

Symposium focuses on processing steps

The fundamentals of vegetable oil processing were the main topics at an all-day symposium held by the AOCS Northeast Section in April in Newark, New Jersey. Nearly 90 participants listened to four industry experts speak on degumming and refining, bleaching, filtration, and deodorization and deacidification of vegetable oils.

Roy Carr of the POS Pilot Plant Corp. in Saskatoon, Saskatchewan, covered degumming and refining. His talk included information on caustic and degumming routes in refining, sources of oil, purification, equipment and control methods. He particularly noted that improper refining could affect subsequent processes such as bleaching, hydrogenation and deodorization. Carr said refining efficiency was harmed by short runs, and he pointed out the need to balance sales needs against short-run processing costs.

Consultant Calvin Zehnder agreed that a balance is needed between sales demand and production costs. His presentation on deodorization and deacidification included information on process theory, accepted process-operating parameters, equipment and the potential for the physical refining of certain oils. Zehnder explained that even though physical refining has economic advantages, current technology is not yet suitable for soybeans, the most important seed processed in the U.S.

Werner Zschau's talk dealt with the properties of bleaching clays and included information on wet bleaching and chlorophyll removal. Zschau, Süd-Chemie AG's director of technical service and new products, said bleaching clays function in capacities other than bleaching. The clays can be used to decompose peroxides and phosphatides, remove soaps in alkaline refining, and remove metals such as copper and iron. He also said wet bleaching can bring phosphatide levels in soybean oil down to acceptable levels in physical refining.



Roy Carr (second from right) fields a question during the discussion session at the AOCS Northeast Section's all-day processing symposium as other panelists (from the left) Werner Zschau, Frank Passalacqua and Calvin Zehnder listen.

Ed King and Frank Passalacqua of Industrial Filter & Pump Manufacturing Co. covered the area of filtration.

During the round table discussion, Carr noted that much of the canola oil in Canada is physically refined. One reason that physical refining is possible for canola is

canola feedstock is often more uniform than soybeans. Commenting on the effect of supercritical extraction on the industry, Carr said it is better suited for low-volume, high-value products at this time. Zschau recommended nitrogen blanketing to reduce peroxide products.

Northeast candidates

Election of 1988-89 officers for the Northeast Section of AOCS was scheduled to be held Tuesday, June 7, 1988, at the section's Guest Night at the Friar Tuck Inn in Cedar Grove, New Jersey.

Officer candidates were the current section officers: Anthony J. Montana of M&T Chemicals Inc., section president; Dennis Breitbart of T.J. Lipton Inc., section vice president; Aura Maza of Best Foods/CPC International, section secretary; and J. Alex Wei of Biosearch, section treasurer.

Candidates for the four board of directors slots were Len Johnson of Hoffmann-La Roche, James W. Hampson of the U.S. Department of Agriculture's Eastern Regional Research Center, August A. Rossetto of Salomon Inc. and Robert L. Baird of Polyesther Corp.

Tony Bimbo, research director at Zapata-Haynie, was to be the featured speaker. Bimbo was to give a talk about fish oils.

Mustafa and Norris win Smalley again

For the second year in a row, Shams Mustafa and Charles R. Norris have won the top awards for analysis of fats and oils in the Smalley Cooperative Check Sample Program.

Mustafa, of Caleb Brett (USA) Inc., Jefferson, Louisiana, earned the Smalley Award for oilseed meal analysis, and Norris, of Mid-Continent Labs, Jackson, Mississippi, won the R.T. Doughtie Jr. Award for best analysis of cottonseed in the 1987-88 program. Both are second-time winners of these awards.

In the check sample program, Mustafa earned a total of eight certificates, including a first place for fish solubles and six honorable mentions in other categories. Norris, meanwhile, earned five certificates, with four honorable mentions in other categories.

The Smalley Award is presented for best analysis of oilseed meal for combined nitrogen, oil and moisture. It is named for Frank Smalley, founder of the AOCS check sample program. The Doughtie Award is given for best analysis of cottonseed for foreign matter, moisture, free fatty acids, oil and ammonia. The award, formerly the Barrow-Agee Award, is named for Richard T. Doughtie Jr., a long-time chairman of the Smalley Program.

