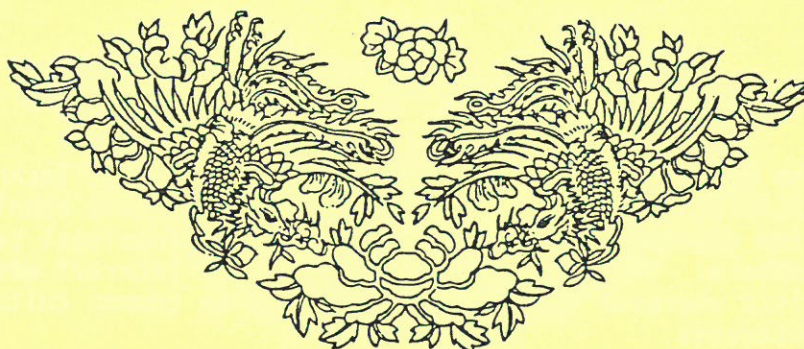


The Association of Chinese Food Scientists & Technologists in America

旅美中國食品科技學會

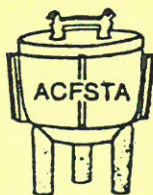
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VOLUME 5  
NUMBER 2



MARCH  
1983



# 旅美中國食品科技學會

The Association of Chinese Food Scientists & Technologists In America

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Anderson Clayton Foods  
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Miles Lab, Inc.  
P.O. Box 932  
Elkhart, IN 46515  
(219) 262-7952

## STATEMENT OF POSITION

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Anthony H. Chen

### 朱正中

Membership  
George C. Chu

### 馮貽澤

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Daniel Y. C. Fung

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Advisor  
Sherman S. Lin

### 呂秋娟

Student Affair  
Sheree C. C. Lin

### 萬建心

Publication  
Peter J. Wan

### 薛維誠

Legal Counselor  
Robert Hsueh

The Association of Chinese Food Scientists and Technologists in America (ACFSTA) is a non-political and non-profitable ethnic Chinese organization dedicated to the scientific and professional betterment of its members. The members of ACFSTA wish to interact with all Chinese scientists wherever they may reside based on common cultural and scientific interests.

ACFSTA takes no political stand or preference. Selection of material for all ACFSTA publications is based on the scientific content and general interest. Any inadvertent political connotation should not be deemed as the official position of ACFSTA.

## EDITORIAL NOTE:

- Official language for ACFSTA has become a subject of discussion, since more and more articles in the newsletter are in English and we even used English to conduct business meetings and to present the first forum at Las Vegas last year. To clarify the official stand on this issue, we should reexamine the objective of the ACFSTA. Based on by-laws, the ACFSTA is a professional organization which seeks for the professional and scientific betterment of its members. If our goal is to make the ACFSTA professionally known and to effectively communicate with our members and with other professional societies, we have to use English as our official language. For those who prefer to use Chinese to express their opinions, they should feel free to do so.
- For the current fiscal year (1982-83), we will publish only three issues of the newsletter. The next, also the last, issue of the newsletter (Vol. 5, No. 3) for this fiscal year will be mailed to you by the end of May. Meantime, the new directory will also be printed and sent to you. If your information as attached in this newsletter is not correct, please notify Peter J. Wan as soon as possible.
- Due to limited space, we could not print all the articles submitted. However, they will be published in the next issue.



## A Letter From the President

Dear Member:

Greetings. I hope the new year of 1983 will be prosperous for you and your family.

As for the ACFSTA, many meaningful projects have been either developed or waiting in the wing. I would like to share with you some highlights of these activities.

In the education and consultation areas, numerous developments have materialized. Bill Chang is organizing a workshop on "New Product and Market Development" for the Republic of China. He is working in concert with the Food Industry Research and Development Institute. The target date for this workshop is June of this year. Last October I spent three weeks in the People's Republic of China. Several activities were born from this trip. The Chinese American Chemical Society will join forces with the Ministry of Chemical Engineering and the ACFSTA to formulate a food preservation program for the PRC. Five to ten short courses are scheduled to be held in Chongqing, Sichuan in October 1983. These short courses are related to various aspects of food technology and food packaging. A special task force has been formed to help several universities in Sichuan in establishing their departments of food science and technology.

Due to the credit of Daniel Fung and his committee members' hard work, the criteria for the ACFSTA award has been established. Sherman Lin and myself are organizing a fund drive to obtain some financial support from various corporations. Our goal is to achieve \$500 for this year.

The membership committee is doing an excellent job in advertising our organization. Through George Chu's leadership and creativity, they have publicized the existence of ACFSTA in many professional magazines and newspapers without any fee paid.

Chifa Lin and his committee members have formulated their strategic plan for helping our members with employment opportunities. Their job is particularly difficult when our unemployment is above 10%. So I urge every one of you to pitch in your share by providing to Chifa a job lead as soon as available.

Sheree Lin, the chairwoman of the student affairs committee, is in the course of organizing her committee. It is no easy job to develop such a new program. I encourage the student member who has a good idea concerning this area to contact Sheree.

Peter Wan, our publication committee chairman, is finishing up the members' directory. This directory will be mailed out to you in the very near future.

As I indicated in my MBO, we will have a forum for this year's annual meeting. The theme of the forum is to emphasize how a Chinese professional can become successful in an organization. The forum is divided into two sessions. The first session deals with the general aspects of professionalism, and I will be the speaker. The second session addresses specifically the communicative skill which is so vitally important in every professional's career. We are fortunate enough to have Dr. Stephen Chang as the speaker. He will stress both verbal and written communication skills. Since this forum is specially designed for Chinese professionals, I urge every one of you to take advantage of it.

As you can see, we have many challenges ahead of us, but with the help and support of all of you, I am confident that we shall overcome them.

Best wishes.

Yours truly,

A handwritten signature in cursive script that reads "Tony".

Anthony H. Chen  
President



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Y. C. Jao, Treasurer  
Miles Lab, Inc.  
P.O. Box 932  
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January 6, 1983

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Peter J. Wan

## 薛維誠

Legal Counselor  
Robert Hsueh

Dr. Peter Wan  
Anderson Clayton Foods  
3333 No. Central Expressway  
Richardson, Texas 75080

Dear ACFSTA Member:

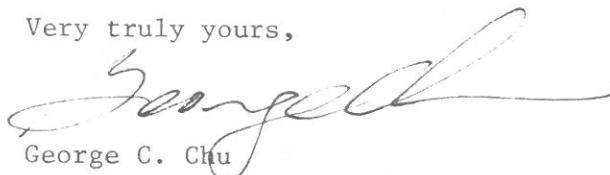
As Dr. Chen requested, I am sending you the following progress report for the past six months regarding our membership committee.

