PROCEEDINGS

of

The Fifty-Sixth Annual Meeting of the

American Society of Bakery Engineers
1980



MARCH 3-5, 1980 CHICAGO, ILLINOIS

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PROCEEDINGS

of the

Fifty-Sixth Annual Meeting

AMERICAN SOCIETY OF

BAKERY ENGINEERS

March 3-5, 1980

Chicago Marriott Hotel, Chicago, Illinois

We gratefully acknowledge the cooperation of the business papers in the baking and allied fields for generously contributing space to describe the activities of the Society during the year. Our special appreciation to those which gave careful coverage to our Annual Meeting and provided us with the photographs which are included in this PROCEEDINGS.

We extend our sincere thanks to the members of the Bakers Courtesy Club of Chicago who served during the Annual Meeting as ushers, microphone monitors and maintained the information desk. On behalf of our members, the Society thanks the "ASK ME" men for serving.

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American Society of Bakery Engineers

ROBERT A. FISCHER, SECRETARY

Room 1921, Riverside Plaza Bldg. 2 North Riverside Plaza CHICAGO, IL 60606

56th ANNUAL MEETING

CHICAGO MARRIOTT HOTEL March 3-5, 1980, Chicago, Illinois

Introduction to the 1980 PROCEEDINGS

One of the most important industries in the world is the food industry—and specifically the baking industry, with bread being the "staff of life."

We are, indeed, fortunate to be a part of this vital industry. The American Society of Bakery Engineers is very pleased to be able to contribute to the growth of our industry through the participation of its members.

For the 56th Annual Meeting of the Society, the Program Committee developed a program consisting of 19 technical papers, as well as a panel discussion, representing many hours of research and preparation in an effort to share knowledge with our members. Those on the program can be justly proud of their contribution, and we appreciate their efforts.

We are grateful to all who participated toward the success of this Meeting and this includes not only those who appeared at the podium as participants, but those serving in other capacities. This includes those serving on various committees: the Bakery Foods Display Committee whose members worked diligently soliciting samples and setting up a beautiful display of a variety of products; the Music Committee which provided music during the technical sessions; the President's Reception

Chairman who arranged a wonderful reception. Another committee extremely active during the Meeting was the Property Committee, whose members handle many phases necessary to the smooth operation of a technical program such as ours.

The Bakery Trade Press participated through coverage of our activities—not only at the time of the Meeting—but throughout the year—and furnished photographs of the Meeting.

Members of the Bakers Courtesy Club of Chicago were very active—serving as ushers and microphone monitors during the sessions and providing a message center for the convenience of our members.

Because all of these individuals became involved, the Society was able to better serve the membership and the industry.

The Annual Meeting this year was held at the Chicago Marriott Hotel, Chicago, Illinois—a new location—from March 3 through 5, 1980. Recorded registration for this 56th Annual Meeting was 1,149—not including ladies who accompany registrants and who receive complimentary badges.

Each year, the Society compiles a PROCEED-INGS similar to this edition—which includes a complete coverage of the program, a reproduction of the presentations, as well as slides, and a transcript of the discussion period following each presentation. All of this material assembled, provides a very valuable text which is sent to our members as a privilege of membership.

To assure accuracy in the compilation of the text, each individual making a statement, who could be identified, was contacted and given the opportunity to edit his remarks as recorded by the reporter. Every effort has been made to provide an accurate, easy-to-follow text, which represents the intent of the speakers.

In addition to the presentation transcripts, this volume contains a Table of Contents, the Subject Index for the 1980 program, the List of Papers presented from 1965 to 1980, a List of Technical Bulletins, a List of E.I.S. Reports and a complete registration list.

The Annual Meeting also serves as a time for members of the industry to gather for special group meetings. The Canadian Member Luncheon is one example. Another is the Allied Trades of the Baking Industry and their popular Early Bird Breakfast. Other groups holding luncheon meetings were the Clayton Emerick Memorial group and the A.A.C.C.; KSU-FSU and A.I.B. Alumni held breakfast meetings.

A bit of socializing was provided during the President's Reception at which members had an opportunity to meet the current officers and to visit with friends. The ladies, too, had their Tea on Sunday afternoon and a hospitality room for their use—an innovation this year.

Every member receives a copy of the PROCEEDINGS—which we hope will become a permanent part of his technical library on bakery production. This book will be of particular value to members who were not able to attend the Annual Meeting, and will also provide a valued reference for all members.

