

TRIOS Software Overview

TRIOS is TA Instruments' state-of-the-art software package that uses cutting-edge technology for instrument control, data collection, and data analysis for thermal analysis and rheology instruments. The intuitive user interface allows you to simply and effectively program experiments and move easily between processing experiments and viewing and analyzing data. TRIOS software delivers a whole new experiment experience.

- · Easy organization and data file management
 - · A unique file-naming system allows for effortless organization of data files
 - The File Manager offers simple data file location
- Compatibility with the latest Windows Operating System platforms
- Maximum flexibility
 - · Instrument control and data analysis via any computer
 - Configurable for multiple monitors
 - · Ability to control multiple instruments at once
- Seamless integration between instrument control and data analysis
- · Easy data export in a variety of output formats, including XML, Word, Excel, and PDF
- · Effortless graph formatting
- · Customization of the display

TRIOS software is supported by a full range of services, including onsite training, customer service that is only a phone call away, and easy-to-use, easy-to-understand Help documentation. All of these items reflect TA Instruments' commitment to providing thermal analysis and rheology products and related services that deliver maximum value for your investment.

What's New in TRIOS Software V5.2

TRIOS software is now better than ever with key enhancements that will make your TRIOS experience exceptional. The next generation of instrument control and data collection and analysis, TRIOS V5.2 is more efficient and intuitive, allowing you to work faster and easier.

RHEOLOGY

Introducing the Upper Peltier Plate for the Discovery Hybrid Rheometer

Trios v5.2 provides support for the launch of the Upper Peltier Plate (UPP) for the Discovery Hybrid Rheometer. This new temperature accessory delivers fast-responding and accurate temperature control from -40°C to 150°C. The UPP is compatible with the HR x0 series consisting of the HR 10, HR 20, and HR 30 models, along with the DHR 1, DHR 2, and DHR 3.

Rheology Enhancements

- Discovery DMA 850 firmware update:
 - Maintain Legacy calibration table at instrument shutdown
 - Performance improvements for legacy calibration table

Rheology Bug Fixes

DHR/AR Pressure Cell: The friction calibration is now properly applied when using the standard pressure cell accessory on the HR x0, DHR, or AR Series instruments.

THERMAL ANALYSIS

Introducing AutoPilot for DSC and TGA



AutoPilot brings new functionality to TRIOS software v5.2 that allows you to create scripts that can quickly and easily replicate common tasks for increased efficiency. A script is a collection of programmed instructions that automates the execution of tasks that are usually implemented one-by-one by a human operator. AutoPilot is a keyed feature that can be used to guide new operators through instrument operation by displaying videos, timers and interactive dialog boxes, automate routine operations in TRIOS such as data analysis and report generation, and to integrate conditional decision making into operating procedures. AutoPilot scripts can be deployed across multiple laboratories within an organization assuring that standard operating procedures for sample loading and trimming, data analysis and reporting, and more, are followed, increasing throughput and efficiency while

```
count with is from 1 to 10 by 1 do Create Test From Template Heat and Hold Heating Rate
Isothermal Time 200
Isothermal Time 100
End experiment when
Set Sample Information Single Name Create text with Test # ""

Start Experiment Wait until Completed Create New Overlay Document
for each item file in list List Open Files

do Send Step 1 From File file To Overlay
```

TGA AutoPilot script

```
main Create Test From Template Cell Conditioning Conditioning Temperature
Hold Time
Set Sample Information With User Prompt Start Experiment Wait until Completed
Apply Intelligent Analysis Intelligent DSC Analysis
```

DSC AutoPilot script

TA Instruments What's New in TRIOS Software

minimizing variations in test results. In addition, AutoPilot's unique OneTouch interface allows even complex scripts to be operated by novice operators through a single click, reducing the possibility of errors. Together, these features provide a powerful enhancement to TRIOS software, extending its capabilities beyond routine testing and analysis.

Thermal Analysis Enhancements

- Intelligent Analysis for Discovery DSC 25/25P/250/2500/X3: Intelligent Analysis is designed to automatically analyze DSC data and, for many data files, produce analyses that closely match those that an experienced user would perform. Where data is more challenging, the Intelligent Analysis algorithm will generate a useful starting set of analyses that may then be adjusted to match the requirements for the specific case under consideration.
- Thermal Kinetics: Introducing the new Thermal Kinetics feature for TRIOS. The consolidated ribbon interface streamlines your workflow, simplifying the kinetics analysis of data obtained from your DSC, TGA, or SDT. Determine parameters, such as Activation Energy (Ea) and Reaction Order (n), and generate predictive curves to make informed predictions about your material's behavior, with this simple, yet powerful, analysis feature.
- TMA firmware update: Under certain conditions, opening and closing the furnace while the MCA cooler is on could result in a critical error, requiring a reboot of the TMA.

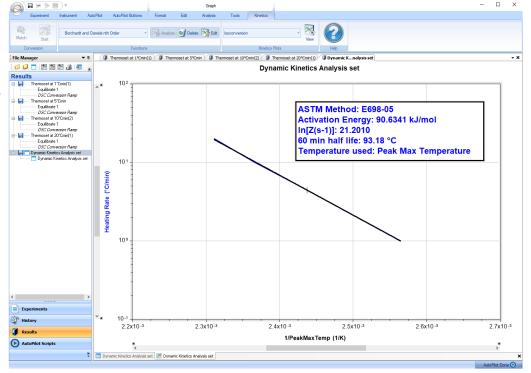
Thermal Analysis Bug Fixes

Discovery TMA Film/Fiber
 Probe Calibration: Corrected auto-offset value units sent to the instrument, allowing for successful probe calibration.

ELECTROFORCE

Enhancements

The Point Display feature is now enabled for ElectroForce DMA files. This provides users with convenient and fast access to



Kinetics analysis

view the Force and Displacement raw data for each data point in a DMA results plot or table.



Additional Information

INSTALLING TRIOS SOFTWARE

For instructions on installing TRIOS software, refer to the Installing TRIOS Software instructions.

MORE RESOURCES

A number of additional resources are available to you. For assistance with TRIOS software, first consult the Help.

For immediate assistance contact the TA Instruments Hotline at +1 302-427-4000 from 8:00 am to 4:30 pm EST.

For email support, please send your question to one of the following:

thermalsupport@tainstruments.com rheologysupport@tainstruments.com microcalorimetersupport@tainstruments.com

PREVIOUS WHAT'S NEW DOCUMENTS

For Previous What's New in TRIOS Software documents, click here.

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