1. Dr. Tung-Shan Chan has mailed our recruiting letter to twenty (20) universities located at the west of the central time zone.
2. Dr. John Lu has mailed our recruiting letter to six universities in Southeastern area. He is working on the east coast area now.
3. I have posted our recruiting letter at American Cereal Chemistry Annual Meeting in October at San Antonio, Texas and National Soft Drink Convention in November in Atlanta, Georgia.
4. I have contacted the World Journal News in New York. The news of our organization is recruiting new members and has been published in the newspaper dated September 28, 1982.
5. I have been sending recruiting letters monthly to those who are listed as new members in Food Technology.

For the coming year, we would like to emphasize our work in "Ad" on Chinese newspaper and professional journal. If there are any suggestions or comments, please let us know.

Also, I would like to take this opportunity to express my personal thanks to our Committee members for their fine job.

Very truly yours,



George C. Chu

PROGRESS REPORT FROM EMPLOYMENT COMMITTEE.....C. F. Lin

A. Organization of Committee.

The following is a list of members who have agreed to serve as regional representatives:

Ernest Chen  
Molson Breweries of Canada, Limited  
Montreal, Quebec

David Chou  
Ralston Purina Company  
St. Louis, Missouri

Chi-Hang Lee  
Del Monte Corp.  
Walnut Creek, California

Tung-Ching Lee  
University of Rhode Island  
Kingston, Rhode Island

Paul M. Lin  
Organon Nutritional Products  
Buena Park, California

Sherman Lin  
Anderson Clayton Foods  
Richardson, Texas

Kuang-Chi Tang  
Thomas J. Lipton, Inc.  
Englewood, New Jersey

Shaw Wang  
Rutgers University  
New Brunswick, New Jersey

The committee still needs more regional representatives, especially in the South, Chicago Metro, and Minneapolis. Any member interested in serving on the Employment Committee, please write or call me.



B. Function of the Committee.

1. To provide resume critique.
2. To provide job leads.
3. To conduct personal coaching for job interviews.
4. To provide consultation for career development.

C. How the Committee Functions.

1. Any member of ACFSTA who knows his/her company has an opening, please let me know.
2. Regional Representatives - please spend a few extra minutes when you read your local Sunday newspapers. If there are any ads for openings which you think may be of interest to an association member, please send them to me.
3. If any member would like to use the services of the employment committee, please send two copies of your resume to me. I will respond to your request either by telephone or mail. If the individual wants personal coaching for interviews, I'll send his/her resume to the nearest regional representative.

D. Members Seeking Employment.

- 001 M.S. Food Technology, 1981.  
Thesis research related to seafood.  
Currently employed by a major food company.  
Experienced in formulating various food products.  
Looking for R & D work in Q.C. or sensory evaluation.
- 002 M.S. Food Technology, 1982.  
Thesis research related to soy-cheese whey curd.  
Looking for position in R & D or Q.C.
- 003 M.S. Food Science, 1982  
Thesis work related to fruit processing.  
Looking for position in R & D or Q.C.

- 004 Ph.D. Food Microbiology, 1982  
Dissertation research related to meat processing.  
Looking for position in R & D.
- 005 Ph.D. Cereal Chemistry, 1982  
Dissertation research related to enzymes and  
proteins in cereal.  
Looking for position in R & D

Any member interested in the above member's background,  
please write or call me.

Address & Telephone: Chifa F. Lin  
Food Ingredients Section  
Eastern Research Center  
Stauffer Chemical Company  
Dobbs Ferry, New York 10522  
  
(914) 693-1200, Ext. 2059

E. JOB OPENINGS

1. The W. L. Clayton Research Center of Anderson Clayton Foods has a position for Research Chemist. It required a Ph.D. in Food Science, Chemistry or Biochemistry with 0-3 years working experience, specialized in flavor and/or lipid analysis. Hands-on experience with GC, GC/MS or HPLC is required. Please contact Dr. Anthony H. Chen or Dr. Sherman S. Lin, W. L. Clayton Research Center, 3333 N. Central Expressway, Richardson, TX 75080, phone: (214) 231-6121.
2. The Department of Nutrition and Food Sciences, Texas Woman's University, Denton, Texas 76204, has an opening for Assistant Professor. Please contact Dr. George Liepa for more information His phone number is (817) 382-2158.
3. Tunghai University (Taichung, Taiwan, Republic of China) needs a faculty member for its Food Science Department. If you are interested please contact the department head, Dr. Wang (王慶富主任). Detailed information is attached on page 2.



AWARDS PROGRAM OF THE ASSOCIATION OF CHINESE  
FOOD SCIENTISTS AND TECHNOLOGISTS IN  
AMERICA

Title of the Award: Outstanding Chinese Food Scientist in America.

Criteria for the Award: This award is established to honor an individual of Chinese origin who has made distinguished contribution to Food Science and Technology in his/her particular field of expertise and who has made special efforts to promote the well-being of Chinese Food Scientists and Technologists in America.

Mechanism to choose a winner: 6 months prior to the date of award presentation, nomination of individuals will be solicited in the newsletter. The nominator, with two additional member's endorsements, should submit a set of materials to the committee which should include:

1. Curriculum vita of the nominee.
2. List of outstanding achievements related to this award.
3. Reason for nomination.
4. List of references whom the committee may contact to obtain additional information.

The committee will review all nominations and make a final decision on the awardee. Any member of the committee who happened to be nominated will be automatically excluded from the discussion for the award.

Deadline for nomination will be exactly 2 months before the National Institute for Food Technologists annual meeting.

Amount and kind of Award: The awardee receives a plaque and a check of \$100.00.

Number of Awards: One per year.

Announcement of the Award: To be made at the annual meeting of the Association (IFT Convention) and in the ACFSTA Newsletter, Food Technology and other professional publications.

Time and place of presentation: During the annual IFT Convention.

