

THE

# Journal

OF THE AMERICAN  
LEATHER CHEMISTS ASSOCIATION

May 2022

Vol. CXVII, No.5

JALCA 117(5), 177-220, 2022



## 116th Annual Convention

to be held at the  
Eaglewood Resort & Spa  
1401 Nordic Road  
Itasca, IL 60143

**DATE CHANGE:**  
June 21-24, 2022

For more information go to:  
[leatherchemists.org/  
annual\\_convention.asp](http://leatherchemists.org/annual_convention.asp)

### Contents

<b>Application of L-Ascorbic Acid as an Antioxidative Colorment in Leather Finishing</b> by Sultan Çivi and Eser Eke Bayramoğlu .....	179
<b>Silica-Embedded Polyurea Microspheres with Rough Surface for Matte Leather Finishing</b> by Liang Jia, Li Wang, Jing Li, Jun Xiang, Yi Chen and Haojun Fan .....	184
<b>Manufacture of Exotic Leather and Small Leather Goods from Ovine Stomach</b> by Peris N. Wainaina, Benson Ongarora and Paul Tanui .....	195
<b>Research on the Production of Parchment from Turkey Skin and its Decorative Use</b> by Eser Eke Bayramoğlu .....	201
<b>High Performance Leather based on In Situ Formation of Reduced Graphene Oxide in Chrome Tanning</b> by Xinle Yang, Yanchun Li, Mao Yang, Xugang Dang, and Shan Cao .....	206
<b>ACLA Spring Council Meeting Minutes</b> .....	214
<b>Lifelines</b> .....	219

Distributed by

University of  
**CINCINNATI**  
LIBRARY PUBLISHING  
SERVICES

An imprint of the University of Cincinnati Press

ISSN: 0002-9726

### Communications for Journal Publication

Manuscripts, Technical Notes and Trade News Releases should contact:  
**MR. STEVEN D. LANGE**, Journal Editor, 1314 50th Street, Suite 103, Lubbock, TX 79412, USA  
E-mail: [jalcaeditor@gmail.com](mailto:jalcaeditor@gmail.com) Mobile phone: (814) 414-5689

Contributors should consult the Journal Publication Policy at:  
[http://www.leatherchemists.org/journal\\_publication\\_policy.asp](http://www.leatherchemists.org/journal_publication_policy.asp)

# Beamhouse efficiency takes perfect balance.

Making leather on time, on spec and within budget requires a careful balance of chemistry and process. Buckman enables tanneries to master that balance with our comprehensive Beamhouse & Tanyard Systems. They include advanced chemistries that not only protect the hide but also maximize the effectiveness of each process, level out the differences in raw materials and reduce variations in batch processing. The result is cleaner, flatter pelts. More uniform characteristics. And improved area yield.

In addition, we offer unsurpassed expertise and technical support to help solve processing problems and reduce environmental impact with chemistries that penetrate faster, save processing time, improve effluent and enhance safety.

With Buckman Beamhouse & Tanyard Systems, tanneries can get more consistent quality and more consistent savings. Maintain the perfect balance. Connect with a Buckman representative or visit us at [Buckman.com](http://Buckman.com).

1945  
2020 **Buckman75**

# JOURNAL OF THE AMERICAN LEATHER CHEMISTS ASSOCIATION

*Proceedings, Reports, Notices, and News*  
of the  
AMERICAN LEATHER CHEMISTS ASSOCIATION

---

## OFFICERS

---

**MIKE BLEY, *President***  
Eagle Ottawa – Lear  
2930 Auburn Road  
Rochester Hills, MI 48309

**JOSEPH HOEFLER, *Vice-President***  
The Dow Chemical Company  
400 Arcola Rd.  
Collegeville, PA 19426

---

## COUNCILORS

---

Shawn Brown  
Quaker Color  
201 S. Hellertown Ave.  
Quakertown, PA 18951

Steve Lange  
Leather Research Laboratory  
University of Cincinnati  
5997 Center Hill Ave., Bldg. C  
Cincinnati, OH 45224

John Rodden  
Union Specialties, Inc.  
3 Malcolm Hoyt Dr.  
Newburyport, MA 01950

