

PROCEEDINGS
OF
THE FORTY-NINTH ANNUAL MEETING
OF THE
AMERICAN SOCIETY OF BAKERY ENGINEERS
1973



MARCH 5-7, 1973

CHICAGO, ILLINOIS

TABLE OF CONTENTS

Introduction

Introduction	5
Program Booklet Highlights	6-13
Officers	7
Creed	14

Monday Morning Session

The Meeting opens	15
Invocation — <i>John A. Wagner</i>	16
The President comments — <i>Louis J. Richter</i>	16
The Secretary reports — <i>Robert A. Fischer</i>	18
Program preview — <i>Richard M. Beaverson</i>	22
Annual business meeting	23
Introductions and presentations	26
The Secretary Emeritus comments — <i>Victor E. Marx</i>	29
Inspirational address — <i>Edward W. Krause</i>	30
Report on Ladies Tea	36
Report on American Institute of Baking Alumni Reception	36

Monday Afternoon Session

The session opens	37
Important enzyme reaction in the production process — <i>Dr. Robert D. Seeley</i>	38
Discussion	43
Nonfat dry milk — whey — soya protein blends — <i>Charles M. O'Malley</i>	44
Discussion	47
Influencing flavor in bread — <i>Frank J. Martin</i>	49
Discussion	52
Operation of an oven — <i>Otto Richter, Jr.</i>	53
Discussion	58
Report on President's "Get-Acquainted" Reception	62

Tuesday Morning Session

The session opens	63
Various degrees of mechanization in the production of bread — <i>Paul A. Wright</i>	64
Discussion	69
Various degrees of mechanization in the production of buns and rolls — <i>Melvin C. Moore</i>	70
Discussion	76
Various degrees of mechanization in the production of sweet yeast-raised bakery foods — <i>Wiley W. Hargrove</i>	78
Discussion	86
Various degrees of mechanization in variety cake production — <i>Richard L. Morine</i>	90
Discussion	97
Open panel discussion	98
Report on Canadian Member Luncheon	99
Report on American Association of Cereal Chemists Luncheon	99
Report on Clayton Emerick Memorial Luncheon	99

Tuesday Afternoon "A" Session

The session opens	100
Production of buns to meet specific requirements — <i>William W. Farmer</i>	101
Discussion	106
Control of formulation in production — <i>Robert J. Murphy</i>	107
Discussion	112
Sweetener applications in bread production — <i>Frank J. Fischer</i>	113
Discussion	118
Automated variety hearth bread production — <i>Hellmuth Baur</i>	119
Discussion	126
Automated proofing and baking advances — <i>Glenn R. Grissinger</i>	128
Discussion	135

Tuesday Afternoon "B" Session

The session opens	138
Preparation of fruit fillings for various uses — <i>William King</i>	139
Discussion	143
Applications of gums in cakes, fillings and icings — <i>Dave Roberts</i> ...	145
Discussion	150
Formulation of cakes and icings for freezing — <i>Derwin S. Johnsen</i> ..	152
Discussion	159
Factors affecting flavor and eating properties of fruit cake — <i>Frank C. Gnoza</i>	161
Discussion	168
Packaging of variety cake products — <i>Thomas E. Walmsley</i>	169
Discussion	174
Report on Bakery Foods Display	175-176

Wednesday Morning Session

The session opens	177
Bulk material handling equipment — <i>Frank Haile, Jr.</i>	178
Discussion	181
Meeting ecological requirements for liquid waste — <i>Emil F. Dul</i>	185
Discussion	191
How a baker complies with OSHA — <i>Marvin E. Adams</i>	192
Discussion	195
What is OSHA looking at in the bakery? — <i>Joe Velasquez</i>	195
Opportunities awaiting today's bakery supervisors — <i>Clayton</i> <i>C. Daley</i>	201
Discussion	205
Installation of officers	205
Closing prayer of thanks — <i>Victor E. Marx</i>	208
Final adjournment	209

Miscellaneous

Subject index of 1973 Meeting	211
Subject listing of papers covered in PROCEEDINGS — 1955-1972 inclusive	217
Registration list	227

AMERICAN SOCIETY OF BAKERY ENGINEERS

PROCEEDINGS of the
Forty-Ninth Annual Meeting
March 5-7, 1973
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 1972. 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.