FOR YOUR INFORMATION

For your convenience in locating the various rooms in the Chicago Marriott assigned for our use, we list the floors:

PROGRAM MEETING ROOMS

Salon III—Seventh Floor
Monday A.M. Session
Monday P.M. "A" Session
Tuesday A.M. Session
Tuesday P.M. Session
Wednesday A.M. Session

Salon II—Seventh Floor Monday P.M. "B" Session

OTHER

Northwestern and Ohio Rooms **Advisory Committee** Meeting—Sixth Floor Purdue and Wisconsin Rooms-Luncheon for Advisory Committee— Sixth Floor Northwestern Room—Executive Committee Meeting (Sun.)—Sixth Floor Salon III—Program Participant's Meeting— Seventh Floor A.S.B.E. Office—Seventh Floor Lincolnshire II—Property Room—Sixth Floor Anteroom Area—Registration—Seventh Floor Chicago Ballrooms A, B & D-Bakery Foods Display—Fifth Floor Northwestern Room-Executive Committee Meeting (Wed.)—Sixth Floor

FOR YOUR CONVENIENCE

Restaurants in Chicago Marriott Allie's Bakery La Plaza J. W.'s

PRIZES ON DISPLAY

See the prizes for the Wednesday morning attendance drawings in the lobby window of the gift shop on the north side of the lobby.

INTRODUCTION

TO YOUR

56th ANNUAL MEETING

Welcome fellow Engineers to the Annual Meeting of the American Society of Bakery Engineers. This year we have 19 papers covering a variety of subjects which we think will be interesting to you.

We also have a panel discussion entitled Trends of the '80s which features five outstanding subjects and speakers.

This year the popular Bakery Foods Display starts immediately after the Tuesday P.M. session for the convenience of our members. The new Chicago Marriott Hotel on North Michigan Avenue is our meeting place and we know you will like these new facilities.

The Session Chairmen and program participants have worked long and diligently in preparing their assignments for the program. We ask you to take an active part in each of the sessions by asking questions and/or making comments.

The Officers and the Program Chairmen sincerely hope that the 56th Annual Meeting will be of value to you and that you have an enjoyable time while you are in Chicago.

A. CHARLES ROLAND, III PROGRAM CHAIRMAN

F. ROBT. GRANT FIRST ASSISTANT PROGRAM CHAIRMAN

ANTAL G. OSZLANYI SECOND ASSISTANT PROGRAM CHAIRMAN

AMERICAN SOCIETY OF BAKERY ENGINEERS

ROOM 1921, RIVERSIDE PLAZA BLDG. 2 NORTH RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606

OFFICERS 1979-1980



FRANK H. OTWAY President



J. W. DOTY Second Vice President



R. RICHARD SCHLIPF First Vice President



ERNEST T. STEVENS Third Vice President



ROBERT A. FISCHER Secretary-Treasurer

PROGRAM CHAIRMEN 1979-1980



F. ROBT. GRANT First Assistant Chairman



A. CHARLES ROLAND,III Program Chairman



ANTAL G. OSZLANYI Second Assistant Chairman

OFFICERS OF AFFILIATES TO A.S.B.E.

BRITISH SOCIETY OF BAKING

Chairman Geoff Prince First Vice Chairman Peter R. Ort Second Vice Chairman Jim Brown Third Vice Chairman David P. Roberts Secretary Ronald W. Sheppard Assistant Secretary Sheila J. Wedgwood Treasurer David J. Garratt

AUSTRALIAN SOCIETY OF BAKING

Chairman John W. Packham
First Vice Chairman Zig Bluzmanis
Second Vice Chairman George G. Benjamin
Third Vice Chairman Ronald Devereaux
Secretary-Treasurer Michael B. Dennis

REGISTRATION

Please register promptly on arrival to prevent delays during meeting hours.

Registration Hours

Sunday

12 Noon to 5:00 P.M.

Monday

8:00 A.M. to 5:00 P.M.

Tuesday

8:00 A.M. to 5:00 P.M.

Wednesday

8:00 A.M. to 10:00 A.M.

Registration Desk

Seventh Floor

Please cooperate by keeping escalator landings free of crowds, and avoid group conversations in front of registration desks.

Registration Fees

Members

\$40.00

Non-Members

\$60.00

Registration includes President's Reception and Bakery Foods Display. Admittance to these events is limited to registrants—by badge only.

IOINING THE SOCIETY

A non-member who joins the Society before registering for the 56th Annual Meeting can register as a member.

The Membership Committee maintains a desk in the registration area during the registration hours. Committee members are on hand to explain the benefits of membership and to assist in signing up new members.

