PROCEEDINGS

OF

THE FORTY-EIGHTH ANNUAL MEETING

OF THE

AMERICAN SOCIETY OF BAKERY ENGINEERS

1972

MARCH 6-8, 1972
PICK-CONGRESS HOTEL
CHICAGO, ILLINOIS

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AMERICAN SOCIETY OF BAKERY ENGINEERS

PROCEEDINGS of the Forty-Eighth Annual Meeting March 6-8, 1972 Pick-Congress Hotel, Chicago, Illinois

There is some need for bringing to the member's attention what is available in printed form. For your convenience we have listed as a section of this book subjects discussed during the Annual Meetings from 1955 through 1971. Subjects are listed under general headings for easy reference. We hope this listing will emphasize the fact that many of our members may have information on these subjects of which they are not aware. Review the subject matter in your bound PROCEEDINGS from time to time. It pays to be familiar with what is available.

During the year the business papers in the baking and allied fields generously contributed space to describe the activities of the Society. Many of them not only gave careful coverage to our Annual Meeting, but illustrated it fully with photographs taken during the Meeting, and a number of these publications have graciously provided us with their plates to help us make our PROCEEDINGS more attractive. We wish to express our appreciation to all for their splendid cooperation.

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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

48th

ANNUAL MEETING

PICK-CONGRESS HOTEL March 6-8, 1972 Chicago, Illinois

Introduction to the 1972 PROCEEDINGS

As President L. J. Richter sounded the final gavel on Wednesday afternoon, March 8, 1972, the 48th Annual Meeting became history—and work began immediately on these PROCEEDINGS.

Publishing the PROCEEDINGS accomplishes several objectives—the most important of which is that it provides each member, whether or not he attended the Meeting, with a verbatim record of the prepared papers, reproductions of all slides and printed materials which were distributed, and a transcript of all discussions which took place in the meeting room.

To be assured that the transcript we publish is a true reflection of what each speaker intended to say, we send every participant who can be identified, a copy of his comments, as recorded by the reporter, for his editing. Statements made by all participants are strictly their own opinions.

It is also possible to include photographs of many of the members and guests who attended, through the courtesy of the bakery business papers.

The program of the 48th Annual Meeting centered around the presentation of 22 papers at five technical sessions (with concurrent sessions on Tuesday afternoon).

All A.S.B.E. programmed functions were well attended. In addition to the meeting sessions, these included the Ladies Tea on Sunday afternoon, the President's "Get-Acquainted" Reception on Monday evening and the Bakery Foods Display on Tuesday afternoon and evening.

Registration for this Meeting was 1,357, which included non-members as well as members—but did not include registrants' ladies, who received complimentary badges.

For many years other organizations—closely identified with the baking industry—have held meetings at the hotel during our Meeting. In addition to the American Association of Cereal Chemists and the Canadian members (both of which held luncheons on Tuesday), were the Alumni Association of the American Institute of Baking (reception on Sunday), the Allied Trades of the Baking Industry, Inc. (breakfast on Wednesday) and the Clayton Emerick Memorial group (luncheon on Tuesday). We were happy to cooperate with each group in arranging its function.

The members of the Bakers Courtesy Club of Chicago served again this year—as they have for 43 years previously—to assure smooth running of our Meeting. Besides maintaining an Information Desk where messages were received and posted, they also served as ushers and microphone monitors during the sessions. We are genuinely grateful to them for their assistance.

The Property Committee is another group which serves the Society well at its Annual Meeting. Property Manager Bruce W. Bing, Glenwood, Illinois and his assistants handled the hundreds and hundreds of details involved in the set-up of the Meeting room, projecting the slides, making signs, delivering Program Evaluation Cards and hand-out material to the ushers—and many more too numerous to mention.

The Advisory Committee of the Society held its

semi-annual meeting on Sunday morning, March 5 -presided over by President Robert C. Brink. Sixty-eight committee members were present to consider the reports of the Chairmen of the Standing Committees and to make recommendations to the Executive Committee regarding continuation of their work-subject to Executive Committee ap-

The Executive Committee met after luncheon on Sunday-29 were present including past presidents—to consider the matters referred to it and, to consider all other matters pertinent to the Society's operation.