2 North Riverside Plaza, Chicago, Ill., U.S.A., 60606

©Copyright 1973 by The American Society of Bakery Engineers
Printed in U.S.A.

TABLE OF CONTENTS

Introduction

Introduction	5
Program Booklet Highlights	6-13
Officers	7
Creed	14

Monday Morning Session

The Meeting opens	15
Invocation — <i>John A. Wagner</i>	16
The President comments — <i>Louis J. Richter</i>	16
The Secretary reports — <i>Robert A. Fischer</i>	18
Program preview — <i>Richard M. Beaverson</i>	22
Annual business meeting	23
Introductions and presentations	26
The Secretary Emeritus comments — <i>Victor E. Marx</i>	29
Inspirational address — <i>Edward W. Krause</i>	30
Report on Ladies Tea	36
Report on American Institute of Baking Alumni Reception	36

Monday Afternoon Session

The session opens	37
Important enzyme reaction in the production process — <i>Dr. Robert D. Seeley</i>	38
Discussion	43
Nonfat dry milk — whey — soya protein blends — <i>Charles M. O'Malley</i>	44
Discussion	47
Influencing flavor in bread — <i>Frank J. Martin</i>	49
Discussion	52
Operation of an oven — <i>Otto Richter, Jr.</i>	53
Discussion	58
Report on President's "Get-Acquainted" Reception	62

Tuesday Morning Session

The session opens	63
Various degrees of mechanization in the production of bread — <i>Paul A. Wright</i>	64
Discussion	69
Various degrees of mechanization in the production of buns and rolls — <i>Melvin C. Moore</i>	70
Discussion	76
Various degrees of mechanization in the production of sweet yeast-raised bakery foods — <i>Wiley W. Hargrove</i>	78
Discussion	86
Various degrees of mechanization in variety cake production — <i>Richard L. Morine</i>	90
Discussion	97
Open panel discussion	98
Report on Canadian Member Luncheon	99
Report on American Association of Cereal Chemists Luncheon	99
Report on Clayton Emerick Memorial Luncheon	99

Tuesday Afternoon "A" Session

The session opens	100
Production of buns to meet specific requirements — <i>William W. Farmer</i>	101
Discussion	106
Control of formulation in production — <i>Robert J. Murphy</i>	107
Discussion	112
Sweetener applications in bread production — <i>Frank J. Fischer</i>	113
Discussion	118
Automated variety hearth bread production — <i>Hellmuth Baur</i>	119
Discussion	126
Automated proofing and baking advances — <i>Glenn R. Grissinger</i>	128
Discussion	135

Tuesday Afternoon "B" Session

The session opens	138
Preparation of fruit fillings for various uses — <i>William King</i>	139
Discussion	143
Applications of gums in cakes, fillings and icings — <i>Dave Roberts</i> ...	145
Discussion	150
Formulation of cakes and icings for freezing — <i>Derwin S. Johnsen</i> ..	152
Discussion	159
Factors affecting flavor and eating properties of fruit cake — <i>Frank C. Gnoza</i>	161
Discussion	168
Packaging of variety cake products — <i>Thomas E. Walmsley</i>	169
Discussion	174
Report on Bakery Foods Display	175-176

Wednesday Morning Session

The session opens	177
Bulk material handling equipment — <i>Frank Haile, Jr.</i>	178
Discussion	181
Meeting ecological requirements for liquid waste — <i>Emil F. Dul</i>	185
Discussion	191
How a baker complies with OSHA — <i>Marvin E. Adams</i>	192
Discussion	195
What is OSHA looking at in the bakery? — <i>Joe Velasquez</i>	195
Opportunities awaiting today's bakery supervisors — <i>Clayton</i> <i>C. Daley</i>	201
Discussion	205
Installation of officers	205
Closing prayer of thanks — <i>Victor E. Marx</i>	208
Final adjournment	209

