

The Association of Chinese Food Scientists & Technologists in America

旅美中國食品科技學會

ACFSTA

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NEWSLETTER



Vo. 3, No. 3

APRIL 1981

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ACFSTA Newsletter

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EDITOR'S NOTE *****

We all experience sometime in our lifetime that it is quite uneasy to say what should be said. This may apply to our business, research, job hunting, and the like. I am lucky this time to have them said in this Newsletter. Therefore, I need to express my special appreciation to Angel, Tony, Victor and Steve who help me say them all. Let's hear from you next time, next year.....

Mark your calendar for our June 8th meeting and banquet at Atlanta. Hope to see you there.

***** SANTA LIN

 林輝正

LETTER TO MEMBERS

April 6, 1981

Dear Members,

It has been both a pleasure and an honor to serve you as the Secretary of ACFSTA for the last two years. I would like to share a few thoughts with you as I am passing the assignment to the next secretary in this coming June.

ACFSTA is a non-profit organization. We are bound together by our common professional interest and ethnic background. This "double bond" should make us a closed-knit organization. However, perhaps due to our busy work and family life, there are only a few enthusiastic members. Apathy, unfortunately, seems to be prevalent.

In the last two years - after repeated pleading, only 75% of the members paid their membership dues; 40% bothered to return their ballots; 60% sent back their membership information cards. As you all know, printing and mailing costs are high. Yet only a handful of members would inform us of their changed addresses.

If we all can put a little effort in our organization, we can make it more functional and effective in serving us. We have to remember that the President and the officers are just as busy as the rest of us. We can at least show them our support with more rapid response to their requests.

This organization can also grow better when we pool our ideas. Please do not be shy about giving suggestions. Three heads together are always better than one. It is every member's responsibility and privilege to let his/her opinions be heard.

Pardon me if this letter sounds a little critical. I just want to see our ACSFTA grow into a healthy organization which can be functional in promoting the benefits of our members.

Hope to see you at IFT Annual Meeting in Atlanta.

Sincerely,


Angel Yang

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THE ART & SCIENCE OF INTERVIEWING

By: Tony Chen
Anderson Clayton Foods

In the past year and a half, I have had the opportunity to set up the group of Process Development in Research and Development. Consequently, I have hired personnel from senior staff level to technician position. I thought I would share some of my experience with you from the standpoint of an interviewer.

A successful interview consists of three stages, namely the preparation, the interview, and the follow-up. Adequate performance in these three stages is mandatory before an offer can be secure. Let's first talk about preparation. Be sure to know as much about the employer as possible. For example, information such as what type of product does the company make? what are the annual sales of the company? who will be the possible people that will be talking to you during the interview? what are their backgrounds and areas? This kind of information can be easily obtained from professional directories such as IFT, AOCS, Standard and Poor, and numerous reference books in the library. Be sure to keep this in mind because you do not have much time to impress your potential employer. The better job you do on the background work, the easier it will be to produce a good impression.

After you have done your homework about the company, you are ready for the interview. Be sure to dress conservatively and formally for the occasion. There is no such thing as a "too conservative" dress code, but there are always objections for those who dress too casually.

Before you can convince your interviewer that you are worth something to the company, make sure to convince yourself first that you have fine qualities to sell and that you will be an important asset to the company. If you are not sure that you are good enough for the job, it will definitely show.

Your attitude during the interview is equally important. Do take advantage of body language. A firm handshake, steady eye contact, and eagerness to listen often produce unexpected results. When you are asked a question about information that you are not familiar with, do not try to "B.S." your way through. One bad answer often outweighs ten good ones.

Do not "bad mouth" your current or past employers, and be prepared to give a logical answer to the reason for your departure. Make sure to ask plenty of questions concerning the position in which you are interested. Interviewing is a two-way street. You want to find out about the job as much as they would like to find out about you. Do not have the attitude that you are begging for the job.

After you have your interview it is a nice gesture to write a letter to the interviewer thanking him for his hospitality. This will give you a chance to convey additional information about your qualifications or experience that you might have neglected to mention during the interview. If you are not a letter writer, a thank you phone call might be in order. Do not call collect unless you are told to do so.

After you have done all these - the only thing left to do is to hope for the best.