---

Awards committee:

Chairman:

Dr. Daniel Y.C. Fung, Call Hall, Kansas State University, Manhattan, KS 66506  
Telephone: (913) 532-5654

Members:

Dr. Tung-Shan Chen, Food Science Division, Dept. Home Eco., California State University, Northridge, CA 91330 Telephone (213) 885-2841

Dr. Tung-Ching Lee, Dept. of Food Science and Technology, University of Rhode Island, Kingston, RI 02881 Telephone: (401) 792-2466

Dr. Y. Hang, Institute of Food Science, Cornell University, Geneva, NY 14456  
Telephone: (315) 787-2265

Dr. Levi Chang-Gang Ying, Block and Guggenheimer, 318 New Brunswick Ave., East Brunswick, NJ 08816 Telephone: (201) 238-3850

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## 薛維誠

Legal Counselor  
Robert Hsueh

## REPORT FROM STUDENT AFFAIRS COMMITTEE

1. Members of the committee:  
Sheree C. C. Lin, Chairperson, Kansas State U.  
Dr. Daniel Y. C. Fung, Kansas State U.  
I-Tsuen Chen, Kansas State U.
2. Activities:  
The main objective of this committee is to help and serve all the student members. We are drawing up a plan for the student affair and will have it completed in February, 1983.  
If you have any suggestions for our committee, please contact Sheree Lin.
3. Handouts available upon request:
  - A. How to Conduct Job Hunting and Interviewing.  
By Dr. Anthony H. Chen
  - B. Maintaining Your Non-Immigrant Student Status and Applying for Permanent Residence in the U.S.  
By Attorney Harry J. Joe.

These are a series of seminars presented to the students in Dallas and Fort Worth areas on February 6, 1983. Anyone who would like to have a copy of these lecture notes, please inform Dr. P. J. Wan, 3333 N. Central Expressway, Richardson, TX 75080.



ACFSTA OUTSTANDING STUDENT AWARD

The purpose of the award is to recognize the Chinese student who is majoring in Food Science or related fields and has performed in an outstanding manner for the field of food science and technology and/or for the organization of ACFSTA.

Application is limited to the members of ACFSTA. Applicant must submit the present school transcript and the outline of his research works or his academic publications to the committee. All applications must be received by April 30, 1983. The student winner will be selected by the Student Award Committee.

The winner will be announced in our annual meeting at New Orleans, and a stipend of \$100 will be awarded as a token of recognition from our organization. The winner does not have to be at the meeting.

For an application or any further information needed, please write or call:

George C. Chu  
American Maize Company  
Route 1, Box 84  
Decatur, AL 35601  
Phone: (205) 355-8815

STUDENT AWARD COMMITTEE:

Santa Lin  
Grace Yen  
George C. Chu

ANNUAL MEETING

Santa H. Lin

The 1983 IFT annual meeting will be held at the New Orleans (Louisiana) Superdome June 19-22, 1983. As usual, the ACFSTA annual meeting will be held during the same period. A detailed program will be announced in the next issue of Newsletter. Due to the favorable response from our members on the 1982 forum "Career Preparation and Development," organized by Dr. Joseph Jen, we are going to have another forum this year. It will be organized by Mr. George Chu. The title will be "Professional Development."

AT YOUR WORKING PLACE!



HAVE YOU EVER BEEN FRUSTRATED?  
HAVE YOU EVER BEEN AGGRAVATED?  
HAVE YOU EVER BEEN IGNORED?  
HAVE YOU EVER BEEN NEGLECTED & UNRECOGNIZED?  
HAVE YOU EVER BEEN TREATED UNFAIRLY?  
BY YOUR BOSS? YOUR COLLEAGUES? OR EVEN  
YOUR SUBORDINATES?

PLEASE COME TO OUR "ACFSTA FORUM" AT THE  
IFT ANNUAL MEETING!

YOU WILL GET YOUR REWARD!



## REPORT FROM THE TREASURER

Y. C. JAO

The following listed members have already paid their dues for 1982-83 fiscal year. If you have not paid yet, please send your check to Dr. Y. C. Jao, Miles Laboratories, Inc., P. O. Box 932, Elkhart, IN 46515. As a reminder, your membership fee is tax deductible.

Printing cost plus postage is still our major financial burden. Each issue of Newsletter is now costing us more than three hundred dollars. Without your support the Newsletter could not be continued. If you do or expect to change address, please notify the editor as soon as possible so we won't waste our precious resources.

### STUDENT MEMBERS:

*Chang, Yen Yen	*Hu, Shu-Dean	*Lin, Kuo-Wei
Chao, Rong Yeu	*Hung, Tsui-Hwa	Lin, Yung-Long
*Chen, Chihoog	*Hung, Yen-Con	*Lu, Sharon P. W.
Chen, Chuin-Chieh	*Lai, Chron S.	Wang, Ping-Lieh
*Chen, Jiann-Yuh	Lee, Chia Yen	Wei, Tsao-Ming
*Chen, Kuan-Hua	*Lee, Fang-Jen	Woo, Alexander H.
Chow, Edward	*Lee, Jia-Fen	Wu, Fu Yu
Chu, Caroline	Lee, Yeun-Chung	*Wu, Jing-Yang
Chung, Si-Yin	*Leu, Romeo J. P.	*Wu, Pei-Fen
*Han, Tzyy-Jan	*Lin, Chien-Chi	Wu, Perry H.
Hsieh, Chieh-Cheng	*Lin, Chiw-Chuan Sheree	Yang, Tony C. H.

### PROFESSIONAL MEMBERS:

Chang, Stephen S.	Huang, Yao-Wen	Nip, Wai-Kit
*Chen, Cecil Shy-Show	Hwang, Chung Yung	Peng, Andrew C.
Chen, Mike L. M.	Kan, Tze-Ming	Soo, Hong Ming
Chen, Rocky	*Law, Pui-Yee	*Tang, Juen Yang
Chen, Sze-Chin	Lee, Tung-Ching	Tao, Michael C.
Chen, T. C.	Lee, Yung-Hsiung	*Tseng, Rose Y. L.
Chen, Tony	Liao, F. T.	Wan, Peter J.
Chen, Tony H.	Lin, Robert Hozon	*Wang, John
Chu, George C.	Lin, Sherman S.	Wang, Rueen-Chiou
Hang, Y.	Loh, Jimbay	*Wei, Cheng-I
Hsieh, Oliver A. L.	Lu, John Y.	*Yang, Huei-Hsiung
*Hsu, Chwen-Chwen	Luh, Bor S.	*Yeh, L. Nelson
Hu, Kwoh H.	*Ma, Yuan-Mei	Yiu, Ann
Huang, I-Lo	Mao, Wei-Wen	

### SUPPORTING MEMBERS

Chang, Kun-Yu  
Lee, Shu-Chi  
Lin, Santa H.  
Yao, Grace R. Y.  
Chang, Y. S. Amelia

### HONORARY MEMBERS:

Chu, Horn Dean

### CORPORATE MEMBERS:

Lu, Louis K.