The Executive Committee met again on Wednesday afternoon-this time with 22 in attendance including past presidents, and with President L. J. Richter presiding. At this meeting the details and all facets of the program of the 48th

Annual Meeting were reviewed, discussed—and recommendations for the 49th Annual Meeting were offered.

It has been said many times before—but for the benefit of our newer members we repeat—that the PROCEEDINGS each year becomes a valuable addition to the reference library of our productionminded members. For this reason—and as a convenience to our members—we include a table of contents, a subject index for the 1972 Meeting program and a complete list of the papers which have been presented at Annual Meetings from 1955 to and including 1971.

Keep the PROCEEDINGS with your copies from previous years—and they, along with the Decennial Index, will stand ready to satisfy your quest for nearly any type bakery production information.

FOR YOUR INFORMATION

For your convenience in locating the various rooms in the Pick-Congress assigned for our use, we list the floors:

PROGRAM MEETING ROOMS

Great Hall-Second Floor

Monday A.M. Session

Monday P.M. Session Tuesday A.M. Session

Tuesday P.M. "A" Session

Gold Room-Second Floor

Tuesday P.M. "B" Session Wednesday A.M. Session

OTHER

1917 68 4 Buckingham Room-Advisory Committee Meeting-Ground Level

Alcove—Luncheon for Advisory Committee— Ground Level

Buckingham Room-Executive Committee Meeting (Sun.)-Ground Level

Gold Room-Program Participant's Meeting-Second Floor

Plaza Room-A.S.B.E. Office-Second Floor

Belmont Room-Property Room-Second Floor

Francis I Room-Registration-Second Floor

Windsor and Buckingham Rooms-Bakery Foods Display—Ground Level

Buckingham Room—Executive Committee Meeting (Wed.)—Ground Level

FOR YOUR CONVENIENCE

Restaurants in Pick-Congress

Coffee Shop

Pompeian Room

Royal Scots Grill

Tavern Tap

. Tipperary Inn

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 on page 40 along to him.



INTRODUCTION

TO YOUR

48th ANNUAL MEETING

Welcome!

BESTERON THAN

Your 1972 Program Committee has worked diligently to bring you a timely and up-to-date group of papers. The papers range in scope from ecology and microwaves to production and quality control.

The subject matter of this year's program has again been derived from your replies to the reaction cards and the program questionnaire. With this approach it is felt the resulting program will be of interest to all and for the benefit of all.

The arrangement of the 22 technical papers is changed somewhat from last year. They are so spaced to allow the meeting to be over on the third day at 12:30 p.m. and thereby allow convenient scheduling of transportation. The A and B Sessions on Tuesday afternoon have been timed to allow 1/2 hour for an open panel discussion on bread or cake subjects. Your participation in these discussions will not only make for an interesting session but can benefit your own knowledge. Please present your questions and views.

Your participation in all of the discussion periods will enhance the paper presented and encourage the free exchange of ideas and information as stated in the Engineer's Creed.

Become a part of your program and we all benefit!

HERMAN SAUSSELF

RICHARD M. BEAVERSON FIRST ASSISTANT

ERNEST O. CAIN SECOND ASSISTANT PROGRAM CHAIRMAN

AMERICAN SOCIETY OF BAKERY ENGINEERS.

ROOM. 1921, RIVERSIDE PLAZA BLDG.

2 NORTH RIVERSIDE PLAZA

CHICAGO, ILLINOIS 60606

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OFFICERS 1971-1972



ROBERT C. BRINK President



DONALD K. DUBOIS Second Vice President



LOUIS J. RICHTER First Vice President



PAUL W. KAMMAN Third Vice President



ROBERT A. FISCHER Secretary-Treasurer



VICTOR E. MARX Secretary Emeritus

PROGRAM CHAIRMEN 1971 - 1972



RICHARD M. BEAVERSON First Assistant Chairman



ERNEST O. CAIN Second Assistant Chairman

1971-1972 Officers
British Chapter Affiliated to
The American Society of Bakery Engineers

Chairman—George E. Vere, Rotherham, Yorkshire
First Vice Chairman—David J. Garratt, Norwich, Norfolk
Second Vice Chairman—William Pringle, Cheshire
Secretary—Ronald W. Sheppard, Croydon, Surrey
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1971-1972 Officers
Australian Chapter Affiliated to
The American Society of Bakery Engineers

Chairman—Kenneth Packham, Forestville, S. Aust.
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Second Vice Chairman—R. Green, Balgowlah, N.S.W.
Third Vice Chairman—Leslie J. Allan, Erskineville, Sydney, Aust.
Secretary-Treasurer—S. J. Packham, Hurstville, N.S.W.