Jose Luis Gallegos  
Elementis LTP  
546 S. Water St.  
Milwaukee, WI 53204

LeRoy Lehman  
LANXESS Corporation  
9501 Tallwood Dr.  
Indian Trail, NC 28079

Marcelo Fraga de Sousa  
Buckman North America  
1256 N. McLean Blvd.  
Memphis, TN 38108

---

## EDITORIAL BOARD

---

Dr. Meral Birbir  
Biology Department  
Faculty of Arts and Sciences  
Marmara University  
Istanbul, Turkey

Chris Black  
Consultant  
St. Joseph, Missouri

Dr. Eleanor M. Brown  
Eastern Regional  
Research Center  
U.S. Department of Agriculture  
Wyndmoor, Pennsylvania

Dr. Anton Ela'mma  
Retired  
Perkiomenville, Pennsylvania

Cietta Fambrough  
Leather Research Laboratory  
University of Cincinnati  
Cincinnati, Ohio

Mainul Haque  
ALCA Education  
Committee Chairman  
Rochester Hills, Michigan

Joseph Hoefler  
Dow Chemical Company  
Collegeville, Pennsylvania

Elton Hurlow  
Retired  
Memphis, Tennessee

Prasad V. Inaganti  
Wickett and Craig of America  
Curwensville, Pennsylvania

Dr. Tariq M. Khan  
Research Fellow, Machine Learning  
Faculty of Sci Eng & Built Env  
School of Info Technology  
Geelong Waurm Ponds Campus  
Victoria, Australia

Nick Latona  
Eastern Regional Research Center  
U.S. Department of Agriculture  
Wyndmoor, Pennsylvania

Dr. Xue-pin Liao  
National Engineering Centre for Clean  
Technology of Leather Manufacture  
Sichuan University  
Chengdu, China

Dr. Cheng-Kung Liu  
Research Leader (Ret.)  
Eastern Regional Research Center  
U.S. Department of Agriculture  
Wyndmoor, Pennsylvania

Dr. Rafea Naffa  
New Zealand Leather & Shoe  
Research Association Inc. (LASRA\*)  
Palmerston North, New Zealand

Edwin Nungesser  
Dow Chemical Company  
Collegeville, Pennsylvania

Dr. Benson Ongarora  
Department of Chemistry  
Dedan Kimathi University of Technology  
Nyeri, Kenya

Lucas Paddock  
Chemtan Company, Inc.  
Exeter, New Hampshire

Dr. J. Raghava Rao  
Central Leather  
Research Institute  
Chennai, India

Andreas W. Rhein  
Tyson Foods, Inc.  
Dakota Dunes, South Dakota

Dr. Majher Sarker  
Eastern Regional  
Research Center  
U.S. Department of Agriculture  
Wyndmoor, Pennsylvania

Dr. Bi Shi  
National Engineering Laboratory  
Sichuan University  
Chengdu, China

Dr. Palanisamy Thanikaivelan  
Central Leather  
Research Institute  
Chennai, India

Dr. Xiang Zhang  
Genomics, Epigenomics and  
Sequencing Core  
University of Cincinnati  
Cincinnati, Ohio