AN EXPLANATION OF **BADGES AND RIBBONS**

Badge Inserts

White for all registrants With a star, for new members (who have joined since 9/1/79)

Ribbons

White for overseas visitors Silver, coral, ruby & gold for members with 25 years or more of continuous membership Blue for members on the program Green for Committee Chairmen and Executive Committee members

SCHEDULE OF LADIES' ACTIVITIES

SUNDAY, MARCH 2, 1980

2:30-4:30 P.M.-Ladies' Tea

Great America I & II Sixth Floor

MONDAY, MARCH 3, 1980

8:00 A.M.-4:00 P.M.—Hospitality Room

Great America I

Sixth Floor 5:30-7:00 P.M.—President's Reception

Salon I

Seventh Floor

TUESDAY, MARCH 4, 1980

10:00 A.M.—Ladies' Tour

and Luncheon

WEDNESDAY, MARCH 5, 1980

8:00 A.M.-12 Noon—Hospitality Room Great America I Sixth Floor

PRE-MEETING SCHEDULE OF EVENTS SUNDAY, MARCH 2, 1980

10:00 A.M.—ADVISORY COMMITTEE

MEETING

Northwestern and Ohio Rooms

Sixth Floor

1:00 P.M.—ADVISORY COMMITTEE

LUNCHEON

Purdue and Wisconsin Rooms

Sixth Floor

2:00 P.M.—EXECUTIVE COMMITTEE

MEETING

Northwestern

Sixth Floor

2:30-4:30 P.M.'-LADIES' TEA

Great America I & II Sixth Floor

4:00 P.M.—PROGRAM PARTICIPANTS.

SESSION CHAIRMEN AND MEETING CHAIRMEN MEETING

Salon III

Seventh Floor

POST-MEETING SCHEDULE OF EVENTS WEDNESDAY, MARCH 5, 1980

2:00 P.M.—EXECUTIVE COMMITTEE

MEETING

Northwestern

Sixth Floor

THURSDAY, MARCH 6, 1980

8:00 A.M.—PROGRAM COMMITTEE

MEETING

Illinois Room

Sixth Floor

SCHEDULE OF NON-A.S.B.E.-MEETING FUNCTIONS MONDAY, MARCH 3, 1980

American Institute of Baking Alumni **Association Breakfast**

7:30 A.M.—Illinois & Indiana Rooms—Sixth Floor Evert Kindstrand, Chairman

KSU-FSU Bakery Science Management **Alumni Association Breakfast**

7:30 A.M.—Denver & Houston Rooms—Fifth Floor David N. Pfefer, Chairman

TUESDAY, MARCH 4, 1980

Allied Trades of the Baking Industry, Inc. **Early Bird Breakfast**

8:00 A.M.—Salon II—Seventh Floor Ernest O. Cain, Chairman

American Association of Cereal Chemists Luncheon

11:45 A.M.—Los Angeles Room—Fifth Floor Reb Heinz, Chairman

Canadian Members Luncheon

11:45 A.M.—Denver & Houston Rooms—Fifth Floor Sidney R. Rowell

Clayton Emerick Memorial Luncheon Luncheon

11:45 A.M.—Chicago Ballrooms G & H-Fifth Floor Joseph DeMaria, Chairman

MONDAY MORNING PROGRAM

March 3, 1980 SALON III

9:00 - Meeting Room Opens

9:15 — Call to Assembly and Greetings Byron R. Bard, Fort Worth, TX Meeting Chairman

- Entrance of Officers
Introductions by Byron R. Baird

— America The Beautiful
Andrew Maier, II, Reading, PA
God Bless America
Audience led by Andrew Maier, II

— Invocation
Lyle C. Woods, Olathe, KS

— The President Comments Frank H. Otway, Springfield, OH

— The Secretary Reports
ROBERT A. FISCHER, Chicago, IL

— Program Preview
A. Charles Roland, III, St. Louis, MO

Annual Business Meeting
 Conducted by Frank H. Otway, President

- Presentations and Introductions

— Greetings from the Retail Bakers of America JAMES GREBE, President Milwaukee, WI

— Greetings from the American Bakers
Association
ROBERT J. WAGER, President
Washington, DC

— Introduction of Speaker
J. W. Dory, N. Kansas City, MO

— Opening Address
W. T. Webb, Decatur, IL

Announcements
 Frank H. Otway, President

11:30 - Adjournment

MONDAY AFTERNOON PROGRAM

March 3, 1980

TECHNICAL PRODUCTION SESSION "A"
SALON III

1:15 - Meeting Room Opens

1:20 — Call to Assembly

Byron R. Baird, Fort Worth, TX

Meeting Chairman

1:25 — Introduction to Technical Production Session

M. E. Adams, Glenview, IL Session Chairman

1:30 — Manufacture and Processing of Frozen Dough

Bill E. Boyd, St. Louis, MO Factors related to the handling and stability of frozen unbaked dough.

1:50 — Discussion

2:00 — Sweeteners in Bun Production

B. ALVIN MORGAN, Decatur, IL

A comparison of sweeteners used in bun production.