Miscellaneous

Subject index of 1973 Meeting	211
Subject listing of papers covered in PROCEEDINGS — 1955-1972 inclusive	217
Registration list	227

American Society of Bakery Engineers

ROBERT A. FISCHER SECRETARY

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

49th ANNUAL MEETING

PICK-CONGRESS HOTEL
March 5-7, 1973 Chicago, Illinois

Introduction to the 1973 PROCEEDINGS

Each year the Annual Meeting is the culmination of the efforts of scores of individuals who have spent thousands of hours during the year to present a program of interest and benefit to the members.

The success of the Annual Meeting program depends upon everyone involved and is not due to any one person or any small group of persons—everyone contributes to the Meeting's success, including the members of the audience who ask questions and enter into the discussions.

We, on the A.S.B.E. staff, do not consider the Annual Meeting completed until the PROCEEDINGS are published.

As you examine this edition of the PROCEEDINGS, bear in mind that it represents a complete record of the Meeting. All prepared papers have been reproduced along with the slides that were shown and the hand-out material that was distributed.

To ensure the accuracy of the recording of the discussions following each paper, a transcript is sent to each participant who can be identified—for editing and verification of his recorded comments. The Society feels that by following this procedure, the material as presented, represents the intent of the speaker—and, of course, is his own opinion.

Interspersed throughout, are photographs of many of our members and guests—which were made available to us as a courtesy of the bakery business papers.

The registration for this Meeting was 1,254—

including members and nonmembers, but not the ladies who accompanied registrants, since they were provided with complimentary badges.

The 49th Annual Meeting, of two and one-half days duration, included six sessions during which 23 presentations were made on technical and timely subjects. The sessions were well attended—as were the other A.S.B.E. programmed events: 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.

Organizations closely identified with the baking industry held functions of their own during our Meeting. On Sunday evening, the Alumni Association of the American Institute of Baking held a reception prior to its annual meeting and, on Tuesday at noon, luncheon meetings were held by the Canadian members, the American Association of Cereal Chemists and the Clayton Emerick Memorial group. All reported good attendance and we welcome the opportunity to work with each group in arranging its function.

Although it was mentioned above that the success of the Annual Meeting is the result of the efforts of everyone involved, there are two groups which must be singled out for extraordinary service. Without them it would be virtually impossible to have a smooth and efficiently run Meeting. The Property Committee looks after the signs, the projection of slides, the Program Evaluation Cards and hand-out material, and many more details. Property Manager Jonathan Yentis, Chicago, Illinois and his assistants deserve our thanks.

The other group are the members of the Bakers Courtesy Club of Chicago. These "ASK ME" men served again this year at the Information Desk, at the meeting room entrance as ushers, and in the meeting room monitoring the microphones. Our grateful appreciation to them for their invaluable assistance.

The semi-annual meetings of the Advisory Committee and of the Executive Committee were held on Sunday, March 4 with President Louis J. Richter presiding. The committee reports of the Chairmen of the Standing Committees were considered by the 72 members present at the Advisory meeting and were referred, with recommendations, to the Executive Committee for action.

Twenty-two members of the Executive Committee, including Past Presidents, considered the matters referred to it—as well as other matters

pertaining to the operation of the Society. They met again (23 members) on Wednesday afternoon, following the adjournment of the Annual Meeting. At this meeting, President Paul W. Kamman presided and the program just presented was reviewed and recommendations were offered for the 1974 Annual Meeting which will be the 50th Annual Meeting.

To make each issue of the PROCEEDINGS valuable as a reference book—and as a convenience for our members—we include a table of contents, a subject index for the current Meeting program and a complete list of papers presented at the Annual Meetings since 1955. This material, together with the PROCEEDINGS from earlier Meetings, and technical bulletins, form the basis of an incomparable reference source for technical 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

Buckingham Room—Advisory Committee Meeting—Ground Level
Alcove—Luncheon for Advisory Committee—Ground Level
Buckingham Room—Executive Committee Meeting (Sun.)—Ground Level
Great Hall—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 36 along to him.