Dr. Luis A. Zugno  
Buckman International  
Memphis, Tennessee

---

## PAST PRESIDENTS

---

G. A. KERR, W. H. TEAS, H. C. REED, J. H. YOCUM, F. H. SMALL, H. T. WILSON, J. H. RUSSELL, F. P. VEITCH, W. K. ALSOP, L. E. LEVI, C. R. OBERFELL, R. W. GRIFFITH, C. C. SMOOT, III, J. S. ROGERS, LLOYD BALDERSO, J. A. WILSON, R. W. FREY, G. D. McLAUGHLIN, FRED O'FLAHERTY, A. C. ORTHMANN, H. B. MERRILL, V. J. MLEJNEK, J. H. HIGHBERGER, DEAN WILLIAMS, T. F. OBERLANDER, A. H. WINHEIM, R. M. KOPPENHOEFER, H. G. TURLEY, E. S. FLINN, E. B. THORSTENSEN, M. MAESER, R. G. HENRICH, R. STUBBINGS, D. MEO, JR., R. M. LOLLAR, B. A. GROTA, M. H. BATTLES, J. NAGHSKI, T. C. THORSTENSEN, J. J. TANCOS, W. E. DOOLEY, J. M. CONSTANTIN, L. K. BARBER, J. J. TANCOS, W. C. PRENTISS, S. H. FAIRHELLER, M. SIEGLER, F. H. RUTLAND, D.G. BAILEY, R. A. LAUNDER, B. D. MILLER, G. W. HANSON, D. G. MORRISON, R. F. WHITE, E. L. HURLOW, M. M. TAYLOR, J. F. LEVY, D. T. DIDATO, R. HAMMOND, D. G. MORRISON, W. N. MULLINIX, D. C. SHELLY, W. N. MARMER, S. S. YANEK, D. LeBLANC, C.G. KEYSER, A.W. RHEIN, S. GILBERG, S. LANGE, S. DRAYNA, D. PETERS

THE JOURNAL OF THE AMERICAN LEATHER CHEMISTS ASSOCIATION (USPS #019-334) is published monthly by The American Leather Chemists Association, 1314 50th Street, Suite 103, Lubbock, Texas 79412. Telephone (806)744-1798 Fax (806)744-1785. Single copy price: \$8.50 members, \$17.00 non-member. Subscriptions: \$185 for hard copy plus postage and handling of \$60 for domestic subscribers and \$70 for foreign subscribers; \$185 for ezine only; and \$205 for hard copy and ezine plus postage and handling of \$60 for domestic subscribers and \$70 for foreign subscribers.

Periodical Postage paid at Lubbock, Texas and additional mailing offices. Postmaster send change of addresses to The American Leather Chemists Association, 1314 50th Street, Suite 103, Lubbock, Texas 79412.



# Stahl's innovations driven by sustainability

---

With the rise of both electric and self-driving, cars are becoming quieter and anti-squeak and rattle materials are becoming increasingly important. At the same time, improved anti-stain performance is required, because of the current trend for pale-colored car seats. Therefore, we have developed Stay Clean. This low-VOC coating technology protects pale-colored leather and vinyl surfaces against common stains, such as dye from jeans, spilled coffee and dirt. Our solution also makes surfaces low-squeak, which is a great asset as global research has shown that a squeaking car interior is one of the biggest annoyances among car owners. Another trend in car interior is the popularity of matt surfaces. Therefore, we have developed PolyMatte®. This non-squeaking solution provides a luxurious feel to the finished article in combination with flexibility and scratch and abrasion resistance. Our portfolio contains many products, varying from beamhouse products, tanning systems to finishes,

duller concentrates, crosslinkers and thickeners to leveling agents, defoamers, colorants and hand modifiers. Our most sustainable option is Green PolyMatte®, which is based on rapeseed oil (20%) instead of crude oil-derived intermediates. If you would like to know what our Stahl solutions for automotive can do for your business, please visit [www.stahl.com](http://www.stahl.com) or contact us at: [alexander.campbell@us.stahl.com](mailto:alexander.campbell@us.stahl.com).

If it can be imagined, it can be created



Stay Clean



Low-VOC



PolyMatte®



*Celebrating*  
**75** Years  
1941-2016

**UNION**  
*Specialties, Inc.*

**The power of water-based  
polyurethane technology**

3 Malcolm Hoyt Dr. Newburyport, MA 01950, USA. Certified ISO 9001:2015  
Tel: +1 978-465-1717 Fax: +1 978 465-4194 E-mail: [union@unionspecialtiesinc.com](mailto:union@unionspecialtiesinc.com)

**[www.unionspecialtiesinc.com](http://www.unionspecialtiesinc.com)**



**SCOTT NORTHAM, CPA, PC**  
Certified Public Accountants

**INDEPENDENT ACCOUNTANT'S REPORT  
ON APPLYING AGREED-UPON PROCEDURES**

American Leather Chemists Association  
1314 50<sup>th</sup> Street, Suite 103  
Lubbock, TX 79412

We have performed the procedures enumerated below, which were agreed to by American Leather Chemists Association (ALCA), solely to assist you in evaluating the revenue and expense transactions of the Organization for the fiscal year ended December 31, 2021. ALCA's management is responsible for the presentation of the revenue and expense transactions. This agreed-upon procedures engagement was conducted in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

We examined the detailed general ledger and a representative sample of the revenue and expense transactions and the related underlying supporting documentation for the organization for the fiscal year ended December 31, 2021 for the purpose of determining whether the documentation presented properly supported the revenue and expense transactions and were properly categorized within the financial records. We found no significant exceptions within the revenue and expense transactions tested.