\*New members.



# 美國食品科學學會中國聯誼會紀實

山 任 筑

並一致決議 IFT 中國聯誼會成立為永久性的組織，推選陸伯助博士為會長，王亞龍博士為副會長，陳善博士為秘書並並理明明年年會聚餐事宜。當時並對參加聯誼會的會員徵收美金兩元的年會費，以利發行通訊錄及會誌之用。餐畢，首先舉行自我介紹，各人花樣百出，尤其在工業界服務的會員們，大多乘機吹其公司產品，不斷引起哄堂大笑，添增許多自然餘興。介紹完以後，陸博士作了一個簡短的報告有關國內食品加工工業的概況，然後展開了會務討論，因為是第一次會議，各會員發言踴躍，對國內食品加工工業的關懷溢諸言表，很多人都恨不待立刻可以貢獻一己之力為國服務，筆者在座深深為會員們愛國的情緒所感動，可見大家雖是身在海外，仍心向家園。

因為討論的題目過於廣泛，只能就記憶所及，略提幾項簡列如下：

一年一度全美的食品加工學會 (IFT) 的年年會於一九七五年八月八日至十一日在美國伊利諾州芝加哥市舉行。因為芝加哥地位重要，今年的註冊人數達九千人之譜，遠超過以往的記錄。各學校研究機構及食品公司研究人員發表的研究報告及專題演講有 394 篇，亦為 IFT 有史以來之最多者，每天上下午均有八到九個小組同時進行討論，使很多人想聽的兩、三篇報告列於同一時間內發表而有向隅之憾，將來如果此種趨勢繼續發展下去，來年的年年會目的安排將愈趨困難。

在美國經濟一片不景氣聲中，食品加工學會一枝獨秀。去年一年中會員大增，如今年總數已達兩萬五千人以上。學會編印的學術雜誌亦在一年中增加四分之一以上的發行量，可見不論一國經濟的好壞，民生必需的食品是不可或缺的。愈是艱困的時代，人們才更認真認到食品增產及加工之重要性。

今年年年會，我國人參加者亦遠較往年為多，發表研究報告者亦較往年增加，是一可喜之現象。除開研究報告及食品展覽之外，年年會還有其他許多活動；譬如參加一個國際學生午餐會，其宗旨是聯絡國際食品加工學者的感情，IFT 新舊主席及要員均參與其中。在會上作演講者是今年國際學術獎的得主 Borgstrom 博士，他談及世界糧食問題時指出歷史上最強盛的王朝往往有十年左右的存糧，以備糧荒，而中國最盛盛的朝代有廿年的存糧，目前世界存糧尚不足全世界二年之需，是一件非常值得警惕之事。

1. 決議明年年年會在加州 Anaheim 舉行時，仍於星期日晚上聚餐，細則由秘書安排後，於開會前兩週通知各會員。

2. 決議發行會員通訊錄及提議發行不定期會誌，增列新會員名單。

3. 提議設立聯誼會顧問小組，幫助國內食品界解決疑難雜症。

4. 提議設立聯誼會通訊，以利國內外食品界交換消息。

5. 提議聯誼會會員供給就業及獎助金資料，以利國內外人士申請。

6. 提議會員多項研究中國傳統食品及其改進等等。

自從去年張憲憲博士在美參加年年會時，臺大農化系及其他同學與張博士一起聚餐時提出的 IFT 中國聯誼會，今年開始萌芽了。六月八日星期日在 IFT 的聯誼會會上，幾個去年與會的學人即開始通知定於次日六時集合，同赴芝加哥的中國城聚餐。因為是臨時動議，許多人未能接到通知，或已有別的約會，而未克前往參加，如張調祥博士曾到集會地點後又離去。雖是如此，最後參加者仍有五十人左右。聚餐是在中國城的第一樓飯店舉行，由陳同善君負責點菜，曹德風、王樂同等負責接送，王君並擔任財務，會中除大家大快朵頤及歡談之外

最後，凡有興趣參加聯誼會的國內外人士，請直接與陸伯助會長或蔡同善秘書聯絡。地址是：

Dr. B. S. Luh, Dept. Food Sci. Techn., Univ. Calif., Davis, CA 95616, U.S.A.

Dr. T. S. Chen, Food Sci. Div., Dept. Home Econ., Calif. State Univ., Northridge, CA 91324, U.S.A.

作者介紹：本文作者任筑山教授現任教於美國 Clemson University, Department of Food Science and Biochemistry: Clemson, South Carolina

## 世界日報 OCT. 22, 1982

很興的在世界日報上看到乙則有關中國食品科技學會的消息(見下)證明本會的幹事在積極的幹事。左面的小故事可以充分的說明宣傳工作的重要性。希望執事諸公繼續努力使會各務蒸蒸日上。報紙消息中有吳小錯本會是於一九七五年在芝加哥正式成立的，而非在達拉斯市。任筑山曾以其生花妙筆寫了一篇專文報導(見左)對本會頗有歷史價值，也許可以供新會友參考。

### 中國食品科技學會提供技術諮詢服務

【德州達拉斯訊】德州達拉斯旅美中國食品科技學會表示，該會樂意為食品業者提供技術諮詢服務，國人從事食品生產、加工、或餐館業，而對新產品有疑問或興趣者，可與該會會長陳慶筠博士連絡。

陳會長通訊處為：Dr. Tony Chen, 3333 N. Cent ral Expressw ay Richardson, TX 75080 電話：(二一三) (二二二) 六二二二

中國食品科技學會是一個學術性組織，於一九七五年在德州達拉斯市成立，由於歷屆會長和幹事會的努力，會務發展迅速，會員素質亦大為提高，目前會員已多至二百餘人。

本報夏天，美國食

承編者先生看得起，屢次要我為通訊提供文稿，性急生智，炒出這一盤大雜碎。 陳同善註 11.19.82.



