LIFE LINES

Cheng-Kung Liu, see *JALCA* **94**, 158, 1999

Mila Aldema-Ramos, see *JALCA* 102, 280, 2007

Nicholas P. Latona, see *JALCA* 96, 401, 2001

Renee J. Latona, see *JALCA* **100**, 396, 2005

Eduard Hernández Balada, see JALCA 103, 167, 2008

William N. Marmer, see *JALCA* **93**, 328, 1998

Peter H. Cooke, see JALCA 101, 330, 2006

John G. Phillips is the North Atlantic Area statistician for USDA's Agricultural Research Service (ARS) and is stationed at the Eastern Regional Research Center (ERRC) in Wyndmoor, PA. He received his Bachelor's degree from the University of Minnesota and his Master's and Ph.D. from the University of Notre Dame. Since 1975, he has been responsible for supplying statistical support and consultation to the researchers in the North Atlantic Area of ARS and has worked closely with members of ERRC's leather research group. He is a Fellow of AOAC International.

Karel Kolomaznik, see JALCA 91, 21, 1996

Michaela Barinova has been working at the Department of Automation and Control Engineering of the Faculty of Applied Informatics, Tomas Bata University (TBU) in Zlin, Czech Republic, since 2005 on the main research project

"Modeling and control of natural and synthetic polymer processing". Currently, she is pursuing a Ph.D. at the Faculty of Technology, TBU, Zlin. Fields of interest: Optimization and control in raw hide preservation, recycling and re-use of tannery wastes and used leather products.

Tomas Furst completed his MSc (Mathematical Modeling) at the Charles University in Prague in 2002. He obtained a Ph.D. in mathematical analysis at the Palacky University in Olomouc in 2006. He has been working at the Dept. of Mathematical Analysis and Applications of Mathematics at the Palacky University in Olomouc since 2002.

His primary field of interest is modeling flow and transport processes in saturated and unsaturated porous media by means of partial differential equations and cellular automata.

A.E. Musa, see *JALCA* 103, 228, 2008

B. Madhan, see *JALCA* 100, 265, 2005

W. Madhulatha, see *JALCA* **79**(6), 1984

J. Raghava Rao, see *JALCA* **93,** 156, 1998

Gurashi Abdalla Gasmelseed, see JALCA 103, 228, 2008

S. Sadulla, see *JALCA* 100, 61, 2005

THE 105TH ANNUAL CONVENTION, JUNE 18 - 21, 2009

OGLEBAY RESORT, WHEELING, WEST VIRGINIA

Welcome to an exciting venue of events that will be unfolding for us from June 18 to June 21, 2009. We will host the 105th Annual Meeting at the beautiful Oglebay Resort & Conference Center in Wheeling, West Virginia. It is a first class facility. You can learn more about Oglebay by logging on to their website at http://www.oglebay-resort.com. Look for the reservation form in your spring mailing which will give all details of the convention. Also, continue checking this website for new information and announcements about the 105th Annual Meeting.

Prior to the official opening of the convention, the annual shotgun golf tournament will be held at the Speidel Golf Club playing the Robert Trent Jones course beginning at 1:00 pm Thursday afternoon, June 18th. Pre-registration for golfers is a must to facilitate the start of the tournament. Further information on the golf outing will be found in your convention packet which will be sent in March.

The official opening of the convention will begin with Registration on Thursday, June 18, from 5:00 to 7:00 pm in the main lobby. Registration will continue from 7:00 to 8:00 pm at the West Plaza joining the President's Cocktail Reception from 7:00 to 8:00 pm and an outdoor buffet from 8:00 to 9:00 pm at the West Plaza overlooking the lake.

ALCA President Stephen S. Yanek will open the Technical Program at 8:00 am on Friday. This year's technical program is being organized by Vice-President David LeBlanc and will offer a wide array of leather technologies covering tanning to finishing to environmental issues and can be viewed in the coming months under this section of our website. The 50th John Arthur Wilson Lecture will feature Eleanor M. Brown, Research Chemist/Lead Scientist with the Eastern Regional Research Center, Agricultural Research Service, United States Department of Agriculture in Wyndmoor, PA. Our Technical Committees will have an opportunity to meet and have discussions during lunch-time. The technical sessions will end at 4:15 followed by the Fun Run at 5:00 pm. Friday's activities will be capped off by a cocktail reception and dinner in the Gleessner Ballroom from 7:00 pm to 9:30 pm. This will be an exciting evening that you won't want to miss.