Constitution of the state of

REGISTRATION

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

Registration Hours

 Sunday
 1:00 P.M. 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

Francis I Room

Near escalators on second floor. Please cooperate by keeping escalator landings free of crowds, and avoid group conversations in front of registration desks.

Registration Fees

Members \$20.00 Non-Members \$30.00

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

JOINING THE SOCIETY

A non-member who joins the Society before registering for the 48th Annual Meeting can register as a member.

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

SUNDAY, MARCH 5, 1972

10:00 A.M.—ADVISORY COMMITTEE
MEETING

Buckingham Room

1:00 P.M.—ADVISORY COMMITTEE
LUNCHEON

Alcove

2:00 P.M.—EXECUTIVE COMMITTEE

MEETING

Buckingham Room

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

Presidential Suite-Room 400

4:00 P.M.—PROGRAM PARTICIPANTS AND SESSION CHAIRMEN MEETING Gold Room

WEDNESDAY, MARCH 8, 1972

2:00 P.M.—EXECUTIVE COMMITTEE MEETING
Buckingham Room

SUNDAY, MARCH 5, 1972

RECEPTION

American Institute of Baking Alumni-Lincoln and Grant Park Rooms

MONDAY MORNING PROGRAM MARCH 6, 1972 GREAT HALL

9:00-Meeting Room Opens

9:15—Call to Assembly and Greetings

CARL C. HAUSWALD, JR., Baltimore, MD

Meeting Chairman

9:20—Introduction of Song Leaders
WALTER N. CLISSOLD, Chicago, IL
Music Chairman

Song Leaders—
WILLIAM E. BUSSE, South Bend, IN
GEORGE F. CONANT, Louisville, KY
HARRY D. GARDNER, Albion, MI
FRED M. JENSEN, Rolling Meadows, II.
WILLIAM E. MAIER, Reading, PA
WILLIAM C. MILES, Oakville, Ont., Can.
HARRY R. VERNON, Richardson, TX

9:25—Entrance of Officers
Introduction by CARL C. HAUSWALD, Jr.

9:30-Star Spangled Banner-God Save the Queen

9:35—Invocation

JOHN A. WAGNER, Philadelphia, PA

9:40—The President Comments
ROBERT C. BRINK, Cincinnati, OH

9:50—The Secretary Reports
ROBERT A. FISCHER, Chicago, IL

10:15—The Secretary Emeritus Comments VICTOR E. MARX, Chicago, IL

10:20—Program Preview
HERMAN SAUSSELE, Jr., St. Louis, MO
Program Chairman

10:25—Introduction of Speaker

DONALD K. DUBOIS, Kansas City, MO
Second Vice President

10:30—Inspirational Address
DR. A. D. HOLT, Knoxville, TN

11:10-Introductions and Presentations

11:30—Annual Business Meeting
Conducted by ROBERT C. BRINK
President

12:00-Adjournment

MONDAY AFTERNOON PROGRAM MARCH 6, 1972 GREAT HALL

1:30—Meeting Room Opens
HARRY D. GARDNER, Albion, MI
Song Leader

1:35—Call to Assembly
CARL C. HAUSWALD, JR., Baltimore, MD
Meeting Chairman

1:40—Introduction to Technical Session FRANK E. JOHNSON, Oak Creek, WI Session Chairman

1:45—Application of Microwaves to Bakery Production ERNEST W. STEIN, New York, NY

A survey of present and possible future applications of microwaves to bakery production. Applications for proofing, baking, and thawing of frozen breads, cakes, doughnuts, and other bakery items. A layman's explanation of microwaves and the government regulations for the use of microwaves.