John Thomas, B. Butler and M. Haider of SGS Control Services, Kenner, Louisiana, earned eight certificates as a team, including three first-place awards. Frank W. Weber of SGS Control Services, Carteret, New Jersey, won seven certificates, with two first-place awards. Guy E. Moore of Woodson-Tenent Labs, North Little Rock, Arkansas, won six certificates, including a first place in soybeans.

The Smalley Program in 1987-88 distributed 7,686 samples of oilseed and fats and oils materials to subscribing chemists, who analyzed the samples using specified AOCS methods. A total of 453 individuals or labs participated in the program, compared with 441 in 1986-87. During the 1987-88 program, a palm oil series was added, and the drying oil series was dropped.

Participants' results are analyzed statistically to determine who has performed the best analysis in each category; subscribers receive reports enabling them to compare their proficiency with that of other participants. Chemists whose results are significantly awry know their instruments or their laboratory technique may be faulty. First-place and honorable mention certificates are awarded for each category of analysis. Winners for the 1987-88 program were recognized at the AOCS annual meeting in May in Phoenix.

Chemists who wish to participate in the 1988-89 check sample program should write to Smalley Check Sample Program, PO Box 3489, Champaign, IL 61821-0489, USA.

Winners of first-place and honorable mention certificates for 1987-88 include the following:

Oilseed Meal

Combined moisture, oil and nitrogen

First Place (Smalley Award)

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

Honorable Mention

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

David Humphrey, Pattison's Laboratories, Harlingen, TX

Zana Bodiford and Vaji Mohtashami, SGS Control Services, Deer Park, TX

Robert Humphreys, Southern Cotton Oil, Division of ADM, Memphis, TN

Charles R. Norris, Mid-Continent Labs, Jackson, MS

Moisture

First Place

J.E. Williams, Archer Daniels Midland Co., Clarksdale, MS

Honorable Mention

Charles R. Norris, Mid-Continent Labs, Jackson, MS

Douglas E. McLemore, Woodson-Tenent Labs, Dayton, OH

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

L.J. Bastijns, Laboratoires Oleotest SPRL, Antwerp, Belgium

John Ledin, Woodson-Tenent Labs, Des Moines, IA

Oil

First Place

Zana Bodiford and Vaji Mohtashami, SGS Control Services, Deer Park, TX

Honorable Mention

Frank W. Weber, SGS Control Services, Carteret, NJ

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

Guy E. Moore, Woodson-Tenent Labs, North Little Rock, AR

David Humphrey, Pattison's Laboratories, Harlingen, TX

Nitrogen

First Place

Robert Humphreys, Southern Cotton Oil, Division of ADM, Memphis, TN

Honorable Mention

Garlon J. Beckwith, Mid-Continent Labs, Greenwood, MS

W.B. Sizer, General Testing Labs, Division of SGS, Vancouver, British Columbia, Canada

Leon Hunter, Pope Testing Labs, Dallas, TX

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

J.E. Williams, Archer Daniels Midland Co., Clarksdale, MS

Crude Fiber

First Place

J.E. Williams, Archer Daniels Midland Co., Clarksdale, MS

Honorable Mention

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

Elaine S. Abbott, Woodson-Tenent Labs, Gainesville, GA

Charles R. Norris, Mid-Continent Labs, Jackson, MS

Jack W. Henry, Iowa Testing Labs, Eagle Grove, IA

Donald E. Britton, Mid-Continent Labs, Memphis, TN

Soybeans

Combined moisture, oil and ammonia

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First Place

Guy E. Moore, Woodson-Tenent Labs, North Little Rock, AR

Honorable MentionShams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA
H. Newton Beavers, Woodson-Tenent Labs, Goldston, NC
Charles R. Norris, Mid-Continent Labs, Jackson, MS
Elaine S. Abbott, Woodson-Tenent Labs, Gainesville, GA
John Ledin, Woodson-Tenent Labs, Des Moines, IA**Cottonseed***Foreign matter, moisture, free fatty acids, oil and ammonia***First Place (R.T. Doughtie Jr. Award)**

