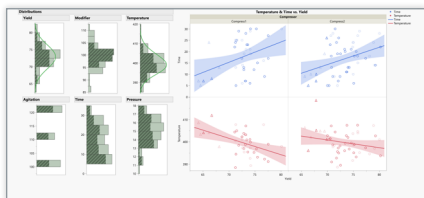


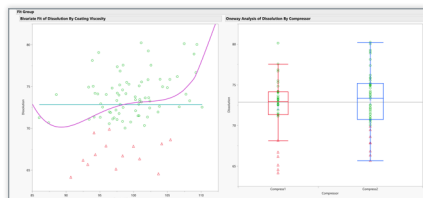
# JMP® for Chemistry & Chemical Engineering

Chemists and chemical engineers have data that needs to be analyzed, modeled, and understood. JMP® statistical discovery software from SAS includes a full suite of capabilities that helps data explorers in chemical industry to visualize data, explore patterns, optimize experimental designs, evaluate results, and build robust processes - all in an easy to use, visual and interactive way.



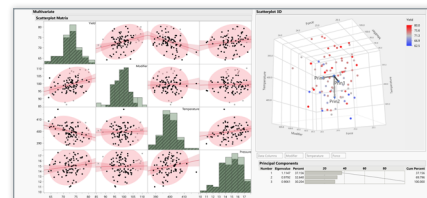
## Data Visualization & Exploration

Explore data dynamically using a variety of charts, graphs, plots, and maps to uncover insights. Move effortlessly (point & click) from data discovery to report sharing.



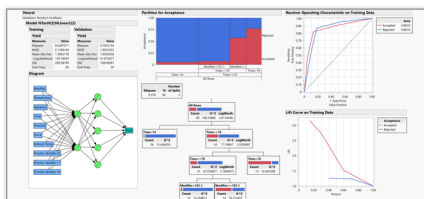
## Engineering Statistics

Perform descriptive and inferential statistics using ANOVA & Regression. Fit and validate Probability distributions, Tolerance & Prediction Intervals, Bootstrapping and Randomization.



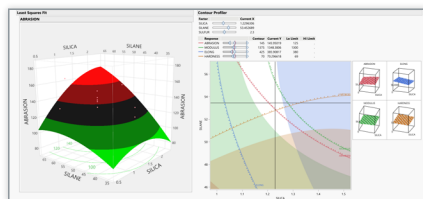
## Chemometrics (Multivariate)

Apply multivariate methods like Principal Component Analysis (PCA), Factor Analysis, Clustering, Discriminant, Partial Least Square (PLS) & Multidimensional Scaling (MDS).



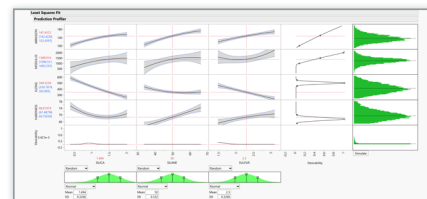
## Predictive Modeling & Machine Learning (ML)

Analyse and Predict using Advanced Regression & Classification methods. Explore various ML algorithms to build, validate, compare, select, and deploy statistical models.



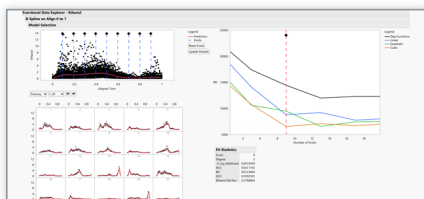
## Design of Experiments (DOE)

Explore Classical, Screening, Response Surface, Definitive Screening, Mixture and Taguchi designs. Use Custom Design to construct tailor made optimal design for your experimental setting.



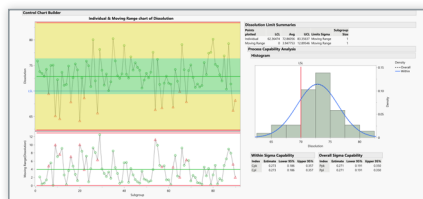
## Robust Process Optimization

Use Prediction profiler to find best process conditions that maximizes desirability. Perform Monte Carlo Simulation and Simulation experiment to derive a robust solution.



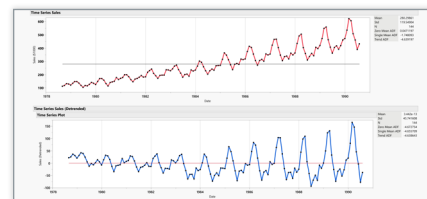
## Functional Data Analysis & Nonlinear Modeling

Build nonlinear models using custom loss function. Create a functional model by fitting a B-spline, P-spline, or Fourier basis model to the data that are functions, signals, or series.



## Statistical Process Control & Six Sigma

Investigate quality problems using control charts, Measurement System Analysis (MSA), Process Screening, Pareto & Root cause analysis and solve using DMAIC six sigma tools.



## Time Series Analysis & Forecasting

Explore Time series data to build ARIMA, Seasonal ARIMA and Transfer function models. Forecast using an automated model selection algorithm and fit the best model.

## Customer Success Stories

JMP is a tool of choice for engineers, scientists and other data explorers. Leading universities and research institutions across the globe use JMP for teaching and research. Please browse through our customer success stories at [jmp.com/success](http://jmp.com/success).

### BASF

A team of chemists at BASF used JMP® to evaluate the performance of variety of compounds quickly and efficiently. With JMP, they designed a new, more environmentally friendly cleaning formulation that is now used in place of phosphates by dish detergent manufacturers around the world.

### Eastman

Statisticians at Eastman say JMP® Pro is their "Swiss army knife." JMP allows them to interactively engage with their data & to share insights more easily with their customers. "We're seeing so many successes across the board with JMP. It's such an essential tool for us," says Howard Rauch of Eastman's Applied Statistics group.

### Dow

As Dow transitions from a traditional manufacturer to a solutions provider, JMP has been involved in 75,000 projects resulting in \$10 billion in EBIT. "It's well documented that Dow has saved or generated billions and billions of dollars in value through Six Sigma," says Ed Noack, Global Leader of Diamond Value Chain at Dow.

## Did you know?

Globally, thousands of engineers, scientists and researchers attend webinars and trainings hosted and delivered by JMP at ChemistryWorld (Royal Society of Chemistry, RSC). For a detail list of resources, please browse through [www.chemistryworld.com/jmp/5568.bio](http://www.chemistryworld.com/jmp/5568.bio)

CHEMISTRYWORLD

## JMP for Chemistry and Chemical Engineering



JMP : [jmp.com/jmp](http://jmp.com/jmp)

- Data visualization and EDA
- Statistical Analysis and Modeling
- Quality and Reliability
- Design of Experiments (DOE)



JMP Pro : [jmp.com/pro](http://jmp.com/pro)

- Predictive Modeling and Cross Validation
- Mixed Models and FDA
- Model Screening, Comparison and Deployment
- Text Mining and Sentiment Analysis

## Free JMP trial

JMP is available on both MAC and Windows. Start your 30-day free trial today by visiting [jmp.com/try](http://jmp.com/try).

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*Optimal Design of Experiments: A Case Study Approach*

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Leading companies innovate with statistically designed experiments

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[jmp.com/courses](http://jmp.com/courses)

A complete listing of free course materials for teaching with JMP

### STIPS

[jmp.com/statisticalthinking](http://jmp.com/statisticalthinking)



Free online statistics course [Statistical Thinking for Industrial Problem Solving](#) to build

practical skills in using data to solve problems.



Questions?

Contact us at [academic@jmp.com](mailto:academic@jmp.com).