

# Texas Society for Microscopy

Fall Meeting

Oct. 13-15, 2005

Sheraton Gunter  
San Antonio

## Program



## Thursday October 13, 2005

<b>TIME</b>	<b>EVENT</b>	<b>LOCATION</b>
12:00pm-5:00pm	Registration	Ludwig Foyer
1:00pm-4:00pm	Workshop <b>CRYO-ULTRAMICROTOMY APPLICATIONS IN BIOLOGY AND MATERIALS SCIENCE</b>  presented by Gregory M. Becker, PhD Sr. Product Manager, RMC Products, Boeckeler Instruments, Inc., to be held at the Sheraton Gunter Hotel	Frontier
5:00pm-7:00pm	TSM Executive Council Meeting	Jot Gunter Board Room
12:00pm-7:00pm	Vendor Setup	Ludwig
7:00pm-9:00pm	TSM Social and Vendor Exhibits	Ludwig
9:00pm-11:00pm	TSM Hospitality Suite	TBD

**Friday October 14, 2005**

<b>TIME</b>	<b>EVENT</b>	<b>LOCATION</b>
8:00am-5:00pm	Registration	Ludwig Foyer
8:00am-8:30am	Continental Breakfast	Ludwig
8:30am-8:45am	Opening Remarks by Sandra Westmoreland, president	Alamo
8:45am-9:00am	<p><b>CELL VIABILITY DETERMINATION IN PHOTOCROSSLINKED PEG HYDROGELS FABRICATED WITH STEREOLITHOGRAPHY USING CONFOCAL MICROSCOPY</b></p> <p><i>Speaker:</i> Karina Arcaute, W.M. Keck Border Biomedical Manufacturing and Engineering Laboratory, University of Texas at El Paso, El Paso, TX 79968</p> <p><i>Additional Authors:</i>            Brenda K. Mann, Sentrx Surgical, Inc., Salt Lake City, UT 84108            Ryan B. Wicker, W.M. Keck Border Biomedical Manufacturing and Engineering Laboratory, University of Texas at El Paso, El Paso, TX 79968</p>	Alamo
9:00am-9:15am	<p><b>PLANT EPICUTICULAR WAXES AND TRANSPIRATION UNDER VARIED ENVIRONMENTAL CONDITIONS OF LIGHT INTENSITY AND WATER AVAILABILITY</b></p> <p><i>Speaker:</i> Kimberly Beck, Texas Women's University</p> <p><i>Additional Authors:</i>            Dr. Camelia Maier, Dept of Biology, Texas Women's University</p> <p>**Student Competition</p>	Alamo
9:15am-9:30am	Break	Ludwig
9:30am-10:30am	<p><b>Guest Speaker</b></p> <p><b>FORENSIC SCIENCE AND MICROSCOPY</b></p> <p><i>Speaker:</i> Michael Martinez, Technical Director of the Trace Evidence Section at the Bexar County Criminal Investigation Laboratory.</p>	Alamo
10:30am-11:00am	<p>Poster Session / Coffee Break</p> <p><b>COMPARISON OF MORPHOLOGY OF SORGHUM GRAIN TO RESISTANCE TO MAIZE WEEVIL, "SITOPHILUS ZEAMAIIS"</b></p> <p><i>Author:</i> Mike Pendleton, Microscopy and Imaging Center, Texas A&amp;M University</p> <p><i>Additional Authors:</i>            E.A.Ellis, Microscopy and Imaging Center, Texas A&amp;M University            F.M. Chitio, Div. of Agric., WTAMU            B.B. Pendleton, Div. of Agric., WTAMU</p>	Ludwig
11:00am-11:15am	<p><b>SEM OBSERVATIONS OF SOME VIROLA AUBL. MYRISTIACEAE) SPECIES</b></p> <p><i>Speaker:</i> Tiana F. Franklin, Texas Christian University &amp; Botanical Research Institute of Texas</p> <p>**Student Competition</p>	Alamo