Charles R. Norris, Mid-Continent Labs, Jackson, MS

Honorable Mention

Guy E. Moore, Woodson-Tenent Labs, North Little Rock, AR

Sunflower Seed*Foreign matter, moisture and oil***First Place**

Zana Bodiford and Vaji Mohtashami, SGS Control Services, Deer Park, TX

Honorable MentionFrank W. Weber, SGS Control Services, Carteret, NJ
John Ledin, Woodson-Tenent Labs, Des Moines, IA**Peanuts***Moisture, free fatty acids, oil and ammonia***First Place**

Frank W. Weber, SGS Control Services, Carteret, NJ

Honorable Mention

Leon S. Hunter, Pope Testing Labs, Dallas, TX

Safflower*Moisture, oil and nitrogen***First Place**

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Honorable Mention

Frank W. Weber, SGS Control Services, Carteret, NJ

Rapeseed*Moisture, oil and nitrogen***First Place**

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Honorable Mention

Frank W. Weber, SGS Control Services, Carteret, NJ

Peanut Aflatoxin**First Place**

Joel H. Padmore, North Carolina Department of Agriculture, Raleigh, NC

Honorable Mention

Pam Smith, Seabrook Blanching Corp. of Georgia, Sylvester, GA

M. Caerou, Duquesne Purina, Montfort-Sur-Risle, France

Ram V. Dhara, Matthew McAvan Enterprises, Mississauga, Ontario, Canada

Peter Wiertz, Vereldigte Handelschemiker, Hamburg, West Germany

Peanut Aflatoxin Food & Mycotoxin Unit, Department of General Services, Division of Consolidated Labs, Richmond, VA

Corn Aflatoxin**First Place**

Santhi Kanoktanaporn, SGS Far East Ltd., Bangkok, Thailand

Honorable MentionBill MacDonald, Krispak, Scarborough, Ontario, Canada
J. Viviers, Maize Board of Pretoria, Pretoria, South Africa
Guy E. Moore, Woodson-Tenent Labs, North Little Rock, ARJaume Cifuentes, Gallina Blanca Purina SA, Barcelona, Spain
Steve Stroh, Iowa Department of Agriculture, Des Moines, IA**Cottonseed Aflatoxin****First Place**

Scott Waldmire, California Department of Food and Agriculture Feed Lab, Sacramento, CA

Honorable Mention

Jackie Roles, Casa Grande Oil Mill, Casa Grande, AZ

John Wieters, Morris Testing Labs, Macon, GA

Milk Aflatoxin**First Place**

Mark Von Stetina and John Slatner, Department of General Services, Division of Consolidated Labs, Richmond, VA

Honorable Mention

R. Battaglia, Cantonal Laboratory Zurich, Zurich, Switzerland

Fish Meal*Protein, fat, moisture, ash and pepsin digestibility***First Place**

Elaine S. Abbott, Woodson-Tenent Labs, Gainesville, GA

Honorable Mention

John Ledin, Woodson-Tenent Labs, Des Moines, IA

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

Fish Solubles*Protein, fat, moisture, ash, pH and ammonia nitrogen***First Place**

Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA

Honorable Mention

Lynn A. Hawkins, Barrow-Agee Labs, Memphis, TN

Fish Oil*Free fatty acids, moisture and iodine value***First Place**

Frank W. Weber, SGS Control Services, Carteret, NJ

Honorable Mention

Paul C. Thionville, Thionville Labs, New Orleans, LA

Soybean Oil*Free fatty acids, neutral oil and bleached color***First Place**

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Honorable Mention

Lynn A. Hawkins, Barrow-Agee Labs, Memphis, TN

James B. Scoggins, Hahn Laboratories, Columbia, SC

Zana Bodiford and Vaji Mohtashami, SGS Control Services, Deer Park, TX

Paul Thionville, Thionville Labs, New Orleans, LA

K.F. Wood, Hunt-Wesson Foods Inc., Memphis, TN

Cottonseed Oil*Free fatty acids, refining loss and refined color***First Place**

Jesse L. Peoples, Hunt-Wesson Foods Inc., Savannah, GA

Honorable Mention

John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Guy E. Moore, Woodson-Tenent Labs, North Little Rock, AR