## SHAKLEE - A UNIQUE COMPANY

P. Y. Law

Shaklee Corporation was founded in 1956 by Dr. Forrest C. Shaklee, a chiropractor and nutritionist in California. Under the leadership of Dr. Shaklee and a dynamic sale force, the company has grown into an international organization specializing in health-care, nutritional supplement and other related products with an annual sale of half a billion dollars.

This phenomenal growth may be attributed to three factors: First, the company is dedicated to the philosophy of "living in harmony with nature". This philosophy has resulted in the extensive use of natural products in all its manufacturing processes with no added preservatives. Secondly, the heightened awareness of Americans of their physical well-being has contributed to increasing demand for all types of vitamins and nutritional supplements that are uncontaminated by chemical additives. Finally, the company's marketing strategy of direct personal selling has fulfilled the dreams of a large number of people all over the world of owning their own business and becoming financially independent.

The impressive Shaklee Terraces in the heart of San Francisco is the headquarters of the company. The Research Center is located in Hayward, in the vicinity of Berkeley, California. The vitamins and nutritional food supplements are manufactured in a modern plant in Norman, Oklahoma. The Fort Worth Operations in Texas function as the regional distribution center, plus the production of health foods. There are Shaklee manufacturing plants in Japan to supply the international market.

New and improved products are frequently introduced in order to keep up with the market trend and to better serve the customers. Slim Plan, a soy-milk drink mix designed for healthy diet and weight control, will be a new product in the spring of 1983. Although the orientals have been enjoying the soy bean products for hundreds of years, the nutritional value of soy bean has been only recognized and accepted by the western world in recent years.

Shaklee has the potential to be a world leader in health care and health food industry for the simple fact that it employs the modern scientific knowledge to explain and practice the ancient Chinese philosophy on Nature:

"Back to simple truth, return to nature and live in harmony with all things in the universe."

“返樸歸真，回復自然，與天地萬物共存”

## MARINE COLLOIDS DIVISION, FMC CORPORATION

HAROLD HSIEN-CHIH WU

Marine Colloids began as the Algin Corporation, founded by Victor Le Gloahec of France in Rockland, Maine in 1937. The company, at that time, produced only alginates. The process of the carrageenan extraction was first developed at the Algin Corporation and the production of carrageenan was commercialized by 1946.

In 1959 Algin Corporation merged with the Seaplant Corporation of New Bedford, Massachusetts. Both produced only carrageenan at that time.

Marine Colloids became a division of FMC Corporation in 1977 and currently operates under the Special Products Group of FMC, with an annual production capacity in excess of 3000 tons of carrageenan in a continuous operation and employing 305 people, of whom about 145 are members of the United Cement Lime and Gypsum Workers Union.

The organization of Marine Colloids shown in Table 1 is like the traditionally pyramidal organization. The top management team consists of a general manager and five vice-presidents.

The general offices for Marine Colloids are located at the Bioproducts Department, Rockland. Quality Control, Quality Assurance and Research and Development Laboratories are situated at the factory, also in Rockland.

The factory is on a point of land known as Crockett's Point, which juts into the harbor of Rockland, a town with a population of about 8000 located on the East Coast about 400 kilometers northeast of Boston, Massachusetts and 100 kilometers south of Bangor, Maine.

The sales offices for the company are located in Springfield, New Jersey. The company also maintains a sales office at Pleasant Hill, California. An applications laboratory with five chemists adjoins the sales offices in Springfield.

Raw materials for producing carrageenan and agarose are from the red seaweed, Rhodophyceae, and arrive at Rockland from all over the world. Marine Colloids currently has two types of products; namely, carrageenan and agarose. Carrageenans are subdivided by chemical structure to kappa, iota and lambda-carrageenans. Products of carrageenan are marketed under the following registered trademarks:

Viscarin®, SeaKem®, SeaGel®, Gelloid®, Gelcarin®, and SeaSpem®.

Agarose products are marketed as the registered trademarks as follows:

SeaSep®, GelBond™, SeaKem®, Seaplaque®, SeaKem® HEE0, SeaKem® HGT, SeaKem® HGT(p), and Isogel™.

Carrageenans are used as gelling agents, thickening agents, and suspension aids while agaroses are used for biomedical applications, such as protein separation and identification.

Carrageenan applications can be classified into foods and non-foods. Depending on solvent used, the food applications can be further divided into water and milk applications. The typical water applications for carrageenan are as follows:

- Water dessert gels
- Low-sugar jellies, jams, preserves, spreads
- Pimientos
- Imitation fruits and vegetables
- Meat binding
- Gelled Condiments
- Tomato aspic
- Salad dressings
- Cake glazes
- Lemon pie fillings
- Chiffon fillings
- Flavor spread
- Pet foods
- Chocolate syrups
- Imitation Chocolate Milk
- Imitation cheese
- Whipped dessert and artificial whipped toppings.

For milk applications, the end products may look as follows:

- Flans
- Custards
- Puddings
- Pie fillings
- Whipped cream
- Aerosol whipped cream
- Instant breakfast
- Shakes
- Yogurt
- Ice cream
- Ice milk
- Chocolate
- Egg nog
- Fluid skim milk
- Artificial cheese.

As to non-food applications, carrageenans are used in cosmetics and pharmaceuticals, as well as industrial applications. Carrageenan applications in cosmetics and pharmaceuticals are:

- Antibiotics (liquid)
- Lotions and creams
- Shampoos
- Toothpaste



Ulcer products  
 Cough preparations  
 Salves  
 Chewable tablets  
 Medicinals (milk magnesia) and laxatives (liquids).

