

**Newsletter At-A-Glance:**

- **DuraPulse<sup>™</sup> HVT Selected as Medtech Innovation Challenge Finalist**
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**MD&M West 2017 Medtech Innovation Prize Challenge Finalist**

*ElectroForce DuraPulse<sup>™</sup> Heart Valve Tester was one of five finalists selected*

TA ElectroForce's DuraPulse Heart Valve Test Instrument (HVT) was selected as a finalist in Qmed's Medtech Innovation Prize Challenge at MD&M West 2017. The contest recognizes innovative new products that add value to Medical Device OEMs. The DuraPulse HVT utilizes a proprietary frictionless motor technology that enables medical device manufacturers to test the durability and long-term wear of replacement heart valves in a matter of weeks. Thank you to everyone who voted for us!

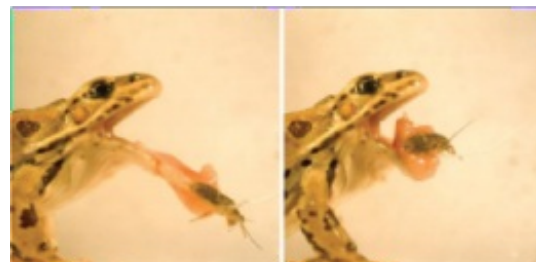


[Click here](#) to learn more about the DuraPulse Heart Valve Test Instrument.

**Customer Highlight Catching Flies and Other Insects**

*Measuring viscoelastic and adhesion properties of a frogs tongue*

Have you ever watched a frogs tongue appear and then, in the blink-of-an-eye, it disappears; although as it retracts it pulls an unsuspecting insect into the mouth of the frog? Have you marveled at the speed of the event and wondered what enables the frogs tongue to stick so readily to its prey? Newly published research from Georgia Tech, in conjunction



with the Atlanta Botanical Garden, utilize an [ElectroForce 3100](#) to perform quasi-static and dynamic test protocols to explore the viscoelastic characteristics and adhesion properties of frog and toad tongues in order to better understand the mechanisms that give it significantly better adhesion than known synthetic polymer materials. These insights may lead to better designs of reversible adhesives that stick at high speeds.

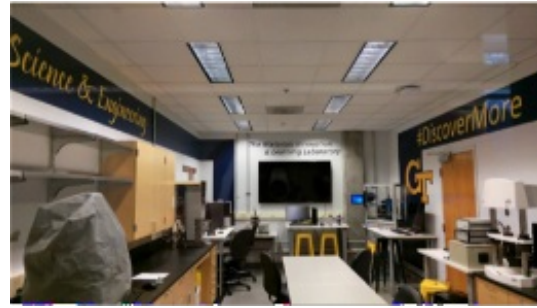
[Click here](#) to download the journal paper.

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## Customer Highlight Georgia Tech Creates the MILL

*New Materials Innovation & Learning Lab open to all Georgia Tech students*

In the fall of 2016 in the School of Materials Science and Engineering at Georgia Tech, the doors opened to a new Materials Innovation & Learning Lab (MILL); a collaborative make-and-measure space for students of any experience level to foster a deeper understanding of the material world around them using cutting-edge technology and entrepreneurial savvy to bring their ideas to life. Open to all students, the MILL features 3D printing technologies as well as material characterization instruments, including an [ElectroForce 3200](#), to give students hands-on experience with the development and characterization of new and different types of materials.



To learn more about the MILL, [click here](#). Read news stories on the lab at [3DPrintingIndustry.com](#) and [niquie.net](#).

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## Customer Highlight Restoring Tissues After the Onset of Periodontal Diseases

*Improving tissue regeneration solutions with the addition of chitosan fiber membranes*

Periodontal (gum) diseases affect many of the tissues and structures in the mouth and can often lead to tissue loss. Regeneration of these lost tissues has been challenging for clinicians. Tissue engineering solutions have emerged as candidates for successful tissue regeneration. Currently, the most widely-used approach is to use a guided tissue regeneration (GTR) membrane to promote this process. However, shortcomings still remain with these types of solutions. Newly published research in the journal Dental Materials, a collaborative effort between Sheffield University and Queen Mary University, explores the possibility of utilizing chitosan fibers to create a surface layer for a GTR membrane in order to improve tissue integration.



To access the publication abstract and paper, [click here](#).

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## TA ElectroForce at ORS 2017 - An Invitation to Highlight Your Research

*Cutting-edge orthopaedic research on display this March in San Diego*

The Orthopaedic Research Society's (ORS) annual meeting will be taking place in San Diego, CA from March 19th to the 22nd. The meeting will bring together leading clinicians, scientists and engineers who will be presenting the most innovative research in the field of orthopaedics. **As we have done in the past, we would welcome the opportunity to highlight any research being presented at this year's conference on a poster to be displayed in our booth.** If you would like to include your research on this

poster, please contact Jason Lusk at [jlusk@tainstruments.com](mailto:jlusk@tainstruments.com) for more information. In addition, we are excited to be sponsoring an ORS Techniques Workshop titled Fracture Mechanics of Rodent Bones: Evaluating Bone Material Quality.

For more information regarding the conference, visit the [ORS conference website](#).



## Promotions

### Rubber Testing Buy One, Get One



For a limited time, when you purchase an [RPA elite](#) or [RPA flex](#) rubber process analyzer, you can choose either a [Discovery DSC](#) or [Discovery TGA](#) for FREE! Contact us for more details on this exciting offer.

[More Information](#)

### 2017 AMG Program



TA will add \$20,000 to the value of any grant for the purchase of select load frame systems, tissue engineering instruments, or material and tissue characterization instruments.

[More Information](#)

## Upcoming Events

### Pittcon

March 5 - 9  
Chicago, IL  
Booth 2220



### Free WinTest® Training

March 6  
Online  
[Register](#)



### ORS

March 19 - 22  
San Diego, CA  
Booth 104



### SFB Society for Biomaterials

April 5 - 8  
Minneapolis, MN  
Booth 32