2:05-Discussion

2:25—What are the Ecological Requirements for Operating a Bakery

BYRON R. BAIRD, Fort Worth, TX

A timely discussion of what the bakery production man will be faced with from the standpoint of ecology. Liquid and solid waste control, as well as gas emission control.

2:45-Discussion

3:05-Impact of New Safety Regulations

EARL A. JOHNSON, Grandview, MO

A consideration of the now-in-force Health Education and Welfare Department's Safety Regulations as they affect the production department. Machinery and environmental requirements.

3:25-Discussion

3:45-The Effect of Enrichment on Production

C. W. OFELT, New York, NY

A review of past, present and future requirements for vitamin and mineral enrichment as it applies to production. Various forms of enrichment with the effects of various types of iron salts. The new enrichment standards.

4:05-Discussion

4:25—Adjournment

MONDAY EVENING PROGRAM

MARCH 6, 1972

GOLD ROOM

5:30-7:00-President's Reception

J. ROBERT FERRIL, Chicago, IL, Chairman

The President's Reception provides an opportunity to meet the officers of the Society, to get together on an informal basis with your fellow Engineers and to enjoy a snack with congenial company. Come meet your friends and enjoy yourselves.

TUESDAY MORNING PROGRAM MARCH 7, 1972 GREAT HALL

9:00—Meeting Room Opens
WALTER N. CLISSOLD, Chicago, IL
Song Leader

9:05—Call to Assembly
Louis J. Richter, San Antonio, TX
Meeting Chairman

9:10—Introduction to Technical Session

JACK H. BARCINSKI, New York, NY

Session Chairman

9:15—Oxidation and Reduction as Applied to the Bread Baking Process

CHARLES L. ULIE, Chicago, IL

An explanation of the fundamentals of oxidation and reduction reactions occurring in the bread making process. Various types of oxidizers and reducers and their behavior in terms of their effects in actual production situations.

9:35-Discussion

9:45-No-Time Dough Systems

C. DEAN BINGAMAN, Memphis, TN

A discussion of various types of processes being used to produce bread without appreciable fermentation time. Times, temperatures, and other factors affecting this type of production. Effects of certain ingredients, and the pros and cons of this type of production.

10:05-Discussion

10:15-Liquid Sponges

ROBERT WINALSKI, Richmond, VA

A presentation on liquid ferments with and without flour. An analysis of the advantages and disadvantages of this concept. Slides of typical formulas and equipment.

10:35-Discussion

10:45—Production of Bread by Combination of Continuous Mixing and Batch Processes

FELIX E. COTTLE, Leawood, KS

A description of the over-all concept of combining continuous mixing and batch processes. Equipment, formulas, production methods and type of bread produced. Emphasis on utilization of the best features of each type of production.

11:05-Discussion

11:15—Open Panel Discussion— New Fermentation Methods

11:45-Adjournment

LUNCHEONS

Canadian Members-Washington Room

American Assn. Cereal Chemists-Lincoln Room

Clayton Emerick Memorial-Florentine Room

TUESDAY AFTERNOON PROGRAM

MARCH 7, 1972 TECHNICAL SESSION A GREAT HALL

1:15-Meeting Room Opens

Quartet—William E. Maier, Harry D. Gardner, Fred M. Jensen and Harry R. Vernon

1:20—Call to Assembly

Louis J. Richter, San Antonio, TX Meeting Chairman

1:25—Introduction to Technical Session

CHARLES MCNICHOLL, La Mirada, CA Session Chairman

1:30—New Developments and Specifications for Bread Pans and Covers

J. ROBERT BLUM, Cincinnati, OH.

A discussion of new designs, materials, construction and concepts of bread pans. Specifications of proper pans for their intended use and the recommended features for use on related equipment.

1:50-Discussion

2:00-Bread Slicer Maintenance

JOHN D. STANFORD, Salem, IL

Pertinent facts concerning adjustments, honing, blade changing, alignments, types of blades, etc., for all types of slicers. The maintenance of belts and scrapers.

2:20-Discussion

2:30-New Forming Techniques for Buns and Rolls

GEORGE R. ANSLEY, JR., Corpus Christi, TX New developments in equipment and techniques for forming and finishing of rolls and buns. Seeding, cutting and forming devices.