INTRODUCTION TO YOUR 49th ANNUAL MEETING

Welcome fellow Engineers and guests to the 49th Annual Meeting of the American Society of Bakery Engineers.

The members of your Program Committee have endeavored to bring you a well-rounded and organized program—full of the current information that you asked for through your responses to the planning questionnaires mailed to you last March.

As we open this Meeting we ask you to help the speakers pass along their expert information by your participation in the discussion periods following each paper.

The Program will be concluded on Wednesday at about noon, so that those of you who wish to depart on that day can make your travel plans accordingly.

This year's program consists of 23 technical production papers presented during five sessions, two of which will be concurrent sessions on Tuesday afternoon. We believe you will find the papers interesting as well as informative and hope that you will use the time allowed following each paper to ask questions and make comments.

We cannot stress too strongly, the fact that discussions involving the free giving of information and exchange of ideas will greatly enhance your attendance at this Meeting.

All of us who have worked on the program are happy to have you in attendance and trust you will benefit from the material presented and enjoy your association with your fellow Engineers.

Richard M. Beaverson
RICHARD M. BEAVERSON
PROGRAM CHAIRMAN

Ernest O. Cain *Frank E. Johnson*
ERNEST O. CAIN
FIRST ASSISTANT
PROGRAM CHAIRMAN
FRANK E. JOHNSON
SECOND ASSISTANT
PROGRAM CHAIRMAN

AMERICAN SOCIETY OF BAKERY ENGINEERS
ROOM 1921, RIVERSIDE PLAZA BLDG.
2 NORTH RIVERSIDE PLAZA CHICAGO, ILLINOIS 60606

OFFICERS 1972-1973



LOUIS J. RICHTER
President



PAUL W. KAMMAN
First Vice President



HERMAN SAUSSELE, JR.
Second Vice President



CHARLES B. CLARK
Third Vice President



ROBERT A. FISCHER
Secretary-Treasurer



VICTOR E. MARX
Secretary Emeritus

PROGRAM CHAIRMEN 1972 - 1973



RICHARD M. BEAVERSON
Program Chairman



ERNEST O. CAIN
First Assistant Chairman



FRANK E. JOHNSON
Second Assistant Chairman

OFFICERS OF CHAPTERS AFFILIATED TO A.S.B.E.

British

Chairman
First Vice Chairman
Second Vice Chairman
Secretary
Treasurer

David J. Garratt
Douglas G. Broad
David G. Elias
Ronald W. Sheppard
Colin A. Matthes

Australian

Chairman
First Vice Chairman
Second Vice Chairman
Third Vice Chairman
Secretary-Treasurer

Leslie J. Allan
Wilfred C. Lovell
Ronald G. Green
Kenneth J. Packham
Sydney J. Packham

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 49th 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.

PRE-MEETING SCHEDULE OF EVENTS

SUNDAY, MARCH 4, 1973

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
Great Hall

POST-MEETING SCHEDULE OF EVENTS

WEDNESDAY, MARCH 7, 1973

2:00 P.M.—EXECUTIVE COMMITTEE
MEETING

Buckingham Room

THURSDAY, MARCH 8, 1973

8:00 A.M.—PROGRAM COMMITTEE
MEETING

Lake Shore Room

SCHEDULE OF NON-A.S.B.E.-MEETING FUNCTIONS

SUNDAY, MARCH 4, 1973

American Institute of Baking Alumni Annual Meeting

5:30 P.M.—Windsor Room

Robert Polonis, President

TUESDAY, MARCH 6, 1973

American Association of Cereal Chemists Luncheon

12:00 Noon—Lincoln Room

Frank N. Hepburn, Chairman

Canadian Members Luncheon

11:45 A.M.—Oxford Room

E. L. Patenaude, Chairman

Clayton Emerick Memorial Luncheon Luncheon

11:45 A.M.—Florentine Room

Joseph DeMaria, Chairman

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.

