

Frazer Keith Elliott Imrie

Qualifications BSc (1st Class Honours) Botany, Zoology, Chemistry
Fellow Institute of Biology
Chartered Biologist
Chartered Scientist
Fellow Institute of Food Science & Technology
Cert. Post-Harvest Pest Control, University of California

Affiliations Accredited Member of Following Consultants' panels:
- Institute of Food Science & Technology
- Society of Biology
- Ex-Chairman & Member Management Committee of Society of Expert Witnesses

Awards: Leverhulme Industrial Fellow (1972-74)

Date of Birth 4 December, 1932

Nationality British

Current Position at CWA

Frazer Imrie is a Director of CWA International Ltd. He is Head of the CWA Food Department, which provides a comprehensive service in the investigation of incidents, claims assessment and expert advice for litigation and loss prevention. He has an international reputation in food technology with particular reference to the carriage of bulk dry commodities.

He spent almost 25 years in the sugar industry and is an expert in all aspects of the production and marketing of raw and refined sugar, its by-products including molasses. His experience extends from the growing of the crop through its processing, refining and the subsequent sale of the products.

During his career in the UK food industry he reached a position at senior board level. For the past 30 years he has been a food consultant.

Frazer is an expert in forensic biology and specialises in preparing technical cases for litigation. He lectures regularly to law firms and insurance companies around the world on food cargoes. He has also worked extensively for various international agencies such as FAO, WHO and UNESCO. He is the author of some thirty research papers and chapters in three books. He is currently a member of several UK consumer evaluation panels.

Specific Expertise and Experience as a Consultant

This is not intended to be an exhaustive list; its purpose is to illustrate the broad scope of Mr Imrie's expertise and experience.

- **Bulk & Bagged Commodities**

Technical and Market investigations of damage to the following:
Wheat, Rice, Maize, Barley, Soya Beans, Oilseeds residues, Raw & Refined Sugar

- **Refrigerated Produce**

Technical and Market investigation of damage to: bananas, pineapples, citrus, apples, pears, kiwi fruit, onions, garlic, potatoes, iceberg lettuce

- **Frozen Food**

Technical and Market investigation of damage to: fish, meat, poultry, prawns, squid, ice cream

- **Animal Feed**

Investigation of damage to bulk animal feed ingredients: feed beans, molasses, alfalfa pellets, urea/molasses pellets, soybean derivatives pellets

- **Market Evaluation**

Evaluation of the structure of the market, pricing (both national and international) and general market aspects of the following:

- The Russian sugar market
- The sugar industry of Brazil
- International banana markets, viz. Japan supplied from Philippines, Chinese banana market, the role of the international banana companies in Europe, the role of banana ripeners in the UK market
- The EU market for garlic
- The structure and costs of the UK market for Egyptian potatoes
- The value of New Zealand apples in Europe.

- Numerous investigations into the pricing structure of markets for rice, wheat, sugar and animal feeds in various parts of the world.
- **Environmental Impact**
 - Studies on the effects of pollutants on food shipments
 - The impact of power station pollutants on commercial field crops

Summary of Previous Employment

1982 to date **Food Consultant**

Initially part-time but full-time for the past 25 years

1983 –1990

Sempernova plc, Chairman & Chief Executive

Founder and main shareholder of a small public company dedicated to exploiting proprietary technology to develop, manufacture and sell non-toxic coatings based on sugar to extend the shelf life of fresh fruit & vegetables

Frazer specialised in the marketing and sales function within the company. This involved close liaison with most of the major producers of fresh fruit and vegetables around the world giving Frazer a unique knowledge of a wide range of fresh food production in both developed and developing countries.

1968 to 1982

Tate & Lyle plc

Divisional Managing Director, New Ventures

Responsible for the commercial development of new ventures arising from internal research or from investment. As such had profit responsibility for ventures in meat technology, sugar chemicals, and fruit & vegetables post-harvest treatment (a joint venture with a major international fruit company).

Marketing Director, Talres Development Ltd

Responsible for the marketing of food chemicals based on sugar.

Group Development Manager

Responsible for the commercial development of new products and processes related to foods.

Head of Microbiology Dept, Central Research Laboratories

Headed research programmes to discover new uses for sugar involving biological transformations. Group quality control of products and processes. Investigated the formation of harmful polysaccharides in cut sugar cane.

1959-1968

Manbre & Garton Ltd

Group Director of Research

Responsible for the research programme of a small sugar and starch group

Chief Quality Control Manager

Responsible for all quality control and technical service for four factories within the group. One factory produced starch from bulk grain, a second made starch derivatives, the other two were sugar refineries. Thus, gained familiarity with the bulk handling of many different types of grain including rice, wheat and barley as well as maize.

Chief Chemist

Responsible for all quality control at a sugar refinery. Also responsible for customer liaison alongside sales personnel.

1955-1959

Chemist

Worked for Public Analysts for Watford & St Albans. Responsible for analysis of many different kinds of foods.

Throughout his industrial career Frazer has been concerned with the many different uses of sugar and starch in the food industry. This has given him an unusually wide knowledge of food manufacturing both from the process and quality control point of view.

His early research projects in the sugar industry included a detailed examination of the methods of storing and transporting liquid sugar products, from pure liquid cane sugar to molasses and refinery syrups. He examined the various methods of cleaning tanks and related this to the incidence of contamination in the resulting products.

During his later industrial career Frazer worked for some time on the evaluation of products for animal feed production. Initially this was on maize based ingredients but later included materials like rice, barley, wheat and waste agricultural products like citrus waste, sugar cane bagasse and molasses.

For the last 30 years Frazer has been a food consultant. His experience in this role has also been very broadly based. For some 5 years he was the technical adviser to the National Fruit and Vegetable Traders Association at New Covent Garden Market which made him familiar with most of the UK and many European wholesale markets and their commercial practices.

His work has involved him in many attendances at loading and discharge of cargoes in many different ports. He is familiar with the different types of equipment used for bulk handling of solid and liquid cargoes and also has extensive experience of the handling of bagged cargoes. He has attended at several of the major container terminals both in UK and overseas.

During his career Frazer has lived and worked in a number of overseas countries notably, Brazil, South Africa, Nigeria, Thailand and Hong Kong.

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