2:50-Discussion

3:00-How to Handle Variations in Flour

JOHN A. GILLIS, Minneapolis, MN

How to recognize and solve problems attributable to flour for both continuous mixing and batch processes. How to correct problems when new lots of flour are started and how to handle variations when they occur.

3:20-Discussion

3:30—Production and Profitability of Variety Breads LOUIS A. VELLONE, Whittier, CA

Formulations and techniques for the profit-

able production of variety breads by the batch process and the continuous mixing method.

3:50-Discussion

4:00-Open Panel Discussion-Bread Subjects

4:30-Adjournment

TUESDAY AFTERNOON PROGRAM MARCH 7, 1972

TECHNICAL SESSION B

1:15-Meeting Room Opens

Quartet—Walter N. Clissold, William E. Busse, George F. Conant, and William C. Miles

1:20—Call to Assembly

Donald K. Dubois, Kansas City, MO Meeting Chairman

1:25-Introduction to Technical Session

EDWARD J. CAMPBELL, Richardson, TX Session Chairman

1:30-Production of Cakes with Extended Shelf-Life

Paul Vachon, Ste. Marie de Beauce, Quebec, Can.

Various techniques and ingredients that can be used to produce both large and small cake units with extended shelf-life. The effects of various types of ingredients on shelf-life.

1:50-Discussion

2:00—Recent Developments in Eggs

ARMAND P. CICCIU, St. Louis, MO

A discussion of new developments in the processing of liquid, frozen and dried eggs. Methods of handling, packaging, thawing, etc. Recent government regulations and new containers.

2:20-Discussion

2:30—Production of Icings and Creme Fillings with Continuous Equipment

FRANCIS J. CLIFFORD, Rye, NY

A description of continuous systems used to continuously produce fillings and icings. Flow and control of this type of production along with ingredients, formulations, costs and quality aspects.

2:50-Discussion

3:00—Production of Cakes Using Latest Emulsifier Systems

RICHARD D. O'BRIEN, Richardson, TX A review of the fundamentals of cake making with emphasis on the types, characteristics, and functions of emulsifiers. Formulas for and slides showing cakes with new emulsifiers. Functional characteristics of various other ingredients.

3:20-Discussion

3:30—Danish Production by Various Methods HAROLD FRANTZ, Coon Rapids, MN

A comparison of conventional, roll-in type Danish production with other modified types of production. Equipment, formulations, and production techniques with the pros and cons of various methods.

3:50-Discussion

4:00—Open Panel Discussion—Cake Subjects

4:30-Adjournment

TUESDAY EVENING PROGRAM MARCH 7, 1972 WINDSOR & BUCKINGHAM ROOMS

4:30-7:30—Bakery Foods Display

J. J. VISKOCIL, Franklin Park, IL, Chairman
WILLIAM J. GREWE, Park Ridge, IL
Assistant Chairman

WEDNESDAY, MARCH 8, 1972

BREAKFAST

Allied Trades of the Baking Industry, Inc.— Great Hall

WEDNESDAY MORNING PROGRAM MARCH 8, 1972 GOLD ROOM

9:30—Meeting Room Opens HARRY R. VERNON, Richardson, TX Song Leader

9:35—Call to Assembly
PAUL W. KAMMAN, Park Ridge, IL
Meeting Chairman

9:40—Introduction to Technical Session STEPHEN F. LAYTON, Hazelwood, MO Session Chairman

9:45—Definitions of Emulsifiers, Conditioners
and Strengtheners
George R. Jackson, Sanford, FL
A definition and explanation of the various
types of fat and other organic derived materials used in bakeries as emulsifiers, conditioners, and strengtheners for bread and
other bakery foods—and, the effect of these
materials on flour.

10:05-Discussion

10:20—Oils, Greases, and Other Release Agents for Bread Pans

CHARLES F. BLUMM, Pittsburgh, PA
A full discussion of the characteristics, composition, application, and specifications for various types of pan release agents. The care of pans and the depanning operations.

10:40-Discussion

10:55—Practical Quality Control
WULF T. DOERRY, Wayne, MI
In-plant control of formulations, mixing, weighing, baking and packaging of bakery foods. The checks to be made and procedures to follow.