2:20 — Discussion

2:30 — Dispersible Powdered Softeners

James L. Suggs, Kingsport, TN

Properties, applications and advantages of dough-dispersible powdered softeners.

2:50 - Discussion

3:00 — Handling Pans on Air

Russell D. Crall, Glen Ellyn, IL

A new system for the movement and storage of baking pans.

3:20 — Discussion

3:30 — Proper Use of Preservatives

Christopher S. Hickey, St. Louis, MO

Extending shelf life by limiting microbial growth in yeast-raised items.

3:50 — Discussion

4:00 — Adjournment

MONDAY AFTERNOON PROGRAM

March 3, 1980
TECHNICAL PRODUCTION SESSION "B"
SALON II

1:15 — Meeting Room Opens

1:20 — Call to Assembly
R. RICHARD SCHLIPF, La Crosse, WI
Meeting Chairman

1:25 — Introduction to Technical Production
Session

DONALD E. SNYDER, Elk Grove Village, IL Session Chairman

1:30 — Systematic In-Bakery Research Using EV-OP Methods

> Dr. Simon S. Jackel, Greenwich, CT Use of evolutionary operation methods and bakery research.

1:50 — Discussion

2:00 — Use of Soy Products in Bakery Foods

Franklin D. French, Decatur, IL The nutritional and functional properties of soy-based ingredients.

2:20 - Discussion

2:30 - Honey Buns

WAYNE G. HILDEBRAND, Mt. Airy, MD The techniques used in honey bun production.

2:50 — Discussion

3:00 - Icing Stabilizers

Lawrence W. Levine, Teaneck, NJ Formulations and production techniques for specific applications.

3:20 - Discussion

3:30 - Variety Doughnuts

JOHN H. TREADWELL, Minneapolis, MN Finishing and merchandising of various types of doughnuts.

3:50 - Discussion

4:00 — Adjournment

MONDAY EVENING PROGRAM

March 3, 1980 SALON I

5:30-7:00 — President's Reception

George E. Laurance, Chicago, IL, Chairman President Otway and the other officers, with their ladies, look forward to meeting fellow members and guests at this annual social event. Chairman Laurance has planned this event with your enjoyment in mind.

TUESDAY MORNING PROGRAM

March 4, 1980 SALON III

9:45 — Meeting Room Opens

9:50 — Call to Assembly

J. W. Dory, N. Kansas City, MO Meeting Chairman

9:55 — Introduction to Technical Production Session

Peter S. Miravalle, St. Louis, MO Session Chairman

10:00 — Conveyorized Proofing and Baking Systems

Peter E. Grogan, Burlingame, CA The use of conveyors in proofing and/or baking.

10:20 — Discussion

10:30 — Vacuum Cooling

Anthony R. Fish, Dallas, TX
The principles, equipment and advantages of vacuum cooling.

10:50 — Discussion

11:00 — Automated Roll Slicing and Handling into Packaging

Dale S. Lecrone, Jackson, MI Past, present and future of roll slicing and packaging.

11:20 - Discussion

11:30 - Adjournment

TUESDAY AFTERNOON PROGRAM

March 4, 1980 SALON III

1:30 — Meeting Room Opens

1:35 — Call to Assembly

Ernest T. Stevens, Birmingham, AL Meeting Chairman

1:40 — Introduction to Technical Production Session

Frank M. Covey, Decatur, IL Session Chairman

1:45 — Oxidizing and Reducing Agents

Paul W. Kamman, Park Ridge, IL Different types of oxidizing materials for their use in baking.

2:05 - Discussion

2:15 — Staling

Dr. Bert L. D'Appolonia, Fargo, ND Ways to prolong shelf life.

2:35 - Discussion

2:45 - Trends of the '80s

A panel discussion of what lies in store for the baking industry in the 1980s in specific areas.

Topics and Panel Members:

