

## **M. K. Gupta (Consultant / Chem. E.)**

### **INTRODUCTION**

Monoj K Gupta is the president of MG Edible Oil Consulting International.

He holds a Master's degree in Chemical Engineering from the University of Florida, Gainesville, Florida.

After working for thirty-two years in the private sector, Mr. Gupta started his private consulting company to assist the Fats & Oils Processing and the Snack Food industry. A specialist in edible oil processing and technology, Mr. Gupta offers a wealth of knowledge in the field.

Mr. Gupta began his career at Procter & Gamble CO. in 1965. His direct responsibilities included product development, manufacturing and quality assurance. He joined the Anderson Clayton Company IN 1981, where he worked in engineering and productivity improvement in both the domestic and international divisions. He had direct responsibility for designing and rebuilding oil-processing plants at numerous locations.

His final corporate assignment was at the Frito Lay Company as a section manager and technical advisor in oil applications in research and development work and frying application worldwide. He was directly responsible for the reduction of **product rancidity** by utilizing an innovative **oil management system**. He also guided the company in procurement strategies on palm oil for Frito Lay's worldwide operations.

Mr. Gupta has worked closely within the past years and continues to have regular contact with the National Sunflower Association, the United Soybean Board and the National Cottonseed Products Association, in the area of genetic and non-GMO modification of oil seeds, their applications and commercialization. Mr. Gupta is credited as being one of the proponents of the Mid-Oleic sunflower (NuSun oil) and assisted the National Sunflower Association to begin its commercialization. He also has close ties with the Malaysian Palm Oil Industry.

## **AREAS OF EXPERTISE**

He possesses extensive theoretical and hands on experience in oil refining, acidulation of soap-stocks, bleaching, hydrogenation, deodorization, Votation and packaging of shortening including solid and pourable shortening, product development & formulation, product application, operator's training, process optimization, trouble shooting, process improvement, productivity improvement, operators' training and process engineering.

M. K. Gupta is a world class expert on vegetable oil and general food processing and handling of raw materials and finished products.

He has rendered his expert opinion on cases involving restaurant grease fires. Mr. Gupta has experience in diagnosing the causes for fires in restaurants, resulting from the grease. Handling of grease in the fryer is a key factor in most restaurant fires. House keeping and clean up is the other important factor. Improper or inadequate care in these areas can cause fire that can amount to high property damage, personnel injury and legal expenses. This can mean substantial capital loss and even loss of personnel.

Mr. Gupta offers training to restaurant personnel on oil handling to prevent accidents and fires.

## **LANGUAGE PROFICIENCY**

Mr. Gupta is fluent in Spanish. He is also fluent in Bengali and Hindi, two prominent languages spoken in the Indian subcontinent.

## **PUBLISHED WORKS**

He has written chapters in technical books on topics related to oil processing. He also published book chapters published in UK and USA.

He has presented technical papers at the American Oil Chemists Society's (AOCS) Technical- Symposia in the United States. He has also presented technical papers at the International Technical Symposia in Budapest, Turkey, The Netherlands, Indonesia, India, Mexico, Central America, the Caribbean Islands and Brazil.

He holds several U.S. and foreign patents on shortening and dry cereal products.

## **TEACHING CAREER**

He has taught short courses at the Texas A&M University. He has also taught short courses organized by the American Oil Chemists' Society, Institute of Food Technology, American Association Of Cereal Chemists, Mexican Institute of Protein & Oils, and at the Meeting Of The Oil Industry, in Brazil and the University of California, Davis.

## **PROFESSIONAL SOCIETY AFFILIATION**

He has been active in the American Oil Chemists' Society. He has served as the Chairman of the Lipid Oxidation & Quality Division (LOQ). He served as the chairperson for the Nominating Committee for the LOQ Division. Currently, he is serving as the chairperson of the Publication Committee. He is the past president of the South Central Section of the American Oil Chemists' Society and a member of the Governing Board of the American Oil Chemists Society.

## **CONSULTING EXPERIENCE**

He has provided process designs to various overseas and domestic clients on a continuous packed bed deodorizer, improved reaction hydrogenation converter, continuous acidulation reactor for soap-stock, as well as complete oil-refining process.

In Korea and Indonesia he has provided recommendations to improve palm oil and palmolein processing for the improvement of oil quality.

Most recent consulting experience has been in USA, Canada, Egypt, Bulgaria, Israel, Mexico, Jamaica, Dominican Republic, and Guatemala, Bolivia, and Equador.

He is currently residing in Richardson, Texas, with his wife. In his spare time he likes to play Bridge and travel.

## **USDA – NCAUR, ADVISORY COMMITTEE, Peoria, IL**

Served on the Steering Committee for Long-Range-research Planning, in January 1999.

## **Services Offered**

Mr. Gupta can provide complete consulting services in the area of oil processing, from oil refining to finished product packaging. More specifically, he offers the following process related services:

### **A. Frying Process**

- Development of Fried Snack Food
- Oil Quality management
- Improvement of Product Shelf Life
- Engineering Design for Better Frying Performance
- Selection of oil for specific product

### **B. Vegetable Oil Processing**

- Product formulation, development and application
- Project development
- Process design
- Plant Commissioning
- Evaluation of plant's performance
- Process trouble shooting
- Productivity improvement
- Set up quality control program
- Cost reduction techniques
- Guide the plant engineers to develop the optimum design for the process

### **C. Baking Process**

- Selection of shortening
- Selection of emulsifier
- Baking parameters
- Trouble shooting

### **D. Product Formulation & Development**

Mr. Gupta has extensive experience in formulation of various fats and oils products and can provide technical support to develop new products or improve performance and reduce costs of the existing products.

## **E. Technical Training**

Mr. Gupta also provides the following services:

- Hands on, as well as class room training to the operators and supervisors on process, operation and control
- Critical process maintenance program
- Process start -ups
- Trouble shooting

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