

## Newsletter At-A-Glance:

- Introducing 1000 N ElectroForce 3310 Test Instrument
- Customer Research Highlight - Sheffield University
- New Tech Tip! Setting up a Fatigue Test in WinTest
- World Biomaterials Congress 2016 Highlights

## New! ElectroForce 3310 1kN Test Instrument

*The Industry's Most Dynamic, Versatile, & Accurate 1kN Test System*

TA ElectroForce is excited to introduce the ElectroForce 3310! Utilizing our patented, friction-free, electromagnetic linear motor, the 3310 delivers 1 kN of force with 25 mm of dynamic displacement at frequencies from 1 cycle per day (static) up to 100 Hz. Capable of running cyclic tests to 1000 N, the ElectroForce 3310's impressive performance extends to much lower forces, controlling applied force to less than 1 N. The 3310 also utilizes our High Accuracy Displacement sensor (HADS), which provides a calibrated displacement accuracy of  $\pm 5$  microns and a resolution of 1 nanometer. The 3310 can also be integrated with a torsion actuator for axial-torsion test protocols, or with an extended stroke (ES) actuator, which provides 150 mm of static testing displacement capabilities.



To learn more about the ElectroForce 3310, [click here](#).

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

## Characterizing the Viscoelastic Properties of Bladder Tumors and Spinal Implants

*Research at the University of Birmingham aims to understand material properties using Dynamic Mechanical Analysis*

*The Journal of the Mechanical Behavior of Biomedical Materials* has recently published two papers on research that was conducted at the

University of Birmingham. The first publication includes research to characterize two elastomeric components of a Posterior Dynamic Stabilization spinal implant to determine if either material had a more significant impact on the overall properties of the device. In the second publication, the researchers aim to use Dynamic Mechanical Analysis (DMA) to measure the viscoelastic properties, in particular the storage and loss modulus, of human bladder tumors.

To read the abstract or access the paper on the spinal device characterization, [click here](#).



UNIVERSITY OF  
BIRMINGHAM



*Unique offers for academic institutions*

[More Information](#)

## UPCOMING CONFERENCES

Summer  
Biomechanics,  
Bioengineering and  
Biotransport  
Conference  
June 29 - July 2, 2016

**SB<sup>3</sup>C** bio mechanics.  
bio engineering.  
bio transport.

TA ElectroForce is proud to be exhibiting at the [2016 Summer Biomechanics, Bioengineering, and Biotransport Conference](#). SB<sup>3</sup>C takes place in National Harbor, Maryland at the Gaylord National Resort & Conference Center. We invite you to meet with us there and learn more about our test instruments which are ideally suited for biomaterials and tissue research.

To read the abstract or access the paper on dynamic mechanical analysis of human bladder tumors, [click here](#).

[Click Here](#) to learn more about the ongoing research of the Spinal Implant Design Research Group at the University of Birmingham.

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

## New Tech Tip! Setting Up a Basic Fatigue Test in WinTest®

*Run a fatigue test in a few easy steps!*

In the newest ElectroForce Tech Tip, Brian Kornis, ElectroForce Customer Service Manager, reviews the steps required to set up a basic fatigue or cyclic test in WinTest. Using the ElectroForce 3200, Brian sets up a force controlled cyclic compression test including preloading the sample and setting up the waveform parameters.



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

## Conference Highlight

*World Biomaterials Conference 2016*

Last month, TA Instruments exhibited at the World Biomaterials Congress in Montreal, Canada. The conference was a great opportunity for us to connect with existing customers, learn about exciting new research, and demonstrate the ElectroForce 5500 test instrument and the 3DCulturePro perfusion bioreactor. We also had fun hosting an evening reception and "testing" Hamish, a Highland Scottish cow, who is the mascot for the next World Biomaterials Congress, which will be held in Scotland. A big thank you to all of those who were able to stop by our booth for a visit or attend the reception!



To learn more about the ElectroForce 5500, [click here](#). For more information about 3DCulturePro, [click here](#).

Find out more information about the next World Biomaterials Congress in Glasgow, Scotland, [here](#).

Keep up with the latest news every day! Follow us on social media:



## TERMIS EU

June 28 - July 1, 2016



*The 2016 TERMIS EU conference will take place in Uppsala, Sweden beginning at the end of June. The theme for this year's meeting is "Towards Future Regenerative Therapies". We invite you to visit with us (Booth E2:05) and learn more about our BioDynamic test instruments, which provide simultaneous simulation and characterization to 3D tissue-engineered constructs in a sterile environment.*

## TCES 2016

July 4 - 6, 2016



*The 16th Annual Meeting of the Tissue and Cell Engineering Society will take place from July 4th through the 6th at University College London. This conference brings together researchers from across the UK to discuss various topics associated with cell and tissue engineering, including building tissues and organs, mechanisms of cell behavior, and clinical and commercial translation.*