Commodities

MORTON I. SOSLAND, Kansas City, MO

Energy

SAM G. VAN SICKLE, Chicago, IL

Production, Labor, Equipment

FRANK R. GOLEY, Dallas, TX

Marketing/Distribution

RICHARD Z. GRAHAM, Defiance, OH

Regulatory

ROBERT J. WAGER, Washington, DC

4:30 — Adjournment

TUESDAY EVENING PROGRAM March 4, 1980

CHICAGO BALLROOMS A, B & D

4:45-7:00—Bakery Foods Display

HAROLD D. FORTNER, Franklin, Park, IL Chairman

Geoffrey B. Burgess, Chillicothe, OH Assistant Chairman—Display Coordination

THOMAS J. DEGNAN, Jr. Franklin Park, IL Assistant Chairman—Eastern Area

RICHARD L. KOENIG, Franklin Park, IL

Assistant Chairman—Midwestern Area ROLAN E. FLETCHER, Norcross, GA

Assistant Chairman—Southern Area JAMES D. KNOX, Hayward, CA

Assistant Chairman—Western Area

WILLIAM A. HOFFMAN, Chicago, IL GEORGE J. KIEFER, St. Paul, MN GUNNAR LYNUM, Crystal Lake, IL B. ALVIN MORGAN, Decatur, IL MELVIN W. MUELLER, Mt. Prospect, IL RONALD D. PATTI, Chicago, IL VERNON T. E. PEARSON, Chicago, IL JOHN C. PLUMLEY, EVERGREEN PARK, IL LOUIS J. SCARPINO, Jackson, MI

ROGER W. STRAND, Minneapolis, MN

The Bakery Foods Display covers the widest possible variety of bakery foods from all corners of our country and from all over the world. It has practical significance in acquainting us with progress in our specialized field of production. It also instills in us the pride in the achievement of our industry and its contribution to human nutrition.

The Display opens at 4:45 P.M. Tuesday, March 4, 1980. ADMISSION BY BADGE ONLY. Samples in the general display area are to be VIEWED ONLY and may not be opened. Samples in the "tear-apart room" are open and can be examined closely. At 7:00 P.M. when the display closes, all samples will be turned over to the Salvation Army for local consumption.

We acknowledge with grateful appreciation the cooperation of our friends in the allied trades, who collected most of the bakery products for this Display. We also thank the donors of this merchandise. Their help makes this Display possible. Our thanks to our members who sent in the samples of their products.

WEDNESDAY MORNING PROGRAM

March 5, 1980 SALON III

9:00 — Meeting Room Opens

9:05 — Call to Assembly
Frank H. Otway, Springfield, OH
Meeting Chairman

9:10 — Introduction to Technical Production Session

> R. Lewis Wilson, Jr., Plano, TX Session Chairman

9:15 — Oven Efficiency and Alternate Fuels

Lynn S. McManus, Saginaw, MI

Optimum energy conservation for ovens.

9:35 — Discussion

9:45 — Liquid Pre-Ferments

Joe E. Turner, Sr., Fort Worth, TX

The advantages of using water preferments.

10:05 — Discussion

10:15 — Training the Trainer

Dr. Darrell D. Brensing, Manhattan, KS

Procedures for establishing a training program.

10:35 - Discussion

10:45 — Selling Bakery Products to Benefit Nutrition

> DR. PAUL A. LACHANCE, New Brunswick, NJ How the baking industry can maximize its opportunities which are afforded by the dietary goals.

11:05 — Discussion

11:15 — Installation of Officers

11:20 — President's Comments and Appointments

11:35 — The Lord's Prayer
Andrew Maier, II, Reading, PA

11:40 - Final Adjournment

A.S.B.E. POLICIES AND GENERAL INFORMATION

COMMERCIALISM POLICY

If you have a question to ask or a statement to make during the sessions, request a microphone, rise, state your name, city and state, and then proceed. It is the FIRM POLICY of the Society that everyone appears as an individual and not as the representative of any commerical organization; hence, there shall be no commercial exploitation of any product, machine, equipment, brand name, firm name, patent, publication or service from either the speakers' platform or the floor.

ALLIED ACTIVITIES

All hospitality rooms are to be closed during all business sessions. It is also expected that commercial promotion of company or brand names will not be indulged in through such media as signs, room displays, motion pictures, general distribution of printed literature, samples, or advertising novelties. The usual cooperation of all allied firms in this policy which has been such an important factor in the success of our Meetings in past years is anticipated again this year.

BAKERY FOODS DISPLAY

Under no circumstances is anyone permitted to remove any bakery products from the display area either while the Display is open or after it closes.

JOINING THE SOCIETY

This is an excellent time to join the Society. Application blanks are available at the Membership Desk and signed applications will be accepted. A temporary receipt will be provided. Your official dues card, membership certificate and printed material will be mailed after the Meeting.

Also page 28 of this Program is a membership application form for your convenience.

PAYMENT OF DUES

Those desiring to pay dues during the Annual Meeting may do so at the Special A.S.B.E. Office located conveniently on the Seventh Floor. A.S.B.E. personnel will be on duty, and will give you a temporary receipt. Your dues card and membership certificate will be mailed to you after the Meeting.

WEAR YOUR BADGE!

You will be admitted to the Meeting ONLY if you are wearing your badge. Wear it proudly on your right lapel; it is your identification that you have registered for the 56th Annual Meeting.

BE A BOOSTER MEMBER

To our members—if you have an associate or acquaintance who would benefit from membership in the Society—pass the application form in this book along to him.