11:15—Discussion

11:30—Shelf-life of Frozen Bakery Foods
JOHN L. DEKEIZER, Deerfield, IL
A discussion of factors which affect the shelf-life of bakery foods such as formulations, finishing, packaging, temperatures, humidities, and freezer conditions. A proposed method for testing.

11:50—Discussion

12:05—Installation of Officers
ROBERT C. BRINK, Cincinnati, OH
Meeting Chairman

12:25—"The Lord's Prayer"
WILLIAM E. MAIER, Reading, PA

12:30-Final Adjournment

SPECIAL EVENTS

PRESIDENT'S GET-ACQUAINTED RECEPTION MONDAY EVENING — MARCH 6, 1972 5:30-7:00 P.M. — IN THE GOLD ROOM

J. ROBERT FERRIL, Chairman

The President's Reception always provides a wonderful opportunity to meet the current officers of the Society, to get together informally with your fellow Engineers and to enjoy a snack with congenial company. Come meet your friends and enjoy yourselves.

NANCY CIGLER, Accordionist (Admission by badge only)

MUSIC COMMITTEE

Walter N. Clissold, Chicago, Ill.—Chairman

TUESDAY EVENING — MARCH 7, 1972 4:30-7:30 P.M. — IN THE WINDSOR AND BUCKINGHAM ROOMS

JOSEPH J. VISKOCIL, Chairman WILLIAM J. GREWE, Assistant Chairman

Donald F. Anetsberger
A. C. Formo
Harold D. Fortner
Russell J. Harrison
William A. Hoffman
Reinhard E. Lutz
Thomas G. Maynard
B. A. Morgan
Melvin W. Mueller
John D. Shogren
Wm. D. Untch

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 4:30 P.M. Tuesday, March 7, 1972. ADMISSION BY BADGE ONLY, Samples in the general display area are to be VIEWED ONLY from 4:30 to 6:30 P.M., after which they may be opened for examining, tasting and eating. Samples in the "tear-apart room" may be opened at any time. At 7:30 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 samples of their products.

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 and home city and then proceed. It is the FIRM POLICY of the Society that everyone appears as an individual and not as the representative of any commercial 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, moving 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 40 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 in the Plaza Room (Second 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 48th Annual Meeting.

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 \$30.00 (\$5.00 is for initiation fee and \$25.00 dues for the fiscal year). This entitles you to all the publications issued during this period INCLUDING 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 messages on Message Board; by checking this board occasionally you can help them in their service to you.
- ... Distribute session material such as charts, formulas, releases, when necessary.

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.

COMMITTEES 1971 - 1972 EXECUTIVE COMMITTEE

Robert C. Brink, Cincinnati, Ohio Louis J. Richter, San Antonio, Texas Donald K. Dubois, Kansas City, Mo. Paul W. Kamman, Park Ridge, Ill. Robert A. Fischer, Chicago, Ill. Victor E. Marx, Chicago, Ill. Carl C. Hauswald, Jr., Baltimore, Md. Gerald Reed. Milwaukee, Wisc. John N. Curtin, Winston-Salem, N. C. George H. Frey, Park Ridge, Ill. Ernest O. Cain, Dallas, Texas James W. Kirkpatrick, Kansas City, Mo. James D. Freund, City of Industry, Calif. William E. Dibble, Kansas City, Mo. Lyle C. Woods, Cleveland, Ohio Leonard B. Weislow, Lake Zurich, Ill. Lee J. Pergiel, Philadelphia, Pa. T. Robert Wolfe, Navarre, Ohio Clemens J. Jensen, Dallas, Texas Lois C. Rasco, Overland Park, Kans.

STANDING COMMITTEES

Financial—John C. MacAlpine III, Swarthmore, Pa.
Interrelations—Daniel J. Jette, Anaheim, Calif.
Publications—Rowland J. Clark, Evanston, Ill.
Information Service—Simon S. Jackel, New York, N. Y.
Manual—J. M. Albright, Park Ridge, Ill.
Sanitation—Philip E. Winters, Cincinnati, Ohio
Index—Paul Holton, Chicago, Ill.
Nominating—Carl C. Hauswald, Jr., Baltimore, Md.
Membership—John C. Morris, Wilmette, Ill.
Sidney L. Fisher, Toronto, Ont., Can.
(Co-Chairman)

Steering and Planning—John A. Wagner, Philadelphia, Pa.