Technical papers will resume Saturday morning at 8:00 am with the Annual Business Meeting ending the morning sessions at 10:45 am. At noon everyone is invited to attend the Activities Awards Luncheon in the Glessner Ballroom, where prizes will be awarded for the Fun Run and golf outing. Technical papers will resume in the afternoon at 1:00 pm until 4:15 pm with the Awards Banquet Social Hour beginning at 6:00 pm in the Glessner Ballroom. Dinner will follow at 7:00 pm with the awards presentations afterwards. The convention will close with check out on Sunday.

Please make plans now to join us for a wonderful time at Oglebay!

Doug Morrison Convention Chair

50th John Arthur Wilson Memorial Lecture — Abstract Collagen – A Natural Scaffold for Bilolgy and Engineering

Eleanor M. Brown

Oils and Animal Coproducts Research Unit

United States Department of Agriculture, ARS, Eastern Regional Research Center

600 East Mermaid Lane, Wyndmoor, PA 19038

ABSTRACT

Collagen, the most abundant protein in mammals, constitutes a quarter of the animal's total weight. The unique structure of fibrous collagens, a long triple helix that further associates into fibers, provides an insoluble scaffold that gives strength and form to the skin, tendons, bones, cornea and teeth. The ready availability, to meat eaters, of animal skins that would putrefy, if left untreated, led to man's earliest venture into biomaterials engineering and resulted in the production of leather. Through empirical methods, a number of tanning agents with a variety of properties were identified. The methods for production of leather evolved over several centuries as art and engineering with little understanding of the underlying science. Scientific advances of the twentieth century, including increasing use of collagen in medical device research, began to provide a basis for understanding the relationship between collagen structure and function in both biology and technology.



Dr. Eleanor M. Brown, Research Chemist, Lead Scientist, FOAC, ERRC, ARS, USDA

During the past 20 years, leather researchers at ERRC have used experimental and theoretical approaches to investigate several methods for stabilizing collagen structure. This research, which includes studies of mineral and vegetable tannages, enzyme catalyzed and aldehyde based covalent crosslinks, electrostatic and hydrophobic interactions, will be reviewed. Insight gained from these studies and those of other leather and biomaterials scientists will be evaluated as steps toward a still elusive, comprehensive mechanism for stabilization of collagen in leather and other biomaterials.

Submissions for the 105th Annual Meeting Technical Program American Leather Chemists Association, June 2009

Partial Listing of Oral Presentations (Subject to Change)

Collagen a Natural Scaffold for Biology & Engineering by Eleanor M. Brown, United States Department of Agriculture, Eastern Regional Research Center, Wyndmoor, PA, John Arthur Wilson Memorial Lecturer

Natural Weathering Study of a Coating for Upholstery Leather by Anna Bacardit, Igualada Tech Eng School, Spain

Optimization of Raw Hide Curing Using Two-Component Counter-Current Diffusion Model by Michaela Barinova, Tomas Bata University, Czech Republic

Cross Linkers by Alex Campbell, Stahl USA, Peabody, MA

Anti Soiling Coatings by Jurgen Christner, TFL Ledertechnick AG, Basel, Switzerland

New Developments in Finishing Technology by Antonio Galiotto, Erretre SRL, Italy

New Equipment Developments by Steven Gilberg, Tan-Mach Ltd Ontario, Canada

Plant Bioactive Compound as Effective Anti Fungal Agent in Leather Processing by A. Gnanamani, Central Leather Research Institute, Chennai, India

Composite Drying with Simultaneous Vacuum and Toggling by C.-K. Liu, United States Department of Agriculture, Eastern Regional Research Center, Wyndmoor, PA

The Quantification of a Minority Protein-Decorin and its Effects on Quality of Leather by Mila Aldema-Ramos, United States Department of Agriculture, Eastern Regional Research Center, Wyndmoor, PA

The Global Recession and its Impact on US Hide Exports by John Reddington, US Hides, Skins and Leather Association, Washington, D.C.

REACH Beyond Preregistration by Lynn Rutkowski, LANXESS Corporation, Pittsburgh, PA

Influence of Retanning on the Adsorption Capacity of Water on Cattlehide Collagen Fibers by Keyong Tang, College of Materials Science and Engineering, Zhengzhou University, Zhengzhou, China

Treatment of Low-Quality Hides with Fillers Produced from Sustainable Resources. Effect on Properties of Leather by Maryann Taylor, United States Department of Agriculture, Eastern Regional Research Center, Wyndmoor, PA

Trade Issues by John Wittenborn, Leather Industries of America, Washington, D.C.

(Please see the ALCA web site, leatherchemists.org, for the latest listing of Annual Meeting papers)