



In Brief...

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## Promotions

**Discover a new generation of  
Thermal Analysis solutions! Trade  
in your DSC 7, TGA 7, DMA 7/  
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*"I would like to take this opportunity to thank you for your trust  
in PerkinElmer solutions and the people who stand behind them."*

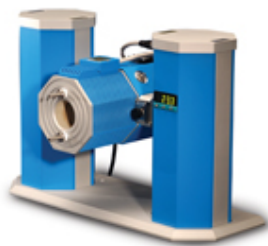
Michael P. DiVito  
Business Unit Manager – Thermal Analysis

## PerkinElmer Acquires DMA Technology

It's my pleasure to inform you we have just announced the acquisition, by PerkinElmer LAS, Inc., a subsidiary of PerkinElmer, Inc., of a new line of Dynamic Mechanical Analysis (DMA) products from Triton Technology, Ltd. The United Kingdom based-company specializes in dynamic spectroscopy equipment. The new PerkinElmer DMA 8000 will replace the Diamond DMA with exciting technology, bringing you even more DMA capabilities. Among the DMA 8000's advantages are its higher flexibility and ease of use in a range of testing environments.

[Learn More](#)

## Innovations in Materials Science - DMA 8000



The PerkinElmer® DMA 8000 is one of the most flexible, cost effective Dynamic Mechanical Analyzers available today. Its innovative design, high functionality and flexible operation make the DMA 8000 ideal for advanced research and routine quality testing.

- Unparalleled flexibility with rotating analysis head
- Enhanced performance due to a lightweight analytical train
- TMA capability
- Superior cooling design
- Integrated fluid bath option
- Controlled humidity studies with a unique humidity generator
- Optional furnace window for viewing the sample
- Analysis of powders or other difficult to prepare samples

[Learn More](#)

## Upcoming Conferences

### Pittcon 2007

Conference and Expo:

Booth # 843

February 25 — March 2, 2007

McCormick Place,

Chicago, Illinois, USA

[www.pittcon.org](http://www.pittcon.org)

## HyperDSC

### [Insights on Pharmaceuticals Using the Unique HyperDSC® Technique](#)

**Free Webcast** — Recorded October 2006

Hosted by Prof. Graham Buckton,

University of London, School of Pharmacy.

### [Improving and Speeding up the Characterization of Substances, Materials, and Products: Benefits and Potentials of High-Speed DSC](#)

Vincent B.F. Mathot, Geert Vanden Poel,

and Thijs F.J. Pijpers, American Laboratory.

### [Characterization Of Epoxy Curing Using High Heating Rate DSC](#)

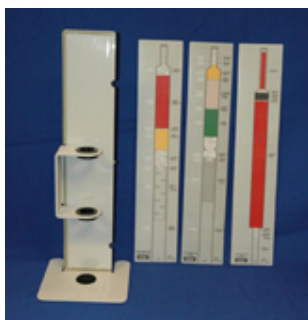
**Research Article** — March 2006

Authors Bryan Bilyeu, Witold Brostow, Kevin P. Menard

Section 3, Materials Research Innovation March 2006,

10.1:1-36. 1066-7857, Full Paper Volume 10.1 Online

## New Elemental Analysis Tube Packing Accessory



The EA Tube Packing Accessory provides a bracket which conveniently holds a combustion or reduction tube during the packing process. Included are three easily interchangeable diagram cards, positioned behind the tube, showing the exact filling levels for the following tubes: combustion tube for CHN, reduction tube for CHN and combustion/reduction tube for CHNS analysis. This simplifies the packing process by enabling hands-free filling and a visual guide for precise packing of the tubes.

[Order Now](#)

## Application Notes:



### Thermal Analysis Applications in the Semiconductor Packaging Industry

Thermal analyzers are an essential tool in the semiconductor packaging industry. Not only are they important in the design and development phase, but thermal analyzers can also be used for failure analysis and quality control purposes.

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### DMA 8000 Applications

Dynamic Mechanical Analysis (DMA) is widely used to characterize materials' bulk properties such as modulus, compliance, and damping (tan delta). It measures changes of rheological behavior under dynamic conditions as a function of temperature, time, frequency, stress, atmosphere or a combination of these parameters.

DMA application notes:

- Amorphicity and Crystallization of PEEK
- Expansion Coefficient of Polymeric Materials using DMA 8000
- Use of Material Pockets for Mechanical Analysis of Powders
- Multifrequency Analysis of Polybutadiene Rubber
- Mechanical Properties of Films and Coatings
- $\alpha$  and  $\beta$  Relaxations of PVC and Calculation of the Activation Energy of the  $\alpha$  Event
- Effect of Saline on Epoxy Resin Paint run in Tension Geometry
- Tg and Cure of a Composite Material

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