Lynn A. Hawkins, Barrow-Agee Labs, Memphis, TN

Robert Humphreys, Southern Cotton Oil, Division of ADM, Memphis, TN

Inside AOCS

Vegetable Oil for Color Only

First Place

L.Q. Rocque, Hunt-Wesson Foods Inc., Fullerton, CA

Honorable Mention

Frank W. Weber, SGS Control Services, Carteret, NJ
John Ledin, Woodson-Tenent Labs, Des Moines, IA
Douglas E. McLemore, Woodson-Tenent Labs, Dayton, OH
Guy E. Moore, Woodson-Tenent Labs, North Little Rock, AR

Tallow and Grease

Titer, free fatty acids, moisture, unsaponifiable matter and insoluble impurities

First Place

John Ledin, Woodson-Tenent Labs, Des Moines, IA

Honorable Mention

H. Hirayama, Nippon Yuryo Kentei Kyokai, Yokohama, Japan
Shams Mustafa, Caleb Brett (USA) Inc., Jefferson, LA
Zana Bodiford, SGS Control Services, Deer Park, TX
T.M. Narayanan Nair, Charles V. Bacon Labs, Irvington, NJ
John Thomas, B. Butler and M. Haider, SGS Control Services, Kenner, LA

Edible Fats

Free fatty acids, α -monoglycerides, Wiley melting point, capillary melting point, congeal point, solid fat index, A.O.M. stability, Lovibond red color, peroxide value and iodine value

First Place

Thomas R. McCrory, Kraft Industrial Foods, Memphis, TN

Honorable Mention

K.F. Wood, Hunt-Wesson Foods Inc., Memphis, TN
J.L. Witwer, Kraft Food Ingredients, Sherman, TX
Paul C. Thionville, Thionville Labs, New Orleans, LA
T.M. Narayanan Nair, Charles V. Bacon Labs, Irvington, NJ
Herbert L. Haynie, Bunge Edible Oil, Ft. Worth, TX

NIOP Fats and Oils

Specific gravity, free fatty acids, iodine value, saponification value and Lovibond color

First Place

Yukio Yamakawa, Nippon Yuryo Kentei Kyokai, Yokohama, Japan

Honorable Mention

L.J. Bastijns, Laboratoires Oleotest SPRL, Antwerp, Belgium
Barbara Sprinkle, Associated Laboratories, Orange, CA
T.M. Narayanan Nair, Charles V. Bacon Labs, Irvington, NJ
Paul C. Thionville, Thionville Labs, New Orleans, LA

Gas Chromatography

Preparation of methyl esters on fats and oils and GC determination of fatty acids

First Place

Neil Loeb, Lever Brothers Co. Research Center, Edgewater, NJ

Honorable Mention

Pat Ross, Sherex Chemical Co., Dublin, OH
Melvin R. Swick, Harshaw/Filtrol Partnership, Beachwood, OH
John Green, Humko Products, Industrial Foods Division of Kraft Inc., Champaign, IL
W. Schellingerhout, Unimills B.V., Zwijndrecht, Holland
Christopher Hanks, Monarch Fine Foods Ltd., Rexdale, Ontario, Canada
Carl W. Schulze, New Jersey Feed Lab, Trenton, NJ

Cellulose Yield

Moisture and cellulose

First Place

Lint Laboratory Team, Buckeye Cellulose Corp., Memphis, TN

Honorable Mention

Robert Humphreys, Southern Cotton Oil, Division of ADM, Memphis, TN

Palm Oil

Free fatty acids, slip melting point, cloud point, Lovibond red color and iodine value

First Place

Edtech Associates Sdn. Bhd., Penang, Malaysia

Honorable Mention

Edtech Associates Sdn. Bhd., Kuala Lumpur, Malaysia
Madam Y.Y. Lau, Syarikat Testing Lab, Selangor, Malaysia
Cham Woon Peng, Chem Sain Konsultant, Kuching, Malaysia

NC officers

Michael Erickson of Interstate Foods (front row in photo, center) has been elected president of the North Central Section of AOCS for 1988-89.