MONDAY MORNING PROGRAM

MARCH 5, 1973

GREAT HALL

- 9:00—Meeting Room Opens
- 9:15—Call to Assembly and Greetings
ROBERT C. BRINK, Cincinnati, OH
Meeting Chairman
- 9:20—Introduction of Song Leaders
WALTER N. CLISSOLD, Evanston, IL
Music Chairman
- Song Leaders—
WILLIAM E. BUSSE, South Bend, IN
GEORGE F. CONANT, Omaha, NE
HARRY D. GARDNER, Albion, MI
FRED M. JENSEN, Rolling Meadows, IL
WILLIAM E. MAIER, Reading, PA
HARRY R. VERNON, Richardson, TX
- 9:25—Entrance of Officers
Introduction by ROBERT C. BRINK
- 9:30—Star Spangled Banner—O Canada
- 9:35—Invocation
JOHN A. WAGNER, Philadelphia, PA
- 9:40—The President Comments
LOUIS J. RICHTER, San Antonio, TX
- 9:50—The Secretary Reports
ROBERT A. FISCHER, Chicago, IL
- 10:15—Program Preview
RICHARD M. BEAVERSON, Dallas, TX
- 10:20—Annual Business Meeting
Conducted by LOUIS J. RICHTER, President
- 10:35—Introductions and Presentations
- 10:55—The Secretary Emeritus Comments
VICTOR E. MARX, Chicago, IL
- 11:00—Introduction of Speaker
HERMAN SAUSSELE, JR., St. Louis, MO
- 11:05—Inspirational Address
EDWARD W. KRAUSE, Notre Dame, IN
- 11:50—Adjournment

MONDAY AFTERNOON PROGRAM

MARCH 5, 1973

GREAT HALL

- 1:30—Meeting Room Opens
WILLIAM E. MAIER, Reading, PA
Song Leader
- 1:35—Call to Assembly
ROBERT C. BRINK, Cincinnati, OH
Meeting Chairman
- 1:40—Introduction to Technical Production Session
CHARLES F. BLUMM, Pittsburgh, PA
Session Chairman
- 1:45—Important Enzyme Reaction in the Production Process
ROBERT D. SEELEY, St. Louis, MO
A description of the important enzyme reactions as they occur in the breadmaking process including the natural and added enzyme systems.
- 2:15—Discussion

MONDAY AFTERNOON PROGRAM

(Continued)

- 2:20—Nonfat Dry Milk—Whey—Soya Protein Blends
CHARLES M. O'MALLEY, Louisville, KY
An evaluation of nonfat dry milk—whey—soya protein blends as they are used in bakery foods.
- 2:40—Discussion
- 2:55—Influencing Flavor in Bread
FRANK J. MARTIN, Thomasville, GA
The effects of ingredients, formulation, processing and baking on flavor and flavor development in bread.
- 3:15—Discussion
- 3:30—Operations of an Oven
OTTO RICHTER, JR., San Antonio, TX
Maintaining peak oven efficiency through an understanding of controls and heat in the oven.
- 3:50—Discussion
- 4:05—Adjournment

MONDAY EVENING PROGRAM

MARCH 5, 1973

GOLD ROOM

- 5:30-7:00—President's Reception
J. ROBERT FERRIL, Chicago, IL, Chairman
The President's Reception gives each of us a fine opportunity to meet and visit with our officers of the Society and for all to be together at an informal gathering for visiting and getting to know one another better in a fine atmosphere among "Friends." Too, there are light snacks to be enjoyed with your friends while you are relaxing and enjoying yourselves.