Insurance—E. H. Hartman, Sr., Atlanta, Ga. Hotel Housing—Charles J. Regan, Jr., Evergreen Pk., Ill. Educational—Edward A. Alesch, Richardson, Texas Public Relations—Joseph J. Harlin,

Shawnee Mission, Kans.
Research and Study—Paul M. Koren, Cincinnati, Ohio
Safety Z-50—William E. Lanham, Jr., Atlanta, Ga.
Standardization of Terms—E. J. Pyler, Chicago, Ill.
Golden Anniversary Meeting—Harold M. Freund,
City of Industry, Calif.

Atlantic City Booth—R. R. Zimmerman, St. Louis, Mo. Victor E. Marx Award—To be appointed

COMMITTEES — 1972 PROGRAM PROGRAM COMMITTEE

Herman Saussele, Jr., St. Louis, Mo. Chairman

Richard Beaverson, Dallas, Texas First Assistant Program Chairman

Ernest O. Cain, Dallas, Texas Second Assistant Program Chairman

Robert C. Brink, Cincinnati, Ohio

Louis J. Richter, San Antonio, Texas

Donald K. Dubois. Kansas City, Mo.

Paul W. Kamman, Park Ridge, Ill.

Robert A. Fischer, Chicago, Ill.

Victor E. Marx, Chicago, Ill.

PROPERTY COMMITTEE

Bruce Bing, Glenwood, Ill. Property Manager

Thomas E. Keffer, Park Forest, South, Ill.
John C. La Botz, Frankfort, Ill.
Edward A. Stigler, Palos Heights, Ill.
Ray L. Urquidi, Argo, Ill.
Jonathan Yentis, Chicago, Ill.
Assistant Property Managers

PAST PRESIDENTS

- 1924-Richard Wahl, Silver Springs, Md.
- 1925-C. J. Patterson (deceased)
- 1926 & 1927-E. B. Price, Farmington, Conn.
- 1928—George W. Tassie (deceased)
- 1929—Gordon H. Darnell, Van Nuys, Calif.
- 1930-Louis E. Caster (deceased)
- 1931-Ross E. Anderson (deceased)
- 1932-Robert L. Gerdes (deceased)
- 1933-Carl S. Pickering, San Diego, Calif.
- 1934-Edward M. Joy
- 1935-F. B. Evers, Nashville, Tenn.
- 1936-W. J. Ocken (deceased)
- 1937-John Roberts, Begumont, Tex.
- 1938—Roger Brandenburg (deceased)
- 1939-William Hauck (deceased)
- 1940-Walter T. Molloy (deceased)
- 1941-Cecil C. Cadwell (deceased)
- 1942-Wm. F. Gossadge, Louisville, Ky.
- 1943-Willard H. Geller, Chicago, Ill.
- 1944 & 1945-Albert J. Faulhaber, Philadelphia, Pa.
- 1946-Guy T. Shiverdecker, Kettering, Ohio
- 1947-Jake M. Albright, Park Ridge, Ill.
- 1948-Otto Richter, San Antonio, Tex.
- 1949-Harold T. Moody, Westminister, Calif.
- 1950-Don F. Copell (deceased)
- 1951-Earl B. Cox, Los Angeles, Calif.
- 1952-Fred Weberpals, Queens Village, N. Y.
- 1953-M. J. Swortfiguer, Owensville, Mo.
- 1954-Wallace K. Swanson, Deltona, Fla.
- 1955-Martin Eisenstaedt, Havertown, Pa.
- 1956-Arthur G. Hackett, Venice, Fla.
- 1957—Harold M. Freund, City of Industry, Calif.
- 1958-Andreas F. Reising, New Orleans, La.
- 1959-H. Alvin Meyer, Ickson, Miss.
- 1960-Clayton C. Daley, Rye, N. Y.
- 1961-Robert Nicolait, Santa Barbara, Calif.
- 1962-Robert G. Dibble, Sun City Center, Fla.
- 1963-John A. Wagner, Philadelphia, Pa.
- 1964-Walter T. Gase, Saginaw, Mich.
- 1965-Irwin O. Rohrbach, Brooklyn, N. Y.
- 1966-George H. Gugler, Sun Valley, Calif.
- 1967-Lawrence E. Pile, Cleveland, Ohio 1968-William C. Kollman, Wilton, Conn.
- 1969-William H. Ziemke, San Jose, Calif.
- 1970-Carl C. Hauswald, Jr., Baltimore, Md.