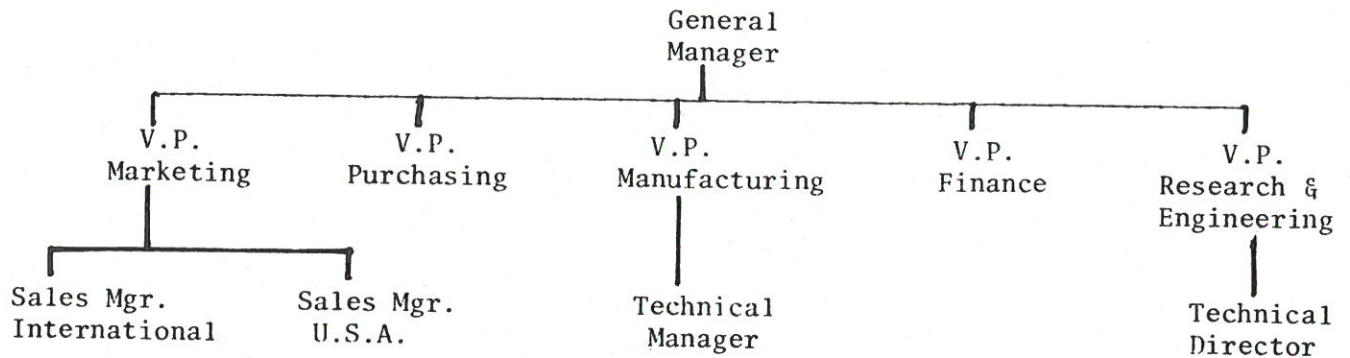
Industrial applications of carrageenan are air freshener gels, beer fining, water purification, textiles, paper, paints, wallpapers, plaster, leather, ceramics, glue and resins, insecticides and horticulture.

Biomedical applications of agarose are vast. By functionality, agaroses are used to separate and identify serum, spinal fluid proteins and a variety of other biological mixtures. By physical shape, agaroses are served as media for molecular weight separations or used for molecular size determinations of viruses, nucleic acids, lipoproteins, enzymes, glycogens, mucins, other polysaccharides, antibodies and miscellaneous proteins.

In short, Marine Colloids has over a hundred blended finished products of carrageenan and numerous products of agarose. Carrageenans as gelling agents, thickening or suspension agents depend on processing conditions, solution viscosity, type of gel, mouthfeel characteristics, syneresis, and freeze/thaw properties. On the other hand, agaroses are valuable tools for qualitative and quantitative aspects of biomedical applications.

TABLE 1

PYRAMIDAL ORGANIZATION CHART



## FOOD MICROBIOLOGY: A brief description

by Daniel Y.C. Fung, MSPH, Ph.D.  
Chairman, Food Science Graduate Program  
Kansas State University  
Manhattan, Kansas

**Definition:** Food Microbiology is a study of all aspects of microbial actions in food and food supply both directly and indirectly related to the welfare of mankind.

What do food microbiologists do?

1. Applied and basic research on microbial spoilage, food preservation, food production, industrial fermentation, and pathogenic organisms related to public health.
2. Food and industrial fermentation processes, increase production, monitor routine processes and develop new microbial products.
3. Quality control and assurance in the food industry.
4. Genetic engineering and new pharmaceutical products.
5. Diagnostics and automation in microbiology.
6. Research, teaching and extension works at universities, colleges, and institutes.
7. Work in government organizations as researchers or law enforcing agents.
8. Consultants, microbial starter culture supply.
9. Many others.

Major areas covered in a course of Food Microbiology

1. History of microbiology, microbial implications in foods, food categories.
2. Food chemistry in relation to microbiology, extrinsic and intrinsic parameters in foods.
3. Yeast and molds, morphology, classification, detection, isolation occurrence and importance.
4. Bacteria, isolation techniques, classification, characterization of major groups, taxonomy.
5. Viruses, protozoa, and other microbes in foods.
6. Microbial technology, genetic engineering, microbial food production, single-cell protein.
7. Industrial processing involving microbial activities, enzymology.
8. Food spoilage: fresh and cured meats, poultry and sea foods, fruits and vegetables, bakery products, canned foods, soft drinks, dairy products.
9. Food preservation by fermentation, pickling, drying, low temperature (refrigeration, freezing, lyophilization) and high temperature (Pasteurization, boiling, cooling, canning) chemical additives, ionizing and nonionizing radiations, sugar concentrates, smoking gassing.
10. Food sanitary qualities and microbial indexes, food disposal and sewage treatment.
11. Government standards and regulation concerning foods.
12. Food borne intoxication and infections, (Staphylococcus aureus, Clostridium botulinum, Clostridium perfringens, Salmonella, Shigella, and other emerging potential pathogens, Aflatoxins).



## Introduction to Microbiology

Microorganisms are ubiquitous in our environment and they affect our daily lives by their prolific biochemical activities under ideal growth conditions. All living things less than 0.1 mm in diameter fall into the world of microbes since human eye cannot resolve matters that small without the aid of magnification. The microbial world includes viruses, bacteria, yeasts, molds, protozoa, algae and other organisms that at different growth stages too small to be seen. On the one hand microorganisms are beneficial to humans by their roles in the various geochemical cycles such as phosphorous cycle, carbon and oxygen cycles, nitrogen cycle and sulfur cycle: without them the earth will not be livable to humans. They are also important in various fermented foods such as wine, cheese, beer, vinegar, bread, soybean products, etc. and production of industrially important acids, solvents, antibiotics, steroids, enzymes, etc. They can even be eaten as foods such as mushroom, yeast, and single cell protein. On the other hand they can spoil our food supplies and cause devastating diseases in animal and human that if unchecked can actually destroy the human race.

From the standpoint of the microorganisms, however, they are simply trying to fulfill their biological activities to grow and to perpetuate in the form of sexual and asexual reproduction. They need water, carbohydrate, protein, fat, minerals, vitamins, and the right combination of gasses, temperature, pH, and other conditions in order to grow and multiply similar to human being's need to survive. Therefore there is no "good" microorganisms or "bad" microorganisms in nature; it is how they affect us that we consider them harmful or beneficial.

For an excellent overview of general microbiology the reader should

consult The Microbial World (Stainer, et al., 1976), Microbiology (Davis, et al., 1973), Fundamentals of Microbiology (Frosbisher, et al., 1974) and others. For a review on Food Microbiology, the reader should consult Food Microbiology (Frazier and Westhoff, 1978), Modern Food Microbiology (Jay, 1978), Microbiology of Foods (Ayres, et al., 1980) and Basic Food Microbiology (Banwart, 1979).