TUESDAY MORNING PROGRAM

MARCH 6, 1973

GREAT HALL

- 9:00—Meeting Room Opens
HARRY D. GARDNER, Albion, MI
Song Leader
- 9:05—Call to Assembly
PAUL W. KAMMAN, Park Ridge, IL
Meeting Chairman
- 9:10—Introduction to Technical Production Session
JOE C. TAYLOR, New Orleans, LA
Session Chairman
This entire session deals with methods and equipment used to mechanize various processes of bakery operations in bread, buns, sweet yeast-raised bakery foods and variety cakes.
- 9:15—Various Degrees of Mechanization in the Production of Bread
PAUL A. WRIGHT, Dallas, TX
- 9:35—Discussion
- 9:45—Various Degrees of Mechanization in the Production of Buns and Rolls
MELVIN C. MOORE, Memphis, TN
- 10:05—Discussion
- 10:15—Various Degrees of Mechanization in the Production of Sweet Yeast-Raised Bakery Foods
WILEY E. HARGROVE, Cary, IL
- 10:35—Discussion
- 10:45—Various Degrees of Mechanization in Variety Cake Production
RICHARD L. MORINE, Mentor, OH
- 11:05—Discussion
- 11:15—Open Panel Discussion
- 11:45—Adjournment

TUESDAY AFTERNOON PROGRAM

MARCH 6, 1973

TECHNICAL PRODUCTION SESSION "A"

GREAT HALL

- 1:15—Meeting Room Opens
Trio—WILLIAM E. BUSSE, HARRY D. GARDNER
and WILLIAM E. MAIER
- 1:20—Call to Assembly
HERMAN SAUSSELE, JR., St. Louis, MO
Meeting Chairman
- 1:25—Introduction to Technical Production Session
ARMAND P. CICCUI, St. Louis, MO
Session Chairman
- 1:30—Production of Buns to Meet Specific
Requirements
WILLIAM W. FARMER, Denton, TX
Formulations and procedures used to meet
specific customer requirements.
- 1:50—Discussion
- 2:00—Control of Formulation in Production
ROBERT J. MURPHY, Dallas, TX
How, why and what to do in order to keep
the actual production formula in agreement
with the master formula.
- 2:20—Discussion
- 2:30—Sweetener Applications in Bread Production
FRANK J. FISCHER, Chicago, IL
A comparison of various types of sweeten-
ers that are used in producing bread includ-
ing basic sugars and various types and
blends of sweeteners.
- 2:50—Discussion
- 3:00—Automated Variety Hearth Bread Production
HELLMUTH BAUR, Stuttgart, Germany
A discussion of equipment available from
the United States and other countries for
the automated and semi-automated produc-
tion of variety hearth breads.
- 3:20—Discussion
- 3:30—Automated Proofing and Baking Advances
GLENN R. GRISSINGER, York, PA
An up-to-date review of control in proof-
ing of bread and buns—describing control
of proofed product through the baking
cycle by controlled product movement
through the use of mechanization.
- 3:50—Discussion
- 4:00—Open Panel Discussion
- 4:30—Adjournment

TUESDAY AFTERNOON PROGRAM

MARCH 6, 1973

TECHNICAL PRODUCTION SESSION "B"

GOLD ROOM

- 1:15—Meeting Room Opens
Trio—WALTER N. CLISSOLD, GEORGE F.
CONANT and FRED M. JENSEN
- 1:20—Call to Assembly
CHARLES B. CLARK, Athens, GA
Meeting Chairman
- 1:25—Introduction to Technical Production Session
JOHN L. DEKEIZER, Deerfield, IL
Session Chairman
- 1:30—Preparation of Fruit Fillings for Various Uses
WILLIAM KING, Lombard, IL
A description of the use of hot and cold
methods for the preparation of fruit fillings
for various uses.
- 1:50—Discussion
- 2:00—Applications of Gums in Cakes, Fillings
and Icings
DAVE ROBERTS, Creve Coeur, MO
A review of the functional properties and
characteristics of various types of gums as
applied to production of cakes, fillings and
icings.
- 2:20—Discussion
- 2:30—Formulation of Cakes and Icings for Freezing
DERWIN S. JOHNSON, Parma, OH
The proper selection and formulation of in-
gredients to produce bakery foods with
maximum freeze-thaw stability.
- 2:50—Discussion
- 3:00—Factors Affecting Flavor and Eating Properties
of Fruit Cake
FRANK C. GNOZA, Corsicana, TX
The effect of ingredients, formulation, bak-
ing, packaging and storage conditions on
flavor and quality of fruit cake.
- 3:20—Discussion
- 3:30—Packaging of Variety Cake Products
THOMAS E. WALMSLEY, Wilmington, DE
An up-to-date review and evaluation of ma-
terials and equipment for the packaging of
small variety cake items.
- 3:50—Discussion
- 4:00—Open Panel Discussion
- 4:30—Adjournment