PAST PROGRAM COMMITTEE CHAIRMEN

- 1929-E. B. Nicolait (deceased)
- 1930-G. Cullen Thomas, Wayzata, Minn.
- 1931-Peter G. Pirrie (deceased)
- 1932-W. E. Doty (deceased)
- 1933-C. A. McDuffee, Grove, Okla.
- 1934-Ross E. Anderson (deceased)
- 1935—Charles P. Oliver (deceased)
- 1936-R. W. Brooks, East Hebron, N. H.
- 1937-W. E. Doty (deceased)
- 1938-Harold Hall, Port Angeles, Wash.
- 1939-O. S. Otting, New Smyrna Beach, Fla.
- 1940-George T. Carlin, Chicago, Ill.
- 1941-G. Richard Ludlow (deceased)
- 1942-F. J. Coughlin, Cincinnati, Ohio
- 1943-Arthur E. Grawert (deceased)
- 1944-Henry P. Montminy, Arlington, Mass.
- 1945 & 1946—Carl W. Steinhauer (deceased)
- 1947-J. H. Debs, Lake Zurich, Ill.
- 1948-Tyler R. Stevens, Gillette, N. J.
- 1949-Glenn E. Hargrave, Shawnee Mission, Kans
- 1950-Charles E. Riley (deceased)
- 1951-Jack S. Devanny, Lincoln, Ill.
- 1952-Len P. Kenney, Milwaukee, Wis.
- 1953-Elmer F. Glabe, Chicago, Ill.
- 1954-Jones E. Mapes, Wyckoff, N. J.
- 1955-T. E. Lauder (deceased)
- 1956-Len Franzen, Chicago, Ill.
- 1957-Ray Thelen, North Palm Beach, Fla.
- 1958-Clifton R. Scarborough, Bordentown, N. J.
- 1959-Lewis P. MacAdams, Dallas, Texas
- 1960-Irwin O. Rohrbach, Brooklyn, N. Y.
- 1961-James M. Doty, North Kansas City, Mo.
- 1962-Harry D. Gardner, Albion, Mich.
- 1963—Ralph E. Manewal (deceased)
- 1964-Lloyd L. Fisher, Sun City Center, Fla.
- 1965-Zenas Block, New York, N. Y.
- 1966-William F. Schroeder, Newhall, Calif.
- 1967-Frank R. Schwain (deceased)
- 1968-Philip W. Orth, Jr., Oak Creek, Wis.
- 1969-G. N. Bollenback, New Delhi, India
- 1970-Gerald Reed, Milwaukee, Wis.
- 1971-Donald K. Dubois, Kansas City, Mo.

ENGINEERS AMERICAN SOCIETY BAKERY OF

APPLICATION FOR MEMBERSHIP

I hereby apply for membership in the American Society of Bakery Engineers.

If elected, I promise and agree to abide by the constitution and policies of this organization.

PLEASE TYPE OR PRINT ALL ANSWERS

Name (in full) .

Home Address . Street Address State Zim Code

Date of Birth. Name of Employer_

Street Address Send mail to: Home Address

Employer's Business Address

City State Business Address

Business of Employer, Position Held

Thirty dollars should accompany the application. Five dollars is for initiation Fee and twenty-five dollars is for the National dues for the fiscal year Sept. 1, - Aug. 31 and all putilications of the Society for that year.

Pleo	se check one or more.	Attended:
	High School	Name
	College or University.	Name
	Degree	Course
	Baking School	Name
Re	commended by: 1	
Re	commended by: 2	

Send application to Secretary AMERICAN SOCIETY OF BAKERY ENGINEERS Room 1921, Riverside Plaza Bldg. Chicago, Illinois 60606 2 North Riverside Plaza

Zim Code

Signature.