GROW WITH US

If you attended our Meeting as a Non-Member and feel you will benefit by membership in the Society, just fill in the form and mail to our office with \$50.00 (\$5.00 is for initiation fee and \$45.00 dues for the fiscal year). This entitles you to all the publications issued during this period INCLUDING the complete transcript of the Annual Meeting PROCEEDINGS which alone is worth your initial investment.

BAKERS COURTESY CLUB

The members of this very fine group of Chicago Allied Men volunteer their services for our Meeting each year. They contribute greatly to the conduct and success of the Annual Meeting and we are pleased to publicly acknowledge their outstanding help again this year.

These men are identified by the familiar "ASK ME" badges. Please cooperate with them.

In addition to ushering during all regularly scheduled functions, they render valuable assistance in many other ways, namely:

- ... See that everyone is promptly seated.
- ... Prevent congestion at the door at all times.
- ... Man the microphones in the Meeting Room when you have a question to ask or a statement to make.
- ... Assist where possible in providing information about the Meeting.
- ... Maintain an Information Desk in the Rendezvous Foyer. A courteous attendant is on duty at all times between and during sessions ready to be of service.
- ... Receive telephone calls, telegrams, and personal messages which reach the hotel for those attending our Meeting. No interruptions to page anyone are permitted except in extreme emergencies.
- ... Post notices of calls or messeges on Message Board. By checking this board occasionally you can help them in their service to you.
- ... Distribute session material such as Program Evaluation Cards, handout materials, etc.

This outstanding organization has long been of real service to us and to the industry of which we are all a part. May they continue to grow and prosper.

AMERICAN SOCIETY OF BAKERY ENGINEERS

The second second	The same of the sa						
PPLICATION FOR MEMBERSHIP					Date		
ereby apply for membership in the American Society of Bakery Engineers.					Please check one or more, Attended:		
elected, I promise and agree to abide by the constitution and policies of this organization				organization.	High School Name		
PLEASE TYPE OR PRINT ALL ANSWERS					College or University Name		
Name (in full)					DegreeCourse		
Home Address					☐ Baking School Name		
Date of Birth	Street Address	City	State	Zip Code	Recommended by: 1		
Name of Employer					Recommended by: 2		
Employer's Business Add	dress	City	State	Zip Code			
Send mail to:			siness Address		Signature		
Business of Employer		Posi	tion Held		Send application to Secretary AMERICAN SOCIETY OF BAKERY ENGINEERS		
Fifty dollars should accompan National dues for the fiscal y					Room 1921, Riverside Plaza Bldg. 2 North Riverside Plaza Chicago, Illinois 60606		

COMMITTEES 1979-1980 EXECUTIVE COMMITTEE

Frank H. Otway, Springfield, OH R. Richard Schlipf, La Crosse, WI J. W. Doty, N. Kansas City, MO Ernest T. Stevens, Birmingham, AL Robert A. Fischer, Chicago, IL Byron R. Baird, Fort Worth, TX Frank J. Fischer, Kansas City, KS Frederick J. Bower, Winston-Salem, NC J. Robert Newlon, Columbus, OH Charles F. Blumm, Pittsburgh, PA F. Robt. Grant, St. Louis, MO Jonathan Arnold, San Francisco, CA Charles R. Clabbers, Savannah, GA Herman G. Burkett, Dallas, TX Harold Jaffe, City of Industry, CA David J. Ash, Deerfield, IL Francis M. Covey, Decatur, IL Richard C. Freihofer, St. Louis, MO Joseph W. Hickenbottom, Greenwich, CT

STANDING COMMITTEES

Financial-John C. MacAlpine, Swarthmore, PA Publications-Frank E. Johnson, Oak Creek, WI Information Service-Simon S. Jackel, Greenwich, CT Manual-Paul W. Kamman, Park Ridge, IL Sanitation-William E. Pieper, Oak Lawn, IL Index-Ross Holton, Denver, CO Nominating-Byron R. Baird, Fort Worth, TX Membership-William O. Devilbiss, Towson, MD Planning and Steering-Charles B. Clark, Fort Smith, AR Insurance-James A. Boge, Park Ridge, IL Hotel Housing-Robert O. Benson, Chicago, IL Educational-William A. Hoffman, Chicago, IL Public Relations-John C. Morris, Wilmette, IL Research and Study-Herman Saussele, Jr., St. Louis, MO Safety Z-50—Robert C. Anderson, Port Washington, NY Standardization of Terms-Richard E. Pyler, Fargo, ND Exposition Booth-William H. Fife, Jr., Des Plaines, IL

