

THE

Journal

OF THE AMERICAN
LEATHER CHEMISTS ASSOCIATION



106th Annual Convention

to be held at the
Grand Geneva
Lake Geneva, WI
June 10-13, 2010

For more information go to
www.leatherchemists.org

ISSN: 0002-9726

March 2010

Vol. CV, No. 3

JALCA 105(3), 71-108, 2010

CONTENTS

Effect of Chromium and Tanning Method on the Drape of Goat Suede Apparel Leathers	71
<i>by K. KRISHNARAJ, P. THANIKAIVELAN AND B. CHANDRASEKARAN</i>	
An Environmentally Friendly Leather-making Process Based on Silica Chemistry	84
<i>by YUANSEN LIU, YI CHEN, JIAN YAO, HAOJUN FAN, BI SHI AND BIYU PENG</i>	
Thermal Shrinkage Effects on the Mechanical Behavior of Leathers	94
<i>by K. TANG, D. CASADONTE, JR., X. ZHENG, P. JIA, AND D. SHELLY</i>	
Cost Effective Fixing Process for Post Tanning Operation	100
<i>by N. FATHIMA, J. RAO AND B. NAIR</i>	
Lifelines	107
Spring Meeting of ALCA Research Liaison Committee	107
Call for Papers for the 106th Annual Convention	108

COMMUNICATIONS FOR JOURNAL PUBLICATION

Manuscripts, Technical Notes and Trade News Releases should contact

MR. ROBERT F. WHITE, *Journal Editor*, 1314 50th Street, Suite 103, Lubbock, TX 79412, USA.

E-mail: jalcaeditor@prodigy.net

Mobile phone: (616) 540-2469

Contributors should consult the Journal Publication Policy at
http://www.leatherchemists.org/journal_publication_policy.asp

JOURNAL OF THE AMERICAN LEATHER CHEMISTS ASSOCIATION

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

OFFICERS

DAVID LeBLANC, *President*
11800 Pine Valley Club Drive
Charlotte, NC 28277

CRAIG G. KEYSER, *Vice-President*
19 Lake Drive
North Brunswick, NJ 08902

ANDREAS W. RHEIN, *Vice-President Elect*
S. B. Foot Tanning Co.
805 Bench Street
Red Wing, MN 55066

COUNCIL

Michael Bley
Eagle Ottawa LLC
2930 Auburn Road
Rochester Hills, MI 48309

Alex Campbell
Stahl USA
13 Corwin Street
Peabody, MA 01961

Goetz Hagen
BASF Corporation
4330 Chesapeake Drive
Charlotte, NC 28216

Steve Lange
Seton Company
Horton Drive
Saxton, PA 16678

Jeffery D. Miller
GST Auto Leather, Inc
31601 Industrial Rd.
Livonia, MI 48150

George Stockman
Buckman Laboratories, Inc.
12567 N. McLean Blvd.
Memphis, TN 38108-3513

EDITORIAL BOARD

Chris Black
Prime Tanning Corporation

Dr. Kenneth A. Boni
Retired

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

Dr. Robert L. Dudley
Retired

Dr. Graham Lampard
Leather, UK

Dr. Cheng-Kung Liu
Eastern Regional Research Center
U.S. Department of Agriculture

Dr. Edwin H. Nungesser
Dow Chemical Company

David N. Price
Consultant

Dr. Mila Aldema Ramos
Eastern Regional Research Center
U.S. Department of Agriculture

George Stockman
Buckman Laboratories, Inc.

Brandon Yoemans
S. B. Foot Tanning Co.

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 BALDERSON, 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. FEAIRHELLER, 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. MULLINX, D. C. SHELLY, W. N. MARMER, S. S. YANEK

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: \$175.00 plus postage and handling of \$40 for domestic subscribers and \$50 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.

Website: www.leatherchemists.org E-mail: ALCA@leatherchemists.org

COPYRIGHT 2010. THE AMERICAN LEATHER CHEMISTS ASSOCIATION