We were not engaged to conduct, and did not conduct, an examination, the objective of which would be the expression of an opinion on the financial statements of the Organization. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to my attention that would have been reported to you.

This report is intended solely for the information and use of by the directors and management of American Leather Chemists Association and is not intended to be and should not be used by anyone other than those specified parties.

SCOTT NORTHAM, CPA, PC  
Ruidoso, New Mexico  
March 24, 2021

1035 Mechem Drive  
Ruidoso, NM 88345

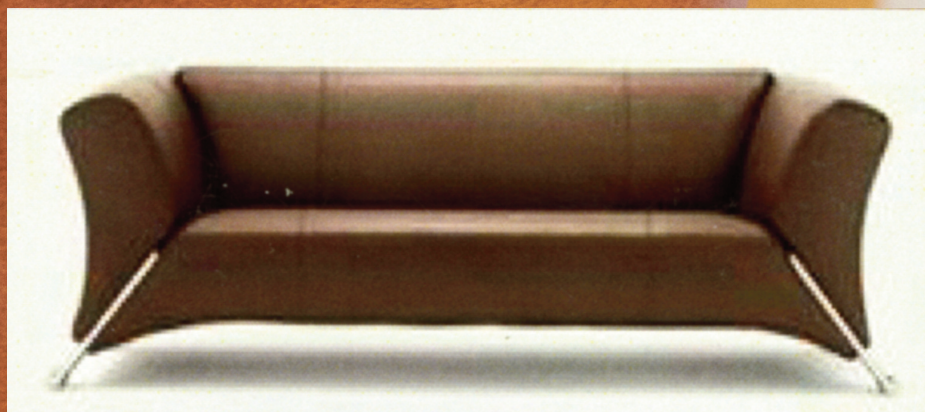
(575) 258-5559  
FAX (575) 258-5570

LEATHER

**AVELLISYNCO**



## Selected Dyestuffs



 **CHEMTAN**

17 Noble Farm Drive • Lee, NH 03861 (Office)  
57 Hampton Road • Exeter, NH 03833 (Manufacturing)  
Tel: (603) 772-3741 • Fax: (603) 772-0796  
[www.CHEMTAN.com](http://www.CHEMTAN.com)



# 116th ALCA ANNUAL CONVENTION June 21-24, 2022 Eaglewood Resort & Spa Itasca, IL

**Featuring the 61st John Arthur Wilson Memorial Lecture**

**"The Road Ahead"**

**By Randy Johnson, President and CEO**

**P A N G E A**

Formerly GST Seton

## **Tentative Schedule**

**Tuesday, June 21**

***Golf Tournament, Opening Reception and Dinner***

**Wednesday, June 22**

***John Arthur Wilson Memorial Lecture  
All Day Technical Sessions, Fun Run  
Reception and Dinner, Activities - Bowling, Pool,  
Darts and an Open Bar***

**Thursday, June 23**

***All Day Technical Sessions, Annual Business Meeting  
Activities Awards Luncheon  
Social Hour, ALCA Awards Banquet***

***Visit us at [www.leatherchemists.org](http://www.leatherchemists.org) for full details  
under Annual Convention as they become available***





***When leather feels this good,  
the boots come off last!***



**Leather chemistry for today.**

Tel: (603) 772-3741 • Fax: (603) 772-0796  
[www.CHEMTAN.com](http://www.CHEMTAN.com)

ISO 9001 Certified



# C O L D M i l l i n g



Smooth Leather  
Milling



Erretre s.p.a. | Via Ferraretta, 1 | Arzignano (VI) 36071 | tel. +39 0444 478312 | info@erretre.com