# Friday October 14, 2005

TIME	EVENT	LOCATION
11:15am-11:30am	<p><b>BIOTIC FACTORS AFFECTING NODULATION IN ALFALFA</b>  <i>Speaker:</i> Megan Canady, North Garland High School, Garland, Texas  <i>Additional Authors:</i>            Jay Ingram, North Garland High School, Garland, Texas            David Muirhead, Texas Scottish Rite Hospital            Juan Gonzalez, Dept. of Cell and Molecular Biology, University of Texas at Dallas</p> <p><b>**Student Competition</b></p>	Alamo
11:30am-11:45am	<p><b>TEM ANALYSIS OF CHEMORECEPTOR ARRAYS IN <i>E. COLI</i> INNER MEMBRANES</b>  <i>Speaker:</i> Rosemary S. McAndrew, Texas A&amp;M University, Department of Biology and Microscopy and Imaging Center, College Station, TX 77843  <i>Additional Authors:</i>            E. Ann Ellis, Microscopy and Imaging Center, Texas A&amp;M University, College Station, TX 77843            Run-zhi Lai, Dept. of Biology, Texas A&amp;M University, College Station, TX 77843            Mike Manson, Depts. of Biology and Biochemistry, Texas A&amp;M University, College Station, TX 77843            Andreas Holzenburg, Depts. of Biology and Biochemistry, Texas A&amp;M University, College Station, TX 77843</p>	Alamo
11:45am-12:00pm	<p><b>MORPHOLOGICAL AND BIOCHEMICAL CHARACTERISTICS OF EPICUTICULAR WAXES ON LEEK AND ONION LEAVES.</b>  <i>Speaker:</i> Brandon Roberts, The Selwyn School, Denton TX 76201  <i>Additional Authors:</i>            David C. Garrett, Department of Materials Science and Engineering, UNT, Denton TX 76201            Camelia G.-A. Maier, Biology Department, TWU, Denton TX 76204</p> <p><b>**Student Competition</b></p>	Alamo
12:00pm-1:30pm	Luncheon / General Business Meeting	North Mezzanine
1:30pm-1:45pm	<p><b>THE EGG SHELL STRUCTURE OF RINGNECK DOVES (<i>STREPTOPELIA RISORIA</i>)</b>  <i>Speaker:</i> Natalie E Hubbard, Biology Department, UT Arlington  <i>Additional Authors:</i>            Howard J Arnott, PhD, Center for Electron Microscopy, Dept of Biology, UT Arlington</p> <p><b>**Student Competition</b></p>	Alamo
1:45pm-2:15pm	<p><b>NANOSCALE 3D FIB-SEM TOMOGRAPHY: A PRACTICAL TOOL</b>  <i>Speaker:</i> E. L. Principe, Carl Zeiss SMT, Inc. Nanotechnology Systems Division            555 Twin Dolphin Drive, Suite 130, Redwood City California, 94065</p>	Alamo
2:15pm-2:30pm	Break	Ludwig
2:30pm-3:30pm	<p><b>WETSEM TM ELECTRON MICROSCOPY OF FULLY HYDRATED SAMPLES</b>  <i>Speaker:</i> Dr. Daphna R. Yaniv, Electron Microscopy Sciences</p>	Alamo

**Friday October 14, 2005**

TIME	EVENT	LOCATION
3:30pm-3:45pm	Break	Ludwig
3:45pm-4:00pm	<p><b>TRANSMISSION AND SCANNING ELECTRON MICROSCOPY OF SE-TEREOLITHOGRAPHY RESINS REINFORCED WITH CARBON NANOTUBES</b></p> <p><i>Speaker:</i> J. Hector Sandoval, W.M. Keck Border Biomedical Manufacturing and Engineering Laboratory, Department of Mechanical and Industrial Engineering, The University of Texas at El Paso, El Paso, TX 79968 USA</p> <p><i>Additional Authors:</i>            K.F. Soto, Department of Metallurgical and Materials Engineering, The University of Texas at El Paso, El Paso, TX 79968 USA            L.E. Murr, Department of Metallurgical and Materials Engineering, The University of Texas at El Paso, El Paso, TX 79968 USA            R.B. Wicker, W.M. Keck Border Biomedical Manufacturing and Engineering Laboratory, Department of Mechanical and Industrial Engineering, The University of Texas at El Paso, El Paso, TX 79968 USA</p> <p>**Student Competition</p>	Alamo
4:00pm-4:15pm	<p><b>ACHENE EPIDERMAL MORPHOLOGY OF <i>PSEUDOGNAPHALIUM</i>, <i>ACHYROCLINE</i>, AND <i>LAPHANGIUM</i> (ASTERACEAE)</b></p> <p><i>Speaker:</i> Andrew James Waltke , Dept. of Biology, Texas Christian University, Fort Worth, TX 76109</p> <p><i>Additional Authors:</i>            Guy Nesom, Botanical Research Institute of Texas, Fort Worth, TX 76102</p>	Alamo
4:15pm-4:30pm	<p><b>DETERMINATION OF EGG SHELL MICROSTRUCTURAL CHARACTERISTICS AND ASSOCIATED PHYSIOLOGICAL PROFILES IN MG-VACCINATED EGG-LAYING CHICKENS</b></p> <p><i>Speaker:</i> Sarah B. May , The Center for Electron Microscopy, University of Texas at Arlington, Arlington, TX 76019</p> <p><i>Additional Authors:</i>            Sandra L. Westmoreland , The Center for Electron Microscopy, University of Texas at Arlington, Arlington, TX 76019</p>	Alamo
4:30pm-4:45pm	<p><b>USE OF QUETOL 651 TO LOWER THE VISCOSITY OF EPOXY RESIN EMBEDDING FORMULATIONS</b></p> <p><i>Speaker:</i> E. Ann Ellis, Microscopy and Imaging Center, Texas A&amp;M University, College Station, TX 77843-2257</p>	Alamo
4:45pm-5:00pm	<p><b>EXPOSURE OF SACCHAROMYCES CEREVISIAE AND SCHIZOSACCHAROMYCES POMBE TO ARSENIC</b></p> <p><i>Speaker:</i> Anabelle Aranda , Biological Sciences, the University of Texas at El Paso</p> <p><i>Additional Authors:</i>            Marian N. Viveros and Joanne T. Ellzey, Biological Sciences, the University of Texas at El Paso</p> <p>**Student Competition</p>	Alamo
8:00pm-10:00pm	TSM Hospitality Suite	TBD

