcoming Conferences and Conference Sessions of Interest

The 2023 Fall Technical Conference (FTC) is happening October 4-6, 2023 in Raleigh, North Carolina, USA. The theme of the *Quality Engineering* invited session on Friday October 6 is Statistical Engineering, and it has two exciting talks:

- *Problem Framing: Essential to Successful Statistical Engineering Applications*
  Roger Hoerl, Union College
- *Testing and Prediction Profiler with Disallowed Combinations—A Statistical Engineering Case Study*
  Yeng Saanchi, North Carolina State University

If you're interested in this and the many other interesting sessions, be sure to register. See the conference website for more details and to register: https://falltechnicalconference.org/registration/.

Announcements from Friends of ISEA!

ASMBI Call for Papers: Special Issue on Digital Twins

We are happy to announce a "Digital Twins" Special Issue of the journal Applied Stochastic Models in Business and Industry (ASMBI), https://onlinelibrary.wiley.com/journal/15264025 dedicated to the topical areas featured in the ENBIS 2023 Spring Meeting on Digital Twins. Submissions are not restricted to papers presented at the ENBIS 2023 spring meeting. The aim of this Special Issue is to attract high-quality, innovative, and original works related but not restricted to the below mentioned research fields relevant to Digital Twins:

- Digital Twin development for both the products and processes
- Simulation models for Digital Twins
- Design and Analysis of computer experiments
- Industrial implementation of Digital Twins
- Robustness and optimization through Digital Twins
- Practical applications and cases studies of data analytics using Digital Twins
- Process surveillance and predictive maintenance through Digital Twins
- Decision making through Digital Twins
- Verification and validation of Digital Twins in real life

All submissions will go through the standard, selective review process of ASMBI. Submissions are possible until November, 13th, 2023 through the website https://wiley.atyponrex.com/journal/ASMB.

Registration for the Third Event on Play with Real Data is open until Oct 06, 2023. During this event, teams interested in working with data receive a real data set and use any analytical method to work on this data in a competitive environment alongside other teams. The committee of judges will check the output of the teams and at the end of the event the winning teams will be announced. ISEA members are welcome to register. More details about this event including a link for registration are at agna-co.ir/en/playdata3