面談藝術與科學

ABOUT THE AUTHOR

Dr. Tony Chen (陳慶筠) is Manager of Process Development at Anderson-Clayton Foods. He graduated from Berkeley with a B.S. degree in Chemical Engineering and continued his graduate study at Ohio State University where he earned his M.S. degree in 1971. While working at Miles Labs as Associate Process Development Scientist and Supervisor in Food and Material Development during 1971-78, he was able to complete his Ph.D. in Food Science and Nutrition from OSU.

His areas of expertise are protein texturization, vegetable oil hydrogenation, process optimization, process design and simulation, and food rheology, in addition to industrial research management.

Food-Related Research at the Northern Regional Research Center

Y. Victor Wu

Northern Regional Research Center
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U.S. Department of Agriculture
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The Northern Regional Research Center (NRRC) is one of four Regional Research Centers of the Agricultural Research component of the Science and Education Administration, U.S. Department of Agriculture. NRRC employs about 300 scientists, engineers, and support personnel. The subjects of research at this center include the components of corn, wheat, grain sorghum, oats, and soybeans. Some recent food-related researches are described.

Cereal Proteins. Proteins and other cereal grain components are isolated and characterized to establish their relation to functional properties and nutritive values of products from grains. Nutrient values, including amino acid composition of cereal grain products, are studied with emphasis on changes caused by processing. Protein-enriched materials from cereal grains are prepared, and their nutritional and functional contributions to food products are determined.

Carbohydrates. Studies include hydrogen-bonding and complexing reactions of carbohydrates, chemical isomerization and degradation reactions, nonenzymatic browning reactions, and the structure and properties of polysaccharides in relation to their interactions with minerals and other constituents of blended and processed foods.

Dietary Fibers. Food fibers are studied with emphasis on their composition, microscopic structure, fractions, ultrastructure, and binding with physiologically important substances.

Oriental Soy Foods. Basic biochemical and microbial aspects of various oriental soy food processes are studied. The relationship between product quality

and soybean variety is investigated to develop uniform, nutritious, high-quality products and economically feasible processes for foods such as tofu, miso, natto, and tempeh.

Immobilized Enzymes. Certain enzymes can be immobilized on inert beads by ion-exchange technology for increased enzyme stability in processing. Immobilization of the enzyme glucose isomerase is used to convert corn sugar to the sweeter sugar, fructose. Immobilized enzymes are being studied as a means of removing undesirable components in soy foods, such as the oligosaccharides believed to be responsible for flatulence.

Blended Foods. The original Corn-Soy-Milk (CSM) was developed by NRRC as a nutritionally balanced food blend that could be prepared by cooking for a few minutes in water. Two instant kinds of CSM are also available. Research on other blended foods includes soy-fortified sorghum grits and seeks to establish formula flexibility.

Soy Protein. Soy proteins, enzymes, and physiologically active constituents are isolated and purified to generate new knowledge to improve use of soy proteins as food. Processing effects on nutritional or functional properties of soy proteins are studied. Nonprotein constituents of soybean meal that interfere with purifying protein or that exhibit specific nutritional or flavor effects are isolated and investigated.

Soybean Oil. Gas chromatography-mass spectrometry is used to identify odor and flavor related compounds formed during heating and oxidation of soybean oil. The effects of preharvest conditions such as frost, moisture, and pesticides and post-harvest factors such as storage, handling, and transportation damage on the quality of soybeans and the extracted soybean oil are studied. The reactions of fats (lipids) with oxygen as accelerated by light, chemicals, enzymes, and naturally

occurring photosensitizers are studied to determine if nutritionally unsafe materials are formed in soybean oil and shortening when they are abused by excessive cooking and frying of foods.

Fat Metabolism. Human and animal subjects are used to evaluate the biological and nutritional properties of isomeric fats in margarine, shortenings, and cooking oils. The nontoxic stable isotope (deuterium) is used to tag three fats found in partially hydrogenated soybean oil. Each fat contains a different level of deuterium and can be distinguished in blood samples by mass spectroscopy.

Mycotoxin. Aflatoxins are carcinogenic agents produced by molds on some agricultural commodities. Analytical methods for determining mycotoxins are evaluated and modified. New methods for quantitative analyses, screening techniques, and presumptive tests based on chemical and physical properties of mycotoxins are developed. Studies are made on methods to detoxify mycotoxin-contaminated agricultural products by chemical, microbiological, and physical methods.