Other officers elected at the section's April 27, 1988, meeting are Gail Qualeatti of UOP, vice president (front row, first from the left); Cathy Stroh of EMI Corp., secretary-treasurer (second row, center); and members-at-large Jim Zatorski of Interstate Foods (second row, on the left), Goad Mozayeni of Akzo Chemie America (second row, on the right), and Gerry Hasenhuettl of Kraft Inc. (standing in rear).

Serving as immediate past president is Govind R. Mirmira of Kraft Inc. (front row, on the right).



Protein officers

The AOCS Protein and Co-Products Section has elected Nancy DiMarco as its chairperson for 1988-89. DiMarco is an associate professor in the Department of Nutrition and Food Sciences at Texas Woman's University, Denton, Texas.

DiMarco served as the section's vice chairperson for 1987-88.

Other officers elected in April are Robert Ory, vice chairperson, and Frank W. Sosulski, reelected secretary-treasurer. Ory, now retired, worked for many years at the U.S. Department of Agriculture's Southern Regional Research Center in New Orleans. Sosulski is professor of crop science at the University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Also, three members-at-large were chosen. They are Lawrence Johnson, professor in charge of the Food Crops Processing Research Center and associate professor of food technology at Iowa State University; John P. Cherry, director of the U.S. Department of Agriculture's Eastern Regional Research

Center in Philadelphia; and Anthony Chen, chairman of the board for 3I Corp. in Plano, Texas.

A total of 47 ballots were cast in the election.

Those voting also approved amending the section's by-laws to permit the election of a slate of officers based on one nominee for each office.

Obituary

EDWARD N. GERHARDT



was 59 years old.

Mr. Gerhardt joined AOCS in 1962. At that time, he was section leader in analytical development for Emery Industries, later named Emery Chemicals and now a division of Quantum Chemical Corp.

He earned his B.S. in chemistry from Xavier University, Cin-

cinnati, Ohio, in 1950, and a M.S. in chemistry in 1959.

He worked in organic analysis for two years at Ballistics Research Laboratory in Aberdeen, Maryland; three years in analytical development at the National Lead Co.; six years in pharmaceutical analysis at Lloyd, Dabney, Westerfield, before joining Emery in 1962.

At the time of his death, he was technical coordinator for Emery. He had been with Emery nearly 26 years.

He served on the Uniform Methods Committee, as well as such AOCS technical committees as Polyethylene in Fats, Dibasic Acids, Hydrogenated Oils, Instrumental Techniques, Atomic Absorption Spectroscopy, Chromatography, Environmental Control, Industrial Oils & Derivatives Analysis, Environmental, Commercial Fatty Acids and Fatty Nitrogen.

He is survived by his wife, Jeanne, and five children.

AOCS education director

Jean M. Bremer has been selected to fill the newly created position of AOCS education director. She is expected to start in her new position during June.

Bremer most recently served as manager of education programs for the Commercial-Investment Real Estate Council of the National Association of Realtors in Chicago, Illinois, a position she held since July 1985. She previously served as curriculum manager for the Institute of Real Estate Management of the National Association of Realtors and as professional designation coordinator for the Realtors National Marketing Institute of the National Association of Realtors.

She is a graduate of Western Illinois University, with majors in history and English, and earned a Masters degree in adult and continuing education from the National College of Education in Evanston, Illinois, in 1987.

The AOCS Governing Board at its February 1988 meeting had authorized the hiring of an education director in line with a proposal from the Education Coordinating Committee. The education director will develop and manage the society's educational activities. As such, Bremer will serve as staff liaison with the Education Coordinating Committee and all managing committees under it.

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