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# Getting Ahead: Ingredients for Career Advancement

Outstanding job performance keeps you on the right track for promotion, but it only opens the door to bigger things. Other assets essential to success are a sound business sense, the ability to communicate effectively, initiative, and a cooperative spirit.

Jerry L. Golden, Shell Oil Co., Houston, Texas 77001

Each of us has a different view on what getting ahead means. We all have different ambitions, wants and needs from our professional career. It seems that everyone wants to advance. But have you ever given much real thought to your advancement? What kind of work do you want ultimately? How much responsibility do you want or are you willing to take? How much time are you willing to devote to your career? Are you interested in staff work or management in a large corporation? Or do you want to run your own company some day?

*What kind of work do you want ultimately? How much responsibility do you want or are you willing to take? Are you interested in staff work or management in a large corporation?*

Well, getting ahead sounds like a good idea, but it's not for everyone. There's a lot of competition and it will require a lot of sacrifice—long hours and a great deal of pressure.

0360-7275/82/5918-0018 \$02.00 © 1982 AIChE

The first article in this series, "Careers in Manufacturing and Marketing," appeared in the April issue, pp. 23-27.

## Think about your future

To answer these questions takes some self-analysis. You must understand what you really want out of your career and what you're willing to put into it. If, after this self-critique, getting ahead is your choice, set out preparing yourself for the future.

Start by understanding your work environment—your industry and your company. Set some realistic goals regarding your personal development and the work experience you think might be necessary in your career. Educate yourself about your current work and work you could be doing in your next assignment. Make a point of observing those who already seem to be progressing. Try to determine the elements that have made them successful. Review your goals periodically and assess how you're doing. Adjust your plan along the way, but keep thinking about the future and how today's actions fit into your long-range plan.

The first and the most fundamental requirement to your advancement is demonstrating sustained quality work in your current job. You can't get anywhere without it. You won't even be considered for further advancement if you haven't demonstrated outstanding performance. You were hired for the purpose of doing a certain type of work. Regardless of your ambitions, you must show a mastery of this

*I cannot stress enough that a person must be a consistently outstanding performer to get ahead.*



***If you're successful in understanding the business implications of your work, you'll be able to use your time more effectively and make a more significant contribution to your company.***

work. You can't use the excuse that you're really interested in some other kind of work and say: "If I had a chance to try something different, I could do a better job." You'll probably never get the chance for that other type of work, if you don't perform well in your present job.

I cannot stress enough that a person must be a consistently outstanding performer to get ahead. Only the top people are selected for the good jobs and promotion. Work hard at being the best performer you can. If you're currently an engineer, try to be the best in your department. If you're a supervisor, be the best. Through your quality performance, you'll gain early recognition which will help in future assignments. Remember, the better people get the better assignments and the better assignments provide for better career development. So start early.

***Put yourself in your supervisor's shoes. Try to anticipate what he needs accomplished, then go do it.***

There's a catch; however, doing excellent work doesn't necessarily get you where you want in your career. To really get ahead, you must possess a set of skills and qualities somewhat different from those required when you were hired or use in your current job. These extra qualities are more intangible and perhaps harder to learn than the technical skills required for your present job. I believe these skills include business sense and certain personality traits. They're extremely important because as you move up, each higher position will require less technical expertise, more business judgment and a higher degree of interpersonal relationship skills.

You need a degree of business sense in every assignment you'll have. It's extremely important that you understand how your work or project fits into the overall objectives of your company. This understanding will help you prioritize your work and concentrate on the truly important things. If you can't make a connection between what you are doing and the business health of your company, you had better stand back and think for a few minutes.

Ask yourself why you're working on this particular project. Did your supervisor assign it to you? Are you helping someone else with a project? Or is your work something you initiated? If your supervisor assigned you the work, chances are there's a need for the work. Nevertheless, your boss has given you several things to do. Make sure you're working on the most important thing. Try to sort out the business connection

yourself, but don't be afraid to ask your boss to help you sort out priorities.

**What is the business connection?**

Two of the biggest traps you can fall into is spending too much time working on other people's projects or those that you simply enjoy doing. In most organizations, team work is important and vital to the successful functioning of the business. I don't want to deemphasize the importance of working with others. However, you must understand your own goals and objectives, and allocate your time accordingly. Helping coworkers is important. All of us need help along the way. But, it won't do you any good to fall short on your own work because you spent too much time helping somebody else.

***Keep your job in perspective. Concentrate on work related to your assignment.***

The second trap is doing pet project work. Engineers, by and large, have a great deal of freedom in developing their own work. This freedom can be invaluable in your career development or it can ruin you. Most people tend to spend their time on things they enjoy. We all know examples of the engineer with good technical skills who is always busy, but just doesn't seem to get anything really worthwhile accomplished. He gets deeper and deeper into a project and before he can wind up the work, he's off on a tangent exploring something else—staying busy but drifting without any solid direction. Get in the habit of asking yourself why you should devote your valuable time to that project. *What is the business connection?* Ask yourself, is this the most important thing I could be doing for my company and my career development?

You'll also probably find it helpful to educate yourself somewhat in business matters. I don't think everyone needs a business degree to advance, but a few basic courses or outside reading, for example in economics, finance and business management, could be helpful for background. Information gained here will be a good supplement for your continuing on-the-job training.

***Develop a sound business sense for your work. This will give you the insight to keep you on the right track.***

If you're successful in understanding the business implications of your work, you'll be able to use your time more effectively and make a more significant contribution to your company. Your own performance will also be judged more favorably and you'll be developing a skill that will be increasingly more important as you advance to positions of increasing responsibility.

## Initiative and good communication

Another performance factor I'd like to stress is initiative. Again, this trait, like managing your time and having a good business sense will influence how you perform in your current job. You should demonstrate early in your career your ability to accept and effectively handle responsibility. Take the initiative to take on this responsibility. Don't wait for someone to assign work to you. Use your knowledge of your work and your business sense to develop the things that need to be accomplished in your area. Put yourself in your supervisor's shoes. Try to anticipate what he needs accomplished, then go do it. Most supervisors would much prefer an employee who understands the work that needs to be done and goes about doing it than one who must be led every step of the way.

I have some words of caution, however. *Keep your job in perspective.* Concentrate on work related to your assignment. Don't take over someone else's work. There is plenty to do in your assigned area. Also, see your work through to completion, but try to understand where you reach the point of diminishing returns. Don't let a project drag out if your efforts aren't yielding a high return on your investment. Complete the job by documenting your results or recommendations.

