



For a Total Solution to all of your Materials Testing Needs

FOR IMMEDIATE RELEASE

University of Michigan researchers use ADMET systems to test the mechanical properties of bone structures

ANN ARBOR, Mich. & NORWOOD, Mass. – June 21, 2004 – ADMET™ Inc. today announced that a University of Michigan research laboratory for the study of biologic & materials sciences has selected an ADMET materials tensile testing machine with Windows-based software. The lab is testing how perturbations in the local microenvironment, such as alterations in mechanical loading, interactions with biomaterials, disease and aging affect mechanical properties of mouse bones.

The research project is led by David Kohn, PhD, professor of Dentistry, Biologic & Materials Sciences and professor of Biomedical Engineering, College of Engineering.

After an extensive search, the lab selected ADMET's eXpert 4501-M low force universal testing machine to provide precise, repeatable flexure and break tests. The machine is equipped with ADMET's personal computer-based MTESTWindows™ Materials Testing System to control the tests, record results and report them to the lab's analysis systems.

Prior to implementing the ADMET system, the University of Michigan laboratory was using an in-house built testing machine to do its flexural testing. "We could not meet requirements for repeatable and accurate deflection rate control," commented doctoral student, Nadder Sahar. "We researched several materials testing systems. The ADMET eXpert 4501-M machine offers the functionality and precise control required for our testing application at a price that was less than half the price of comparable products from other materials testing companies."

The ADMET system is used for two test applications in the lab. The first is a destructive test in which the bone is flexed in a four-point bend fixture to failure. The ADMET system accurately controls the deflection rate of the mouse bone and collects the load data. It then generates a flexural stress versus flexural strain

curve. ADMET's software engineering group developed a flexural stress and strain analysis specifically for the four-point bend fixture being used in the University of Michigan's tests. The analysis supports user input of the moment of inertia, neutral axis distance, contact point distance and total span as variables.

The second test is a cyclic control profile in which the test specimen is placed in the four-point fixture and the displacement is cycled between two defined values at 1HZ frequency for 2 hours. The MTESTWindows system controls the eXpert 4501-M and acquires and stores the load and deflection data for the entire test.

"The University of Michigan is making innovative use of ADMET test systems," said Richard Gedney, ADMET founder and president. "We're pleased that we were able to help them configure a system for their specialized tests. We often work with research organizations to provide systems for applications ranging from the testing of MEMS structures in scanning electron microscopes to tensile testing metals and polymers for the aerospace industry."

About ADMET

ADMET Inc. combines high quality products and services with total cost effectiveness to deliver the industry's most efficient materials testing systems. Its products range from materials testing frames to software and specialized control units. The company offers new testing systems as well as retrofits of existing machines from ATS, Baldwin, ELE Soiltest, Forney, INSTRON, MTS, Riehle, SATEC, Shimadzu, Testmark, Tinius Olsen, United, as well as for Fullam test frames for micro/nanostructure analysis. Highly skilled engineers provide customers with personalized research and development services and support to make ADMET the most responsive materials testing equipment supplier. ADMET's loyal customer base includes leading manufacturers, testing labs, universities and researchers in aerospace, automotive, biomedical, construction, metals, plastics, textiles and other industries. ADMET can be reached at 800-667-3320, sales@admet.com or by visiting <http://www.admet.com>.

###

MEMS - Micro Electro Mechanical System

ADMET and MTESTWindows are trademarks of ADMET Inc. All other trademarks are the property of their respective owners.

For further information:

Marc Venet
ADMET Inc.
781-769-0850 X13
mvenet@admet.com

Sandy McLaughlin
Soucy Communications Group
978-266-1700
smclaughlin@scg-pr.com