# Saturday October 15, 2005

TIME	EVENT	LOCATION
8:00am-8:30am	Registration	Ludwig Foyer
8:00am-8:30am	Continental Breakfast	Ludwig
8:30am-8:45am	<p><b>FABRICATION AND OPTICAL PROPERTIES OF ERBIUM-DOPED GERMANIUM &amp; SILICON-GERMANIUM NANOWIRES</b></p> <p><i>Speaker:</i> Ji Wu, Department of Chemistry, Texas Christian University, Fort Worth, Texas 76129</p> <p><i>Additional Authors:</i> Jeffery L. Coffey, Department of Chemistry, Texas Christian University, Fort Worth, Texas 76129</p> <p>**Student Competition</p>	Alamo
8:45am-9:00am	<p><b>BIODEGRADABLE BIOSILICON/POLYMER COMPOSITES FOR TISSUE ENGINEERING APPLICATIONS</b></p> <p><i>Speaker:</i> Dongmei Fan, Department of Chemistry, Texas Christian University, Fort Worth, Texas 76129</p> <p><i>Additional Authors:</i> Giridhar Akkaraju, Department of Biology, Texas Christian University, Fort Worth, Texas, 76129 Jeffery L. Coffey, Department of Chemistry, Texas Christian University, Fort Worth, Texas 76129 Ernest F. Couch, Department of Biology, Texas Christian University, Fort Worth, Texas, 76129</p> <p>**Student Competition</p>	Alamo
9:00am-9:15am	<p><b>TIN WHISKERS AND THE LEAD FREE INITIATIVE</b></p> <p><i>Speaker:</i> Robert F. Champaign, Raytheon Failure Analysis Lab, NCS Division, 2501 West University, McKinney, Texas 75071</p>	Alamo
9:15am-9:30am	Break	Ludwig
9:30am-9:45am	<p><b>MICROSCOPICAL STUDIES OF COTTON REPRODUCTIVE ORGANS</b></p> <p><i>Speaker:</i> Camelia G.-A. Maier, Biology Department, TWU, Denton TX 76204</p> <p><i>Additional Authors:</i> David C. Garrett, Department of Materials Science and Engineering, UNT, Denton TX 76201 Kent D. Chapman, Department of Biological Sciences, UNT, Denton TX 76201</p>	Alamo
9:45am-10:00am	<p><b>AN SEM STUDY OF LEAF LITTER FROM AN URBAN ENVIRONMENT</b></p> <p><i>Speaker:</i> Howard Arnott, The Department of Biology and The Center for Electron Microscopy. The University of Texas at Arlington, Texas 76019</p> <p><i>Additional Authors:</i> Albert Wong, The Department of Biology and The Center for Electron Microscopy. The University of Texas at Arlington, Arlington, Texas 76019</p>	Alamo

## Saturday October 15, 2005

TIME	EVENT	LOCATION
10:00am- 10:15am	<p><b>THE EFFECTS OF ROAD DE-ICER (MgCl<sub>2</sub>) ON PLANT GERMINATION</b>  <i>Speaker:</i> Caren Collins, North Garland High School, Garland, Texas  <i>Additional Authors:</i>            Jay Ingram, North Garland High School, Garland, Texas            David Muirhead, Texas Scottish Rite Hospital            Juan Gonzalez, Dept. of Cell and Molecular Biology, University of Texas at Dallas</p> <p><b>**Student Competition</b></p>	Alamo
10:15am- 10:30am	<p><b>ELECTROSTATIC POTENTIALS WITHIN CORE/SHELL NANOWIRES BY ELECTRON HOLOGRAPHY</b>  <i>Speaker:</i> Jayhoon Chung, Texas Material Institutes, University of Texas at Austin  <i>Additional Authors:</i>            Lew Rabenberg, Texas Material Institutes, University of Texas at Austin</p> <p><b>**Student Competition</b></p>	Alamo
10:30am- 10:45am	<p><b>THE -8413 FROST RING IS THE OLDEST IN BRISTLECONE PINES</b>  <i>Speaker:</i> Howard J. Arnott, The Department of Biology and The Center for Electron Microscopy. The University of Texas at Arlington, Texas 76019  <i>Additional Authors:</i>            Christine Hallman, Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ 85721            Tom Harlan, Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ 85721            Rex Adams, Laboratory of Tree-Ring Research, University of Arizona, Tucson, AZ 85721</p>	Alamo
10:45am- 10:50am	Closing Remarks by Sandra Westmoreland, president	Alamo
10:50am	Adjourn	