TUESDAY EVENING PROGRAM

MARCH 6, 1973

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 MORNING PROGRAM

MARCH 7, 1973
GOLD ROOM

- 9:00—Meeting Room Opens
HARRY R. VERNON, Richardson, TX
Song Leader
- 9:05—Call to Assembly
LOUIS J. RICHTER, San Antonio, TX
Meeting Chairman
- 9:10—Introduction to Technical Production Session
BYRON R. BAIRD, Ft. Worth, TX
Session Chairman
- 9:15—Bulk Material Handling Equipment
FRANK HAILE, JR., Dallas, TX
The points to be considered in selecting bulk equipment for handling various ingredients under varying conditions.
- 9:35—Discussion
- 9:45—Meeting Ecological Requirements for Liquid Waste
EMIL F. DUL, Manhattan, NY
Methods and equipment available to the baking industry for the disposal of liquid waste materials to meet local ecological requirements.
- 10:05—Discussion
- 10:15—How a Baker Complies with OSHA
MARVIN E. ADAMS, Glenview, IL
A report on the baker's experience with an OSHA inspection.
- 10:35—Discussion
- 10:50—What is OSHA Looking at in the Bakery?
JOE VELASQUEZ, Chicago, IL
Answers to your questions about what the OSHA inspector looks for when making an inspection in the bakery.
- 11:20—Opportunities Awaiting Today's Bakery Supervisors
CLAYTON C. DALEY, Columbus, OH
A practical approach to what the younger people in the baking industry can do to prepare themselves for the tremendous opportunities available today—as well as generating more enthusiasm for everyone in our industry.
- 11:40—Discussion
- 11:50—Open Panel Discussion
- 12:05—Installation of Officers
- 12:25—Closing Prayer of Thanks
VICTOR E. MARX, Chicago, IL
- 12:30—"The Lord's Prayer"
WILLIAM E. MAIER, Reading, PA
- 12:35—Final Adjournment

SPECIAL EVENTS

PRESIDENT'S GET-ACQUAINTED RECEPTION

MONDAY EVENING — MARCH 5, 1973

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, Evanston, Ill.—Chairman

BAKERY FOODS DISPLAY

TUESDAY EVENING — MARCH 6, 1973
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

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 6, 1973. 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 36 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 49th Annual Meeting.

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 1972 - 1973

EXECUTIVE COMMITTEE

Louis J. Richter, San Antonio, Texas
Paul W. Kamman, Park Ridge, Ill.
Herman Saussele, Jr., St. Louis, Mo.
Charles B. Clark, Athens, Ga.
Robert A. Fischer, Chicago, Ill.
Victor E. Marx, Chicago, Ill.
Robert C. Brink, Cincinnati, Ohio
Donald K. Dubois, 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.
Byron R. Baird, Ft. Worth, Texas
J. D. Shoptaugh, Jacksonville, Fla.
J. W. Doty, N. Kansas City, Mo.
John C. Morris, Wilmette, Ill.