SPECIAL COMMITTEES

England Charter Trip—Charles Michlowitz, Kings Park, NY

COMMITTEES—1980 PROGRAM PROGRAM COMMITTEE

A. Charles Roland, III, St. Louis, MO Chairman
F. Robt. Grant, St. Louis, MO First Assistant Chairman
Antal G. Oszlanyi, Des Plaines, IL Second Assistant Chairman
Frank H. Otway, Springfield, OH
R. Richard Schlipf, La Crosse, WI
J. W. Doty, N. Kansas City, MO
Ernest T. Stevens, Birmingham, AL
Robert A. Fischer, Chicago, IL

PROPERTY COMMITTEE

Thomas, E. Keffer, Crete, IL
Property Manager
Donald F. Bianchi, Arlington Heights, IL
Richard A. Danko, Teaneck, NJ
William F. Geist, Rockford, IL
Larry J. Hobbs, Dayton, OH
George E. Laurance, Chicago, IL
George A. Miller, Arlington Heights, IL
Steven B. Smith, Oak Creek, WI
Lon D. Zimmerman, St. Louis, MO
Assistant Property Managers

BAKERY FOODS DISPLAY

Harold D. Fortner, Franklin Park, IL Chairman Geoffrey B. Burgess, Chillicothe, OH Thomas J. Degnan, Jr., Franklin Park, IL Rolan E. Fletcher, Norcross, GA James D. Knox, Hayward, CA Richard L. Koenig, Franklin Park, IL Assistant Chairmen William A. Hoffman, Chicago, IL George J. Kiefer, St. Paul, MN Gunnar Lynum, Crystal Lake, IL B. Alvin Morgan, Decatur, IL Melvin W. Mueller, Mt. Prospect, IL Ronald D. Patti, Chicago, IL Vernon T.E. Pearson, Chicago, IL John C. Plumley, Evergreen Park, IL Louis J. Scarpino, Jackson, MI Roger W. Strand, Minneapolis, MN Committeemen

PRESIDENT'S GET-AQUAINTED RECEPTION

George E. Laurance, Chicago, IL-Chairman

MUSIC COMMITTEE

Walter N. Clissold, Evanston, IL—Chairman Andrew Maier, II, Reading, PA—Co-Chairman

DECEASED MEMBERS

C. F. Tuzin, Chicago, IL Jerome N. Jutton, Dallas, TX John Kirk, Woodinville, WA Nesbitt Movery, Chicago, IL H. T. Lawler, San Antonio, TX E. V. Waack, Saginaw, MI Harold W. McGhee, Miami, MO Gustav A. Wilde, Pittsburgh, PA A. G. Powell, Thomasville, GA James A. Carr, Dallas, TX Conrad H. Schild, Minneapolis, MN Wm. Stoneman Jr., Santa Monica, CA Murray Nissman, Chicago, IL Jack V. Rippy, Bloomington, IL John S. Lynch, Chicago, IL Akira Mochizuki, Sudbury, Ont., Canada Robert C. Miessler, Clearwater, FL Curtis H. Brooks, Mankato, MN William H. Knuepler, Flossmoor, IL Past President M. J. Swortfiguer, Owensville, MO Terry J. Stuart, Dallas TX Robert J. Dwyer, Minneapolis, MN Glenn E. Hargrave, Shawnee Mission, KS Charles O. Bailar, Menasha, WI Lewis P. MacAdams, Dallas, TX Claude R. Stratton, Alexandria, VA Since our Annual Meeting last year, we learned of the passing of the members listed above. Each contributed in some measure to the success of our Society and we shall miss their presence at our Annual Meetings and their support.

PAST PRESIDENTS

(Year of election shown)