Natural Toxicants. Many food sources contain small amounts of natural toxicants, which may affect us adversely. The chemical and biological nature of these toxicants, the effect of storage and food preparation, and the influence of plant genetics and agricultural practices on toxic contents are studied. Methods to render these substances harmless are developed.

— 作者簡介 —

Dr. Victor Wu (吳 應) is Research Chemist at Northern Regional Research Center, USDA. After receiving his Ph.D. from MIT in 1958, he did 3-year post-doctoral research work at Cornell. In 1961 he joined USDA and has become a senior staff member actively participating in cereal and grain research. He has been credited with more than 50 publications and is listed in the American Men and Women of Science.

Question: What do (1) Wheaties, (2) Alligator, (3) Red Lobster, and (4) Monopoly have in common?

Answer: They all belong to General Mills. Wheaties is a brand of breakfast cereal. Red Lobster is a seafood restaurant chain with more than four hundred units in U.S. Alligator is the trademark of a fashion sportshirt. Monopoly is a board game distributed by Parker Brothers, a subsidiary of General Mills.

Most people tend to regard General Mills as a food company. This might have been true twenty years ago, however, in the past two decades, General Mills has transformed from a food manufacturer to a highly diversified multi-business company. Although consumer foods still account for a sizable portion of 4.5 billion dollar sales annually, other business have grown and taken important share of the total picture. The company business can be roughly divided into five major areas: foods, restaurants, toys, fashions, and specialty retailing.

CONSUMER FOODS. Foods are company's most important business area. It accounted for slightly more than 50% of the total sales. The company's most important single food area is the domestic grocery store market, and it primarily operates in dry groceries and frozen foods. These market segments include breakfast cereals, desserts, flour, baking mixes, dinner mixes.

More Than a Food Company

General Mills



TOYS AND GAMES. In the last decade, General Mills has become one of the world's largest toy and game manufacturers. It has several subsidiaries, each specialized in different toys and games. Kenner Products is concentrated in educational and children's toys such as "Play Doh" and "Easy Bake Oven." Parker Brothers has achieved market success with a variety of adult puzzles and board games such as Monopoly and Instant Insanity.

FASHIONS. The fashion group competes in markets that include apparel, accessories and related items. The group includes several jewelers and fashion wear manufacturers.

SPECIALTY RETAILING. This group includes several direct marketing subsidiaries. LeeWards sells a diverse line of do-it-yourself products through mail order. Eddie Bauer specializes in high quality hunting, camping, and outdoor recreational clothing.

by: Tsai-Yi Fan

instant potatoes, frozen seafoods and pizza.

RESTAURANTS.

The market for meals eaten away from home is growing rapidly. More than one-third of total U.S. expenditures for food currently go for meals eaten away from home. General Mills operates a variety of restaurants. Red Lobster Inn and York Steak House are two of the largest systems of the restaurant group.

After the introduction of various businesses operated by General Mills, I will devote the remaining space to describe the research activity in the food area conducted in the company.

Research and development plays a very important part in the growth of General Mills. The research facility for consumer foods is located in James Ford Bell Technical Center in the Metropolitan Minneapolis. The Technical Center operates along two distinct but closely integrated lines -- long term exploratory research programs funded by the Corporation, and applied research programs funded by individual operating divisions. The research conducted by the operating divisions most relates to the marketing needs of each division. The corporate research program conducts research to develop the fundamental technology necessary for long-term growth. One example that fundamental research has led to a new business opportunity is the hydroponic technology. Through several years of painstaking research effort, technologies to grow vegetables in a controlled indoor environment were developed. This was rewarded with the 1980 IFT Industrial Achievement Award. The article appeared in the June, 1980 issue of Food Technology and is highly recommended for more information about the award and the description of the hydroponic technology.

The Technical Center employs more than 700 staff to carry out research and development work. The research staff comes from diversified disciplines. Of course, food scientists constitute the majority in the Technical Center. However, chemical engineers, organic chemists, biochemists, and packaging engineers also play a large role in the research and the development of new products.

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Dr. Steve Tsai-Yi Fain (范才義) is Senior Scientist with General Mills. A graduate of NTU, he received his Ph.D. from MIT in 1973. After spending two years at Thermo Electron Company working on nitrosamine analysis, he was recruited by General Mills to work on new product development.

下期預告：

學府簡介

消息活動

通訊資料增補