So far we've talked about the importance of job performance and using good business sense and initiative to direct your efforts. Mastering these skills will open a lot of doors for advancement. There are also other traits I believe are important to further enhance your performance and potential. These are what I call polishing skills or how well you project yourself as an individual and in your work. Every day, every time you or your work come in contact with someone you're being judged and evaluated. Don't pass up an opportunity to make a good impression. Be honest though, everyone can see through a showoff. Two areas of importance here are communication skills and your personality traits.

We communicate all the time, in many ways. Take some personal time to sharpen your ability to communicate effectively. There have been hundreds of books written on the subject. The best work will go unnoticed if it isn't communicated effectively. Tell people of all the good things you've been doing. Some managers who could influence your career will judge you more on your indirect communications such as writing than on direct personal contact with you or your work. If they haven't seen much of your work documented they won't be in a position to support you for a possible new assignment or promotion.

Your personality plays an extremely important part in your ability to work with others and the impression you make on them. Your character has developed over a long period of time and it's unlikely that you can completely overhaul your basic personality. Nevertheless, there are a few areas where some slight alteration can pay off. You should be sincere and honest. Be open and project a positive, cooperative attitude. Don't do like so many others and withhold information in the view that you'll somehow be more important if you know something that others don't. If you're open with others they'll more likely be open with you. The way others cooperate with you

will have a direct bearing on your effectiveness at work. It's very important that you build a high level of credibility, not only in the work you do; but also in your relationship with others. As you move up, it will be vital to have the trust and support of the people in your organization. You'll develop this asset by being open, honest and cooperating with your coworkers.

### In summary

- Understand what you want from your career and what you're willing to put into it. Set goals and monitor your progress periodically. Let your boss know what you want from your career. You're a lot more likely to get a desirable next assignment, if you've discussed it with your supervisor. As you go, review your progress and adjust your plan as necessary.
- Before you'll be considered for any advancement opportunities, you must demonstrate outstanding performance in your current job. Remember, it's a competitive world. Only the top people will be selected for the better jobs and promotions. You must also sustain this performance at each step along the way.
- You must also develop and have a sound business sense for your work. This will give you the insight to keep you on the right track. You'll be able to sort out priorities and direct your own work better. You have to look at the big picture and understand the work that's truly important for your company. Don't get lost in details. Since most of us come to work with only technical backgrounds, maybe you'll need to educate yourself to develop this business sense.
- Another important point is initiative. Take the bull by the horns. This will come with confidence in yourself and how well you have prepared yourself for the job you're doing. Develop an understanding for what needs to be done, then get out to do it. Anticipate your supervisor's needs. Don't wait for a project to be "assigned" to you.
- These first four traits—setting goals, outstanding job performance, a business sense for your work, and initiative—will keep you on the right track for consideration for advancement. Mastery of these basics will open a lot of career doors. But, to complete the package and to be even more successful, you must project yourself in a manner that makes it apparent that you're the one for that next promotion. You must communicate effectively; have an open and positive attitude about your work and be cooperative with those who work with you. #



朱正中

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AND PHONE

BUSINESS ADDRESS  
AND PHONE

EDUCATION & SPECIALTY

Here is your information which will be printed in our new directory. Please proof-read it. If you have any corrections to be made, please send them immediately to Dr. P. J. Wan, 3333 N. Central Expressway, Richardson, Texas 75080. Any corrections must be received by April 15, 1983 or they cannot be included in this directory.

Here is a sample for our new directory:

# 超級領袖具有共同特質

## 執着認真工作就是快樂

### 平均為五十六歲白人男子年入三十萬

【美聯社特稿】為什麼有的人在替甲老闆工作時會賣命苦幹，替乙老闆幹活時就偷懶取巧？南加大商業管理學院教授丹尼斯說，這便是領導的問題。

「人們寧願奉獻致力於他們所信服的目標，而不願游手好閑虛擲光陰。」丹尼斯說。「公司可以啓發人們這種奮鬥的意志。」

全國知名的管理專家丹尼斯教授四年前決心找出怎樣才是一位「超級領袖」。爲了完成這項研究，他訪問了九十位傑出的

領袖人物，包括全國最大的公司負責人，大學校長，政府官員，報紙發行人以及經常獲勝的球隊教練等。

平均來說，「超級領袖」的年齡是五十六歲，白人男子，大學畢業。每年平均收入三十萬元。他也發現，大多數都是結一次婚，並且對太太仍然熱誠如故。

除了這些統計以外，丹尼斯發現這些領袖有五項共同的特質：

——見識。能夠創造其所期望的狀態的挑戰性的遠景，並引發人們去執行。

——溝通：能够很清晰有效地將他的見地傳達給對方並能爭取其所屬人士的支持

——毅力：不管遇到什麼困難都能執着其目標。

——授權：能够建立一種制度，在這種制度下，每人都能發揮其最大力量達成預期的目標。

——組織能力：能够了解整個機構的動態，並能從錯誤中得到經驗，運用所得的知識改進機構內全部作業。

丹尼斯發現，他所訪問的超級領袖並不

太重視管理方面的通俗理論或動機問題。「跟他們交談時，我並不常聽到要將工作地方人性化，日本式管理方法，改善工作環境或創新的獎勵制度等。」他說。

「我發現一位最有活力的領袖是在一間八呎乘十呎的簡陋辦公室工作。」他回憶說

。「但這間辦公室是一股激流和動力的中心。他的員工在十八個月期間每週工作八小時，因為他們知道即將完成一種新式電腦，這一種電腦會使公司一舉成名。」丹尼斯還發現，超級領袖各種身材都有。除了上述五個特質之外，能幹的領袖有高的，有矮的，胖、瘦，左傾想法的或右傾想法的都有。他們也沒有顯示出共通的心理型態或背景。」他說。

丹尼斯發現這些人根本不考慮衰退，失敗這些問題。他還發現，這些超級領袖在他們的專長領域之外並不十分超級。

「社交上來說，這些人常常不能適應。他們很少善於閒談。」他說。「對他們來說，做任何事都要有目的。如果沒有目的，便會覺得無聊。好像有一個強度範圍，超出這個強度，便要設法避免。」