1924-Richard Wahl, Palm Bay, FL 1925—C. J. Patterson (deceased) 1926 & 1927-E. B. Price (deceased) 1928—George W. Tassie (deceased) 1929—Gordon H. Darnell, (deceased) 1930-Louis E. Caster (deceased) 1931-Ross E. Anderson (deceased) 1932-Robert L. Gerdes (deceased) 1933-Carl S. Pickering, San Diego, CA 1934—Edward M. Joy 1935-F. B. Evers, Nashville, TN 1936-W. J. Ocken (deceased) 1937-John Roberts, Beaumont, TX 1938-Roger Brandenburg (deceased) 1939—William Hauck (deceased) 1940-Walter T. Molloy (deceased) 1941-Cecil C. Cadwell (deceased) 1942—Wm. F. Gossadge, Lee's Summit, MO 1943-Willard H. Geller (deceased) 1944 & 1945—Albert J. Faulhaber, Longboat Key, FL 1946—Guy T. Shiverdecker, Kettering, OH 1947-Jake M. Albright, Park Ridge, IL 1948—Otto Richter, San Antonio, TX 1949-Harold T. Moody, Westminster, CA 1950—Don F. Copell (deceased) 1951—Earl B. Cox (deceased) 1952-Fred Weberpals, Queens Village, NY 1953-M. J. Swortfiguer (deceased) 1954-Wallace K. Swanson, Atlanta, GA 1955-Martin Eisenstaedt, Havertown, PA 1956—Arthur G. Hackett, Venice, FL 1957-Harold M. Freund, City of Industry, CA 1958—Andreas F. Reising, New Orleans, LA 1959-H. Alvin Meyer, Jackson, MS 1960-Clayton C. Daley, Wayne, NJ 1961-Robert Nicolait, Santa Barbara, CA 1962-Robert G. Dibble, Sun City Center, FL 1963-John A. Wagner, Drexel Hill, PA 1964-Walter T. Gase (deceased) 1965-Irwin O. Rohrbach, Reading, PA 1966-George H. Gugler, Sun Valley, CA 1967-Lawrence E. Pile, Cleveland, OH 1968-William C. Kollman, Wilton, CT 1969—William H. Ziemke, San Jose, CA 1970—Carl C. Hauswald, Jr., Baltimore, MD 1971—Robert C. Brink, Villa Hills, KY 1972-Louis J. Richter, San Antonio, TX 1973-Paul W. Kamman, Park Ridge, IL 1974—Charles B. Clark, Fort Smith, AR 1975-Eugene D. Swenson, Winter Haven, FL 1976—Donald S. Noot, Hazelwood, MO 1977—John L. DeKeizer, Deerfield, IL

1978-Byron R. Baird, Fort Worth, TX

PAST PROGRAM COMMITTEE CHAIRMEN

(Year of program shown)

(Year of program shown)
1020 F P Nicolait (danced)
1929—E. B. Nicolait (deceased) 1930—G. Cullen Thomas (deceased)
1931—Peter G. Pirrie (deceased)
1931—Peter G. Pirrie (deceased)
1932—W. E. Doty (deceased)
1933—C. A. McDuffee (deceased)
1934—Ross E. Anderson (deceased)
1935—Charles P. Oliver (deceased)
1936—R. W. Brooks (deceased)
1937—W. E. Doty (deceased)
1938—Harold Hall, Port Angeles, WA
1939—O. S. Otting, New Smyrna Beach, FL
1940—George T. Carlin, Furman, AL 1941—G. Richard Ludlow (deceased)
1941—G. Richard Ludlow (deceased)
1942—F. J. Coughlin, Cincinnati, OH
1943—Arthur E. Grawert (deceased)
1944—Henry P. Montminy (deceased)
1945 & 1946—Carl W. Steinhauer (deceased)
1947—J. H. Debs, Chicago, IL
1948-Tyler R. Stevens, Cape Elizabeth, ME
1949—Glenn E. Hargrave (deceased)
1950—Charles E. Riley (deceased)
1950—Charles E. Riley (deceased) 1951—Jack S. Devanny, Lincoln, IL 1952—Len P. Kenney (deceased)
1952—Len P. Kenney (deceased)
1953—Elmer F. Glabe, Chicago, IL
1954—Jones E. Mapes, Wyckoff, NJ
1955—T. E. Lauder (deceased)
1956—Len Franzen, Chicago, IL
1957—Ray Thelen, San Diego, CA
1958—Clifton R. Scarborough, Shawmut, AL
1959—Lewis P. MacAdams (deceased)
1959—Lewis P. MacAdams (deceased) 1960—Irwin O. Rohrbach, Reading, PA
1961—James M. Doty, North Kansas City, MO.
1962—Harry D. Gardner, Albion, MI
1963—Ralph E. Manewal (deceased)
1964—Lloyd L. Fisher, Sun City Center, FL
1965—Zenas Block, New York, NY
1966—William F. Schroeder (deceased)
1967—Frank R. Schwain (deceased)
1968—Philip W. Orth, Jr., Oak Creek, WI
1969—G. N. Bollenback, Washington, DC
1970—Gerald Reed, Milwaukee, WI
1971—Donald K. Dubois, Manhattan, KS
1972—Herman Saussele, Jr., St. Louis, MO
1973—Richard M. Beaverson, Dallas, TX
1974—Ernest O. Cain, Dallas, TX
1974—Ernest O. Cain, Dallas, TX
1975—Frank E. Johnson, Oak Creek, WI 1976—Lyle C. Woods, Olathe, KS
1970—Lyle C. Woods, Clathe, KS
1977—Armand P. Cicciu, Scotch Plains, NJ
1978—Frank J. Fischer, Kansas City, KS 1979—J. W. Doty, North Kansas City, MO
1979—J. W. Doty, North Kansas City, MO