STANDING COMMITTEES

Financial—John C. MacAlpine III, Swarthmore, Pa.
Inter-relations—Daniel J. Jette, Anaheim, Calif.
Publications—Donald K. Dubois, Kansas City, Mo.
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—Robert C. Brink, Cincinnati, Ohio
Membership—Joseph J. Harlin, Shawnee Mission, Kans.
Steering and Planning—John A. Wagner, Philadelphia, Pa.
Insurance—E. H. Hartman, Sr., Atlanta, Ga.
Hotel Housing—Robert O. Benson, Chicago, Ill.
Educational—Edward A. Alesch, Richardson, Texas
Public Relations—William A. Hoffman, Chicago, Ill.
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.

COMMITTEES — 1973 PROGRAM

PROGRAM COMMITTEE

Richard M. Beaverson, Dallas, Texas
Chairman
Ernest O. Cain, Dallas, Texas
First Assistant Program Chairman
Frank E. Johnson, Oak Creek, Wisc.
Second Assistant Program Chairman
Louis J. Richter, San Antonio, Texas
Paul W. Kamman, Park Ridge, Ill.
Herman Saussele, Jr., St. Louis, Mo.
Charles B. Clark, Athens, Ga.
Robert A. Fischer, Chicago, Ill.
Victor E. Marx, Chicago, Ill.

PROPERTY COMMITTEE

Jonathan Yentis, Chicago, Ill.
Property Manager
Thomas E. Keffer, Park Forest, South, Ill.
John C. La Botz, Frankfort, Ill.
Paul E. Tomei, Glenview, Ill.
Ray L. Urquidi, Argo, 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, San Gabriel, 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, Beaumont, 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, Westminster, 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, Jackson, Miss.
 1960—Clayton C. Daley, Columbus, Ohio
 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, Malverne, L.I., 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.
 1971—Robert C. Brink, Cincinnati, Ohio

PAST PROGRAM COMMITTEE CHAIRMEN

1929—E. B. Nicolait (deceased)
 1930—G. Cullen Thomas (deceased)
 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 (deceased)
 1945 & 1946—Carl W. Steinhauer (deceased)
 1947—J. H. Debs, Chicago, 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, Malverne, L.I., 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, Havertown, Pa.
 1970—Gerald Reed, Milwaukee, Wis.
 1971—Donald K. Dubois, Kansas City, Mo.
 1972—Herman Saussele, Jr., St. Louis, Mo.

AMERICAN SOCIETY OF BAKERY ENGINEERS

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 City State Zip Code

Date of Birth _____

Name of Employer _____

Employer's Business Address _____
 Street Address City State Zip Code

Send mail to: Home Address ☐ 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 publications of the Society for that year.

Date _____

Please check one or more. Attended:

☐ High School Name _____

☐ College or University.. Name _____

Degree _____ Course _____

☐ Baking School Name _____

Recommended by: 1 _____

Recommended by: 2 _____
 (Applicants must be recommended by two members)

Signature _____

Send application to Secretary

AMERICAN SOCIETY OF BAKERY ENGINEERS

Room 1921, Riverside Plaza Bldg.

2 North Riverside Plaza Chicago, Illinois 60606

Creed of the Bakery Engineer

AS A MEMBER OF THE AMERICAN SOCIETY OF BAKERY ENGINEERS
IT IS MY DESIRE AND PRIVILEGE

To live the ideals of Fellowship, Inspiration, and Education which prompted the forming of this organization.

To further the interest and progress of the baking industry in whatever way a greater service may thereby be rendered to society.

To be broad and free with the exchange of ideas and information among fellow Engineers.

To promote and practice cleanliness in its highest principles; not alone cleanliness of person, shop and equipment, but also of mind and habit.

To be ever alert to the advancement of the science of baking.

To foster study and knowledge among those engaged with me in the manufacture of baked goods, realizing always that in the enhancement of our profession in the public esteem each individual contributes an important part.

To assist a fellow Engineer at any time in his problems, upholding in word and deed the substance of the Engineers's Creed the Golden Rule "All Things Whatsoever Ye Would That Men Should Do Unto You, Do Ye Even Unto Them"

To follow this simple Creed in heart and mind, being ever aware of the responsibility that falls upon me as a producer of one of, if not the most important of all foods, and to do honor to the ancient and honorable profession of Baking.