

## Newsletter At-A-Glance:

- New Tech Tip! Setting Up Controlled Stop
- Customer Research Highlight - Characterizing Tire Derived Materials
- Introducing 1000 N ElectroForce 3310 Test Instrument
- Academic Matching Grant Program

## New Tech Tip! Using Controlled Stop for ElectroForce Test Systems

*Tutorial demonstrates proper set-up of controlled stop limit action in WinTest®*

The Controlled Stop limit action is a feature within WinTest that is particularly helpful when running tests in which you expect the sample to fail. The purpose of controlled stop is to ensure that the instrument safely positions the actuator in a pre-defined position once a test limit has been reached. In this newest ElectroForce Tech Tip, Brian Kornis, ElectroForce Customer Service Manager, reviews the steps to set up a controlled stop using the example of a three point bend ramp-to-failure test.



Watch the new Tech Tip [here](#).

## A Hyperviscoelastic Model for Characterizing Tire Derived Materials

*Developing a model to predict the nonlinear behavior of TDM through a larger range of deformations*

Tire waste is a significant ecological problem. While many worn-out or damaged tires are designated for use as a fuel source, there is an increasing desire to find alternative uses for the recycled material. Tire derived materials (TDM) have been used for applications including paving materials, athletic surfaces, and railway components, but overall use has been limited because of the inadequacy of current models to predict the resulting behavior. Research conducted by Dr. Sanjay Govindjee (University of California, Berkeley), Dr. Giuseppe Montella (University of Naples) and Dr. Patrizio Neff (University of Duisburg-Essen), and published in a recent edition of the Journal of Engineering Materials and Technology, aims to develop a new hyperviscoelastic model to better predict the behavior of TDMs under larger deformations. If successful, the model would support the reduction of complexity and expense of designing new applications for TDMs and open up the range of possible uses.



## CURRENT PROMOTIONS

Upgrade and Save!



Upgrade to TA ElectroForce technology and save up to 25% off!

[More Info](#)

## UPCOMING CONFERENCES

TERMIS AP  
September 3-6



"Personalized Medicine Through Tissue Engineering and Regenerative Medicine" is the theme for this year's [TERMIS-AP](#) meeting taking place in Tamsui Township, Taiwan from September 3rd to the 6th. Stop by our exhibit and learn about BiDynamic perfusion-only and mechanical stimulation bioreactors for three-dimensional constructs.

Frontier Biomechanical Challenges in

To read the abstract or access the paper, [click here](#). To learn more about Dr. Govindjee's ongoing research, visit his [academic website](#).

We are always interested to learn more about our customers' research. If you have new research that you would like to share with us, please let us know by emailing us at [electroforce@tainstruments.com](mailto:electroforce@tainstruments.com).

## New! ElectroForce 3310 1kN Test Instrument

*Delivering industry leading dynamic performance in versatile 1 kN load frame*

In last month's newsletter we introduced the ElectroForce 3310 test instrument! With 1 kN of force and 25 mm of dynamic displacement, the 3310 offers a broad performance envelope that enables the characterization of a variety of materials, components, or medical devices. The versatility of the test instrument is unmatched! The 3310 can be paired with a torsion actuator to perform biaxial tests or an extended stroke (ES) actuator for tests that require up to 175 mm of displacement capabilities. We also offer kits that will convert your ElectroForce 3330 (3 kN) test instrument into a 1 kN capacity load frame, providing you with even better performance for low force testing.



To learn more about the ElectroForce 3310, visit the [3300 Series webpage](#).

If you would like to contact one of our sales representatives for more information about the 3310 or request information about the conversion kits, email us at [electroforce@tainstruments.com](mailto:electroforce@tainstruments.com).

## Academic Matching Grant Program

*Add \$20,000 to the value of your new equipment grant*

Have you heard about the Academic Matching Grant (AMG) program? If you have recently found your first faculty position or are moving to a new academic institution and starting a new lab, the AMG program will help you stretch your funding to acquire and maintain your laboratory equipment. It's also beneficial for those academic researchers who have recently been awarded a new equipment grant.



Over the last 10 years, nearly 5,000 TA customers have taken advantage of this unique program. To learn more about how the program can benefit you, visit the [ElectroForce AMG webpage](#).

## Cardiovascular Physiopathology September 8 - 9



*At the beginning of September, the University of Palermo will host the [Frontier Biomechanical Challenges in Cardiovascular Physiopathology](#) symposium. Keynote presentations will explore advances in cardiovascular biomechanics and future clinical therapies.*

## The Composites and Advanced Materials Expo (CAMX) Sept. 27 - 29, 2016



*[CAMX](#), held in Anaheim, CA, will explore the use of composites and advanced materials in a variety of applications, including transportation, aerospace, & medical, among others. Visit the TA Instruments booth and learn how ElectroForce technologies support research of these materials.*

